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### 1NC—OFF

#### The meta-ethic is procedural moral realism - substantive realism holds that moral truths exist independently of that in the empirical world. Prefer procedural realism –

#### [1] Uncertainty – our experiences are inaccessible to others which allows people to say they don’t experience the same, however a priori principles are universally applied to all agents.

#### Our relation to how we establish ethics is lexically prior to consequences – there are intrinsic values that make it such the means can never justify the ends.

**Vallentyne 6** Peter is a Professor of Philosophy at the University of Missouri in Columbia, Missouri. [“Against Maximizing Act-Consequentialism” mospace.umsystem.edu/xmlui/bitstream/handle/10355/10174/AgainstMaximizingActConsequentialism.pdf?sequence=1.]//Mberhe

Core consequentialism holds that the permissibility of actions supervenes on (is fully determined by), and is positively sensitive to, the value of their consequences. This does not require valuemaximization; it only requires value promotion, where the relevant value is that of the 14 consequences. I shall argue that core consequentialism, at least in its standard forms, is mistaken. The ends do not always justify the means. If core consequentialism is true, then any action with maximally good consequences (in a given choice situation) is permissible. The main argument in favor of this claim is the following: P1: An action is morally permissible if it is best supported by insistent moral reasons for action. P2: The value of consequences is always an insistent moral reason for action. P3: The value of consequences is the only insistent moral reason for action. C: Thus, an action is morally permissible if it maximizes the value of consequences. This is the same argument given in the previous section for the impermissibility of actions that do not have maximally good consequences, except that (1) the appeal to insistent reasons has been made explicit, (2) the necessary conditions of the original P1 and C have been converted to sufficient conditions, and (3) the qualification in P3 that allowed the possibility of some prior constraints has been dropped. P1 is highly plausible. An action that is best supported by insistent moral reasons is surely permissible. P2 can be challenged, as I did earlier, on the ground that beyond some point the value of consequences ceases to be an insistent moral reason (once consequences are good enough, their value may only be a non-insistent reason). For the present purposes, however, we can grant this claim. The crucial claim is P3. It is implausible, because there are insistent moral reasons other than the value of consequences. There are also deontological insistent reasons, and these, or at least some of these, are lexical prior to the value of consequences. In particular, individuals have certain rights that may not be infringed simply because the consequences are better. Unlike prudential rationality, morality involves many distinct centers of will (choice) or 15 interests, and these cannot simply be lumped together and traded off against each other.16 The basic problem with standard versions of core consequentialism is that they fail to recognize adequately the normative separateness of persons. Psychological autonomous beings (as well, perhaps, as other beings with moral standing) are not merely means for the promotion of value. They must be respected and honored, and this means that at least sometimes certain things may not be done to them, even though this promotes value overall. An innocent person may not be killed against her will, for example, in order to make a million happy people slightly happier. This would be sacrificing her for the benefit of others. The claim here is that there are some constraints on how value may be promoted. The ends do not always justify the means. Moreover, these constraints, as I shall explain below, are grounded in the normative separateness of persons.17 Constraints may be personal or impersonal. An impersonal constraint against killing, for example, prohibits killing, independently of whether this is in the killed person’s interests and independently of whether she has consented to it (i.e., is in conformance with her will). It would rule out, for example, well-informed suicide, voluntary euthanasia, and non-voluntary euthanasia where an incompetent individual is terminally ill and likely to be in great pain for the remainder of her life. Although impersonal constraints do reflect a normative separateness of individuals, they do not do so, I believe, in the relevant manner. They fail to capture the respect due to persons. Persons (beings that are protected by morality for their own sake) have interests and often autonomous wills. Any constraint against treating a person in a specified way that applies even when the holder validly consents to such treatment and such treatment is in the holder’s interest fails to reflect the respect due to that person. Impersonal constraints fail to reflect this respect, and I agree with core consequentialism’s rejection of such constraints. Constraints can, however, be personal. A personal constraint empowers the protected 16 individual, and makes the prohibition conditional on it thwarting her interests or, alternatively, not being in conformance with her will. Personal constraints are waivable rights, and are waived (and hence not violated) when the breach of the constraint is—for interest-protecting rights—in the person’s interests, or——for choice-protecting rights—when the person has given valid (e.g., free and informed) consent.18 Thus, for example, well informed suicide and voluntary euthanasia do not violate the choice-protecting right against being killed, and non-voluntary euthanasia for a person with a life not worth living does not violate her interest-protecting right against being killed. Personal constraints—both choice-protecting and interest-protecting rights—reflect the normative separateness of persons in an appropriate manner. Like impersonal constraints, they require that the holder not be used merely a means for promoting value. Unlike impersonal constraints, by giving a special role to the interests or will of the rights-holder, they further require that the holder be treated with respect.19 There are, of course, many important questions that need to be answered. One concerns the content of the rights. For the present purposes, we don’t need to answer this question. All that matters is that there are some rights. I believe, for example, that one of our core rights is that of bodily security (e.g., against being killed, struck, or restrained). A second issue concerns whether the rights are choice-protecting or interest-protecting. The issue concerns the nature of the requisite respect that rights require. I’m inclined to think that psychologically autonomous agents have (mainly) choice-protecting rights and non-autonomous but sentient beings (such as young children and certain animals) have interest-protecting rights, but we need not resolve this issue here. All we need is the existence of some kind of right. A third issue concerns whether the rights are absolute or conditional in certain ways. Rights with thresholds, for example, have no force when the value that would be foregone is 17 above some threshold (e.g., a right against being killed might not apply where infringement is the only way of avoiding social catastrophe).20 If there are thresholds, then at some point the normative separateness of persons yields to the promotion of value. For the present purposes, we can leave this open. As long as the rights at least sometimes have some force, the normative separateness of persons will be at least partially recognized in a way incompatible with core consequentialism. The objection to core consequentialism is that it does not recognize that the ends do not always justify the means, and more specifically that the normative separateness of persons (as reflected in rights) make it impermissible to treat people in certain ways even if it promotes value.

#### [2] Naturalistic fallacy – experience only tells us what is since we can only perceive what is, not what ought to be, this means experience may be generally useful but should not be the basis for ethical action.

#### Practical Reason is that procedure. To ask for why we should be reasoners concedes its authority since it uses reason – anything else is nonbinding and arbitrary.

Velleman (David, “Self To Self”, Cambridge University Press, 2006, pg 18-19)

As we have seen, requirements that depend for their force on some external source of authority turn out to be escapable because the authority behind them can be questioned. We can ask, “Why should I act on this desire?” or “Why should I obey the U.S. Government?” or even “Why should I obey God?” And as we observed in the **case** of the desire to punch someone in the nose, this question demands a reason for acting. The authority we are questioning would be vindicated, in each case, by the production of a sufficient reason. What this observation suggests is that any purported source of practical authority depends on reasons for obeying it—and hence on the authority of reasons. Suppose, then, that we attempted to question the authority of reasons themselves, as we earlier questioned other authorities. Where we previously asked “Why should I act on my desire?” let us now ask “Why should I act for reasons?” Shouldn’t this question open up a route of escape from all requirements? As soon as we ask why we should act for reasons, however, we can hear something odd in our question. To ask “Why should I?” is to demand a reason; and so to ask “Why should I act for reasons?” is to demand a reason for acting for reasons. This demand implicitly concedes the very authority that it purports to question—namely, the authority of reasons. Why would we demand a reason if we didn’t envision acting for it? If we really didn’t feel required to act for reasons, then a reason for doing so certainly wouldn’t help. So there is something self-defeating about asking for a reason to act for reasons.

#### That means the aff must prove their framework is based in a self-justifying axiom.

#### Util is not morally guiding 1. Naturalistic fallacy – it needs another framework to define “good” – as theirs collapses to pleasure is good because good is pleasure 2. Aggregation is impossible A. Relies on non-falsifiable intuitionsB. Assumes pain can be defined univocally, which is circumvented by artificial, sadistic desires and the pleasure machine.

**Grisez 98** Germain Gabriel Grisez was a French-American philosopher. Grisez's development of ideas from Thomas Aquinas has redirected Catholic thought and changed the way it has engaged with secular moral philosophy.[“Against Consequentialism” [https://watermark.silverchair.com/ajj-23-21.pdf?token=AQECAHi208BE49Ooan9kkhW\_Ercy7Dm3ZL\_9Cf3qfKAc485ysgAAAp0wggKZBgkqhkiG9w0BBwagggKKMIIChgIBADCCAn8GCSqGSIb3DQEHATAeBglghkgBZQMEAS4wEQQM31I2JRwpIDRMtBt4AgEQgIICUPGnXFsM-WpZTMmjsvPLgy3q8l5rnkIxDz81T0kEBIIzW5Nl3pF8mNA43HdB9X\_X38CzovhZPn5cahx2BsTf9yMoI3YXXP2w0YAzTL1vLtZ86q-GyT8dkvPxR4jZtfjuqM6z\_DJkDfjWAbcJi1ElcDBv3t\_VUqIXkXL5TLX\_VtR5738SYkQ--sdWQTG2VtWgtGXkHg6lXoxgosAyI\_eoOroAakJcUGfQc-fORn8mmJcLd3pe0MJAtLD9eEZs1-cqSQM8g4LUPB94U2pMM9fB8G6fvVrgJS60x8lF\_tMcdD3CFq\_2A1SKcb68PD8Fdihp9r60W-NBbxOkUw22CTS3BZWyEAt63QxKQTi931W3O4BJ-tLiRwXtohTj-osNXkPSSKFuzMzRxQdcfgeWzLrwOhezKs7j8kPd4JyHdgEwC\_CdZhbK22TKsMAfKBqxCwU2wA\_lbtm7K0g9jCIpV6JZgXL3zNZ0He4elP3cFwj5noKSz6SMlCpOGvwe3UOvT5LXL\_punPbCC-F-66WIZG5qCyjY3kzSLITP9ocRgBYIYKgRmyd5fXO16k1GkvVwFVWf4pehQVUpmi637gCzxtmSdIbSa\_EI3Q1Qnev-tQI7-I4MUpNBUa20umMsNrDOMJsgzWHZXFapm93GHP92FTrs5N-2TCe3h7dszGU\_0DikR1HPKA3jHVbXQgK2wLATRIu0ajpT05qSl57rbOdeC\_bZJ00udDxm35tfPYEb\_5P6VlZVFqnB5cYR60rCIVbHJ2IU1RW17YfF1-cqbac-X-lNYXI](https://watermark.silverchair.com/ajj-23-21.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAAp0wggKZBgkqhkiG9w0BBwagggKKMIIChgIBADCCAn8GCSqGSIb3DQEHATAeBglghkgBZQMEAS4wEQQM31I2JRwpIDRMtBt4AgEQgIICUPGnXFsM-WpZTMmjsvPLgy3q8l5rnkIxDz81T0kEBIIzW5) 1978]//Mberhe

In an extensive survey of work in utilitarianism from 1961-1971, Dan W. Brock points out that utilitarianism requires that utility be calculable. After suggesting that there are obvious difficulties in making such measurements, Brock adds: More important and perplexing, however, is how the necessary calculations can, even in principle, be made and whether the logical foundations necessary to the intelligibility of these calculations exist. Moral philosophers have paid surprisingly little attention to these two problems. Most discussions of utilitarianism in recent books and journals simply assume that it is possible to determine in any situation what is required by utility-maximization, and then go on to consider whether this always coincides with what is required by morality.7 Brock's remarks might be discounted as the view of an unsympathetic student of utilitarianism. But this would be a mistake. J. J. C. Smart, a leading proponent of unrestricted, direct utilitarianism, admitted in an article published in 1967 that because of obstacles to calculation . . . the utilitarian is reduced to an intuitive weighing of various consequences with their probabilities. It is impossible to justify such intuitions rationally, and we have here a serious weakness in utilitarianism.8 Similarly, A. J. Ayer, who defends a form of consequentialism with respect to the formation of social policies, criticizes Bentham's attempt to apply consequentialism to the moral judgment of individuals. Ayer concludes: In virtue of what standard of measurement can I set about adding the satisfaction of one person to that of another and subtracting the resultant quantity from the dissatisfaction of someone else? Clearly there is no such standard, and Bentham's process of "sober calculation" turns out to be a myth.9 It also is worth noticing that Bentham himself recognized difficulties in an area related to that considered by Ayer, for in an unpublished note Bentham wrote that the . . . addibility of the happiness of different subjects, however when considered rigorously it may appear fictitious, is a postulation without the allowance of which all political reasonings are at a stand: nor is it more fictitious than that of the equality of chances to reality on which the whole branch of the Mathematics which is called the doctrine of chance is established.10 In other words, Bentham regards the postulation of commensurability as one necessary for practical purposes. He justifies the interpersonal comparisons challenged by the objection he is considering by saying that when there is no reason to consider incommensurable goods more or less than one another, it is quite rational to consider them equal. Bentham's position is unassailable, provided that "equal" can be used meaningfully in this context. This I deny. If "greater good" is to be meaningful in the formulation of a criterion of morality, three conditions must be fulfilled: 1) "good" must have a single meaning; 2) what is good in this unique sense must be measurable; and 3) the result of measurement must settle moral issues either directly or indirectly. Clearly, the necessary meaning of "good" cannot be specified in moral terms. What Rawls says of utilitarianism is true of all consequentialism: Its point is to define "good" independently of "right" and to define "right" in terms of "good." And, in general, consequentialists see this requirement and try to meet it.11 If consequentialists said that ethical considerations determine what a good consequence is, they would either be going in a circle or setting off on an infinite regress. If the single meaning of "good" which consequentialism needs cannot be specified by moral principles, how can it be specified? If human persons have a single, well-defined goal or function, set for them by nature or by God, then "good" has the necessary, univocal meaning. Acts are right or wrong insofar as they do or do not bring one to this goal or fulfill this function. On one interpretation, Aristotle's ethics are of this sort. But Aristotle's ethics, understood thus, have been challenged. Most modern philosophers deny that humankind has a definite goal or function. In this dispute, the moderns seem to be in the right. If persons are ends in themselves, they cannot be ordered to a good as any part to a whole or any means to an end. Aristotle either subordinates the lives of the many to the actualization of a few, or he admits the intrinsic value of lives other than the contemplative. If the latter, "good" lacks the univocal meaning consequentialism needs.12 Many Christians have thought of personal salvation as a single, well-defined goal. Consequentialist thinking based on this conception of the good led to the abuses for which modern humanists condemn Christianity: excessive otherworldliness, religious fanaticism, inhuman asceticism, and so on. Of course, these abuses are not entailed by the view that personal salvation is a single, well-defined goal. But this view does entail that the goodness of a Christian's acts is specified by their efficiency as means of getting to heaven. Those who accept this moral theory face a dilemma. If they consider human acts in and of themselves to be effective means of salvation, they are pelagians. If they consider human acts to be effective means of salvation by divine fiat, they are voluntarists. The latter position implies that this life is inherently meaningless, but is meaningful as a time of temptation. This concept respects divine power, but ignores divine wisdom.13 Anyone who holds that all human persons have a single goal which defines "good" univocally also confronts facts one cannot easily explain. People who seem equally able, intelligent, and healthy have different goals in life. If one says that all humans have the same goal, one will find almost everyone else disagreeing as soon as the goal is specified. Even those Christians, who in theory take an otherworldly and voluntaristic position, in practice treat an incommensurable variety of goods as determinative of the moral goodness of human acts, for they admit the legitimacy of a variety of Christian life styles and they try to show the immorality of various kinds of acts, not only by their incongruity with holiness and grace, but also by their incompatibility with goods immanent in human persons — goods such as life, truth, justice, love, and peace. Shortly after World War II, a British economist, Lionel Robbins, reflected upon the simplifications introduced into the making of socioeconomic policy during wartime. A single objective counts; all else is instrumental. If there is no victory, there is no future. All decisions are technical. Unity of purpose "gives a certain unity to the framework of planning which at least makes possible some sort of direct decision which is not wholly arbitrary. "1A Robbins is correct about the wartime psychology of Britain and the United States. The unconditional surrender of the enemy became a fixation with the leaders and people of both nations. This fixation partly explains the adoption of ethically questionable tactics, such as obliteration bombing. It also helps to explain why Soviet leaders, who took a longer view, were more prudent than Anglo-American leaders in gaining post-war advantages before the war ended. Most philosophical consequentialists have been liberals. Instead of saying that all humans have the same goal, they have tried to define "good" univocally, to leave room for differing concrete goals, but to make them commensurable with one another. Many utilitarians, following Bentham, define "good" in terms of happiness. Others define "good" in terms of the maximum satisfaction of desires, less the minimum of unavoidable frustration. Since different people have different enjoyments and desires, either approach allows for differing goals. To ensure commensurability, those who take either approach must deny that any sort of pleasure or desire differs from any other sort in a way which would make their inherent goodness differ. Desire theorists, for example, often say that all human desires have the same initial claim to satisfaction. If happiness is used to define "good" univocally, "happiness" itself must be used univocally. If it is, the theory becomes implausible.15 For example, if happiness is taken to be a certain quality of consciousness, how can one explain certain people's dedication to causes which are irreducible to states of consciousness. For them, happiness is participation in something bigger than themselves. A consequentialist can use "happiness" in a very wide sense to allow for the diverse life styles people regard as intrinsically good. But if this maneuver makes it plausible to say that everyone desires happiness, "happiness" ceases to be univocal and thus becomes useless for the consequentialist. People not only get happiness by different means, but "happiness" as an end is different things to different people. Attempts to define "good" univocally in terms of satisfaction of desire also fail. Do all human desires really have the same initial claim to satisfaction? Some people desire sadistic pleasure. Many people desire death for criminals. Pornography sells better than the best literature; more people desire the former than the latter. Some people desire feminine deodorant spray. It sells. Most people have what some economists call "artificial desires." Keynes, for instance, distinguishes the needs people have of themselves from the needs they have in ofar as they wish to get ahead of others. Galbraith talks of wants created by production and advertising. He points out that the desire for increased expenditure may be stronger than any need which can be satisfied by it.16 Are all these desires to be counted uncritically in calculating moral right and wrong? A desire theorist can answer that desires must be criticized. If someone desires what is logically impossible, his desire should be ignored. If someone has a desire which would go away if her false belief about matters of fact were corrected, the error ought to be corrected. But these criteria do not dispose of all the examples mentioned in the previous paragraph. The desires of sadists, of proponents of capital punishment, of dirty old men, and of status seekers are not for anything logically impossible. Nor is it always the case that such desires arise from errors about matters of fact. The desire theorist must find additional principles of criticism. Since moral criteria cannot be invoked without circularity or infinite regress, the desire theorist might seek a scientific criterion from psychology. Clearly, the desires of the ~~insane~~ do not have the same initial claim to satisfaction as do the desires of the mentally healthy. Sadists, proponents of capital punishment, dirty old men, and status seekers need not be insane, but perhaps they are not mentally healthy. Therefore, let mental healthfulness of desires be the criterion. But there are just as many schools of psychology as there are philosophical and religious conceptions of the good life. Psychologists are not proceeding as scientists when they go beyond the consensus about insanity to give a full account of "mental health." Opinions about the good life do not become science simply because they happen to be the opinions of Freud, Jung, Adler, Allers, Horney, Maslow, Allport, Erikson, Fromm, Menninger, or some other person of scientific competence. If the opinions of such persons about the good life were science, they would offer a common, detailed account of "mental health." They do not. Attempts to define "good" either in terms of happiness or desire also must fit in pain and frustration. If the disvalues are the same in kind as the values, merely negative in degree, the value and its opposite can be measured on a single scale as one measures heat and cold with the same thermometer. But this assumption has been questioned.17 It is not at all obvious that a disvalue is simply a low level of a value, as cold is lack of heat. Disvalues such as pain and frustration are not mere privations; they have a positive character of their own. Thus, "good" is not univocal if it is defined either in terms of happiness and avoidance of pain, or in terms of satisfaction and frustration of desire. The calculation of the "greater good" is blocked by the incommensurability of the opposites in either pair. Another difficulty with these theories of value is that enjoyments and desires differ in kind, not only in degree. As I said above, "happiness" means different things to different people. One can compare the enjoyment of drinking a Coke with that of eating a candy bar or the desire for the one with that for the other.18 But how many appetizing meals in a French restaurant give enjoyment comparable to that of a happy marriage? How many satisfactions of desires for particular objectives are comparable to the satisfaction of one's desire to be a good father, an excellent philosopher, or a faithful follower of Jesus? Jeremy Bentham, who took calculation seriously, dealt with the problem of commensurability in a characteristically straightforward way: Money is the instrument for measuring the quantity of pain or pleasure. Those who are not satisfied with the accuracy of this instrument must find out some other that shall be more accurate, or bid adieu to Politics and Morals. Let no man therefore be either surprised or scandalized if he find me in the course of this work valuing every thing in money. Tis in this way only we can get aliquot parts to measure by. If we must not say of a pain or a pleasure that it is worth so much money, it is in vain, in point of quantity, to say anything at all about it, there is neither proportion nor disproportion between Punishments and Crimes.19 Since one must calculate, one can. So "good" is reduced to pleasure and avoidance of pain, and these are reduced to money. Bentham's leap-of-faith is breathtaking.20 He is no cynic saying that every person has his or her price. He is a moralist saying that the best things in life simply cost more than a Coke or a candy bar. The definition of "good" in terms of enjoyment faces another objection. Enjoyment is a conscious experience which normally arises but is distinct from some activity which extends beyond consciousness. Let us imagine a device which could record total experiences as they were being lived and then play them back in the brains of other persons. One might enjoy receiving such a recorded experience—for example, of one's favorite athlete winning one's favorite game. But would one wish to spend the rest of one's life receiving such recorded experiences, however enjoyable they might be? This thought-experiment isolates enjoyment as a conscious experience from the whole of real life which one enjoys. If one agrees that one would not wish to spend the rest of one's life receiving recorded enjoyable experiences, one can still value enjoyment, but only insofar as it is part of a real life in which goods transcending consciousness also are participated.21 Those who define "good" in terms of desire can point out that the preceding argument does not touch them. "Satisfaction" is said of whole persons interacting with their total environment. Moreover, while "desire" often is used in a wider sense than "enjoyment," it also is used in a more precise sense than "happiness." . But even if desire theorists can solve other difficulties, they still must admit incommensurable kinds of desires if they are to avoid something like Bentham's postulate that the best things in life merely cost more. If desire theorists admit incommensurable kinds of desires, then in the present matter I have no quarrel with them. The goods remain incommensurable, and consequentialist calculation is blocked.

#### Aggregation is nonsensical since a] it impedes on one persons ends for another and b] assumes everyone values the same thing.

#### Moral law must be universal—our judgements can’t only apply to ourselves any more than 2+2=4 can be true only for me – any non-universalizable norm justifies someone’s ability to impede on your ends.

#### Thus, the standard is consistency with liberty. Prefer:

#### 1] The state is obligated to prioritize freedom.

**Otteson 09** [(James R., professor of philosophy and economics at Yeshiva University) “Kantian Individualism and Political Libertarianism,” The Independent Review, v. 13, n. 3, Winter, [2009](https://link.springer.com/article/10.1007/s10790-015-9506-9)] TDI

It is difficult to imagine a stronger defense of the “sacred” dignity of individual agency. Kantian individuality is premised on its rational nature and its entailed inherent dignity, and the rest of his moral philosophy arguably is built on this vision.1 Kant relies on a similarly robust conception of individuality in work other than his explicitly moral philosophy. The 1784 essay “An Answer to the Question: ‘What Is Enlightenment?’” (Kant 1991), for example, emphasizes in strong terms the threat that paternalism poses to one’s will. Kant argues that “enlightenment” (Aufklärung) involves a transition from moral and intellectual immaturity, wherein one depends on others to make one’s moral and intellectual decisions, to maturity, wherein one makes such decisions for oneself. One cannot effect this transition if one remains under another’s tutelage, and, as a corollary, one compromises another’s enlightenment if one undertakes to make such decisions for the other person—which, as Kant argues, is the case under a paternalistic government. Kant also writes in his 1786 essay “What Is Orientation in Thinking?” that “To think for oneself means to look within oneself (i.e. in one’s own reason) for the supreme touchstone of truth; and the maxim of thinking for oneself at all times is enlightenment” (1991, 249, italics and bold in the original). These passages are consistent with the position he takes in Grounding that a person who depends on others is acting heteronomously, not autonomously, and is to that extent not exercising a free moral will. These passages also help to clarify Kant’s notion of personhood and rational agency by indicating some of their practical implications. For example, on the basis of his argument, one would expect him to argue for setting severe limits on the authority that any group of people, including the state, may exercise over others: because individual freedom is necessary both to achieve enlightenment and to exercise one’s moral agency, Kant should argue that no group may impinge on that freedom without thereby acting immorally. Kant expressly draws this conclusion in his 1793 essay “On the Common Saying: ‘This May Be True in Theory, but It Does Not Apply in Practice’”: Right is the restriction of each individual’s freedom so that it harmonises with the freedom of everyone else (in so far as this is possible within the terms of a general law). And public right is the distinctive quality of the external laws which make this constant harmony possible. Since every restriction of freedom through the arbitrary will of another party is termed coercion, it follows that a civil constitution is a relationship among free men who are subject to coercive laws, while they retain their freedom within the general union with their fellows. (1991, 73, emphasis in original) Kant insists on the protection of a sphere of liberty for each individual to self-legislate under universalizable laws of rationality, consistent with the formulation of the categorical imperative requiring the treatment of others “always at the same time as an end and never simply as a means” (1981, 36). This formulation of the categorical imperative might even logically entail the position Kant articulates about “right,” “public right,” and “freedom.” Persons do not lose their personhood when they join a civil community, so they cannot rationally endorse a state that will be destructive of that personhood; on the contrary, according to Kant, a person enters civil society rationally willing that the society will protect both his own agency and that of others. Robert B. Pippen rightly says that for Kant “political duties are a subset of moral duties” (1985, 107–42), but the argument here puts it slightly differently: political rights, or “dignities,” derive from moral rights, which for Kant are determined by one’s moral agency. Thus, the only “coercive laws” to which individuals may rationally allow themselves to be subject in civil society are those that require respect for each others’ moral agency (and provide for the punishment of infractions thereof) (see Pippen 1985, 121). When Kant comes to state his own moral justification for the state in the 1797 Metaphysics of Morals, this claim is exactly the one he makes: the state is necessary for securing the conditions of “Right”—in other words, the conditions under which persons can exercise their autonomous agency (see 1991, 132–35). Consistent with this interpretation, Kant elsewhere endorses free trade and open markets on grounds that make his concern for “harmony” in the preceding passage reminiscent of Adam Smithian invisible-hand arguments. In his 1784 essay “Idea for a Universal History with a Cosmopolitan Purpose,” Kant writes: “Individual men and even entire nations little imagine that, while they are pursuing their own ends, each in his own way and often in opposition to others, they are unwittingly guided in their advance along a course intended by nature. They are unconsciously promoting an end which, even if they knew what it was, would scarcely arouse their interest” (1991, 41). This statement is similar to Smith’s statement of the invisible-hand argument.2 Kant proceeds to endorse some of the same laissez-faire economic policies that Smith advocated—for example, in his discussion in his 1786 work “Conjectures on the Beginning of Human History” of the benefits of “mutual exchange” and in his claim that “there can be no wealth-producing activity without freedom” (1991, 230–31, emphasis in original), as well as in his claim in the 1795 Perpetual Peace that “the spirit of commerce” is motivated by people’s “mutual self-interest” and thus “cannot exist side by side with war” (1991, 114, emphasis in original).3 Finally, although Kant argues that we cannot know exactly what direction human progress will take, he believes we can nevertheless be confident that mankind is progressing.4 Thus, in “Universal History” he writes: The highest purpose of nature—i.e. the development of all natural capacities—can be fulfilled for mankind only in society, and nature intends that man should accomplish this, and indeed all his appointed ends, by his own efforts. This purpose can be fulfilled only in a society which has not only the greatest freedom, and therefore a continual antagonism among its members, but also the most precise specification and preservation of the limits of this freedom in order that it can co-exist with the freedom of others. The highest task which nature has set for mankind must therefore be that of establishing a society in which freedom under external laws would be combined to the greatest possible extent with irresistible force, in other words of establishing a perfectly just civil constitution. (1991, 45–46, emphasis in original) Kant’s argument in this essay runs as follows: human progress is possible, but only in conditions of a civil society whose design allows this progress; because the progress is possible only as individuals become enlightened, and individual enlightenment is in turn possible only when individuals are free from improper coercion and paternalism, human progress is therefore possible only under a state that defends individual freedom. Kant believes that individuals have the best chance to be happy under a limited civil government, and he therefore argues that even such a laudable goal as increasing human happiness is not a justifiable role of the state: “But the whole concept of an external right is derived entirely from the concept of freedom in the mutual external relationships of human beings, and has nothing to do with the end which all men have by nature (i.e. the aim of achieving happiness) or with the recognized means of attaining this end. And thus the latter end must on no account interfere as a determinant with the laws governing external right” (“Theory and Practice,” 1991, 73, emphasis in original). The Kantian state is hence limited on the principled grounds of respecting agency; the fact that this limitation in his view provides the conditions enabling enlightenment, progress, and ultimately happiness is a great but ancillary benefit. Thus, the positions Kant takes on nonpolitical issues would seem to suggest a libertarian political position. And Kant explicitly avows such a state. In “Universal History,” he writes: Furthermore, civil freedom can no longer be so easily infringed without disadvantage to all trades and industries, and especially to commerce, in the event of which the state’s power in its external relations will also decline. . . . If the citizen is deterred from seeking his personal welfare in any way he chooses which is consistent with the freedom of others, the vitality of business in general and hence also the strength of the whole are held in check. For this reason, restrictions placed upon personal activities are increasingly relaxed, and general freedom of religion is granted. And thus, although folly and caprice creep in at times, enlightenment gradually arises. (1991, 50–51, emphasis in original) In “Theory and Practice,” Kant writes that “the public welfare which demands first consideration lies precisely in that legal constitution which guarantees everyone his freedom within the law, so that each remains free to seek his happiness in whatever way he thinks best, so long as he does not violate the lawful freedom and rights of his fellow subjects at large” and that “[n]o-one can compel me to be happy in accordance with his conception of the welfare of others, for each may seek his happiness in whatever way he sees fit, so long as he does not infringe upon the freedom of others to pursue a similar end which can be reconciled with the freedom of everyone else within a workable general law” (1991, 80, emphasis in original, and 74). In a crucial passage in Metaphysics of Morals, Kant writes that the “Universal Principle of Right” is “‘[e]very action which by itself or by its maxim enables the freedom of each individual’s will to co-exist with the freedom of everyone else in accordance with a universal law is right.’” He concludes, “Thus the universal law of right is as follows: let your external actions be such that the free application of your will can co-exist with the freedom of everyone in accordance with a universal law” (1991, 133, emphasis in original).5 This stipulation becomes for Kant the grounding justification for the existence of a state, its raison d’être, and the reason we leave the state of nature is to secure this sphere of maximum freedom compatible with the same freedom of all others. Because this freedom must be complete, in the sense of being as full as possible given the existence of other persons who demand similar freedom, it entails that the state may—indeed, must—secure this condition of freedom, but undertake to do nothing else because any other state activities would compromise the very autonomy the state seeks to defend. Kant’s position thus outlines and implies a political philosophy that is broadly libertarian; that is, it endorses a state constructed with the sole aim of protecting its citizens against invasions of their liberty. For Kant, individuals create a state to protect their moral agency, and in doing so they consent to coercion only insofar as it is required to prevent themselves or others from impinging on their own or others’ agency. In his argument, individuals cannot rationally consent to a state that instructs them in morals, coerces virtuous behavior, commands them to trade or not, directs their pursuit of happiness, or forcibly requires them to provide for their own or others’ pursuits of happiness. And except in cases of punishment for wrongdoing,6 this severe limitation on the scope of the state’s authority must always be respected: “The rights of man must be held sacred, however great a sacrifice the ruling power may have to make. There can be no half measures here; it is no use devising hybrid solutions such as a pragmatically conditioned right halfway between right and utility. For all politics must bend the knee before right, although politics may hope in return to arrive, however slowly, at a stage of lasting brilliance” (Perpetual Peace, 1991, 125). The implication is that a Kantian state protects against invasions of freedom and does nothing else; in the absence of invasions or threats of invasions, it is inactive.

#### 2] Enterprise – we are composed of different practical identities, but reason unifies them and allows us to shift and act upon different enterprises. Consequentialist frameworks cannot produce unified moral actions.

#### 3] Performativity—freedom is the key to the process of justification of arguments. Willing that we should abide by their ethical theory presupposes that we own ourselves in the first place.

#### Contention –

#### 1] Libertarianism mandates a market-oriented approach to space—that negates.

Broker 20 [(Tyler, work has been published in the Gonzaga Law Review, the Albany Law Review and the University of Memphis Law Review.) “Space Law Can Only Be Libertarian Minded,” Above the Law, 1-14-20, <https://abovethelaw.com/2020/01/space-law-can-only-be-libertarian-minded/>] TDI

The impact on human daily life from a transition to the virtually unlimited resource reality of space cannot be overstated. However, when it comes to the law, a minimalist, dare I say libertarian, approach appears as the only applicable system. In the words of NASA, “2020 promises to be a big year for space exploration.” Yet, as Rand Simberg points out in Reason magazine, it is actually private American investment that is currently moving space exploration to “a pace unseen since the 1960s.” According to Simberg, due to this increase in private investment “We are now on the verge of getting affordable private access to orbit for large masses of payload and people.” The impact of that type of affordable travel into space might sound sensational to some, but in reality the benefits that space can offer are far greater than any benefit currently attributed to any major policy proposal being discussed at the national level. The sheer amount of resources available within our current reach/capabilities simply speaks for itself. However, although those new realities will, as Simberg says, “bring to the fore a lot of ideological issues that up to now were just theoretical,” I believe it will also eliminate many economic and legal distinctions we currently utilize today. For example, the sheer number of resources we can already obtain in space means that in the rapidly near future, the distinction between a nonpublic good or a public good will be rendered meaningless. In other words, because the resources available within our solar system exist in such quantities, all goods will become nonrivalrous in their consumption and nonexcludable in their distribution. This would mean government engagement in the public provision of a nonpublic good, even at the trivial level, or what Kevin Williamson defines as socialism, is rendered meaningless or impossible. In fact, in space, I fail to see how any government could even try to legally compel collectivism in the way Simberg fears. Similar to many economic distinctions, however, it appears that many laws, both the good and the bad, will also be rendered meaningless as soon as we begin to utilize the resources within our solar system. For example, if every human being is given access to the resources that allows them to replicate anything anyone else has, or replace anything “taken” from them instantly, what would be the point of theft laws? If you had virtually infinite space in which you can build what we would now call luxurious livable quarters, all without exploiting human labor or fragile Earth ecosystems when you do it, what sense would most property, employment, or commercial law make? Again, this is not a pipe dream, no matter how much our population grows for the next several millennia, the amount of resources within our solar system can sustain such an existence for every human being. Rather than panicking about the future, we should try embracing it, or at least meaningfully preparing for it. Currently, the Outer Space Treaty, or as some call it “the Magna Carta of Space,” is silent on the issue of whether private individuals or corporate entities can own territory in space. Regardless of whether governments allow it, however, private citizens are currently obtaining the ability to travel there, and if human history is any indicator, private homesteading will follow, flag or no flag. We Americans know this is how a Wild West starts, where most regulation becomes the impractical pipe dream. But again, this would be a Wild West where the exploitation of human labor and fragile Earth ecosystem makes no economic sense, where every single human can be granted access to resources that even the wealthiest among us now would envy, and where innovation and imagination become the only things we would recognize as currency. Only a libertarian-type system, that guarantees basic individual rights to life, liberty, and the pursuit of happiness could be valued and therefore human fidelity to a set of laws made possible, in such an existence.

#### 2] Property rights in space can be consistent with international law

Simberg 12 [(Rand, MSE in technical management from West Coast University, recognized as an expert in space transportation by the Office of Technology Assessment) “Homesteading the Final Frontier A Practical Proposal for Securing Property Rights in Space,” Competitive Enterprise Institute, April 2012, <https://cei.org/wp-content/uploads/2012/04/Rand-Simberg-Homesteading-the-Final-Frontier.pdf>] TDI

But is it true that any recognition of off-planet property claims is de facto a violation of the Outer Space Treaty? Not necessarily. For instance, one could argue that the existence of the Moon Treaty is in and of itself a refutation of the notion that the Outer Space Treaty outlaws private property in space, or else there would be no need for another treaty that essentially explicitly does so. And there is at least one potential loophole that could be exploited by appropriately worded legislation. There are two key assumptions in the legal argument used by opponents of off-planet property claims: 1) that the recognition by a government would only recognize claims by its own citizens; and 2) that it would defend them by force. That need not necessarily be so. Under the treaty, it would in fact be possible for a government, or group of governments, to recognize the property claims of anyone who met specified conditions, regardless of their citizenship or nationality. Such cooperation would obviate the need for physical force to defend claims. The argument that the treaty permits individual property rights was actually made from the very beginning. In 1969, two years after the treaty went into force, the late distinguished space-law professor, Stephen Gorove, noted that under it, “[A]n individual acting on his own behalf or on behalf of another individual or a private association or an international organization could lawfully appropriate any part of outer space, including the [M]oon and other celestial bodies.”32 This clearly provides support for the concept of individual claims off planet under Article II.

#### 3] Space appropriation and exploration originates from private companies such as Space X and Blue Origin. Preventing such is a restriction on the ability of companies to set and pursue their ends and these companies gain contracts with the government for projects which turns promise breaking offense.

## 2

### 1NC—OFF

#### Nature has become valorized to create new markets that appropriate materials through imperialism---the 1ACs modernization of such policies maintains the ruse of green capitalism which makes their impacts inevitable through shifting extraction elsewhere.

Brand & Wissen 21 (Ulrich and Markus, \* Professor of International Politics at the University of Vienna, \*\* Professor of Social Sciences at the Berlin School of Economics and Law, 2021, “The Imperial Mode of Living Everyday Life and the Ecological Crisis of Capitalism”)//ae

VALORIZATION, EXTERNALIZATION AND PASSIVE REVOLUTION: A GREEN CAPITALISM? In the second chapter, we emphasized the importance of looking not only at the destructiveness, but also at the transformative capacity, of capitalist society–nature relations. Unlike earlier modes of production, we argued, following Marx, capitalism can only survive in a mode of permanent change. This fact can also be observed in the current situation. Capitalist valorization of nature does not only mean destruction. It can also take the preservation of nature as a fundamental condition. This is the core idea of concepts such as ‘biocapitalism’ or ‘post-Fordist society–nature relations’ that, having been inspired by regulation theory, consider the transformative and adaptive capacity of capitalism along with its ecological destructiveness. 21 They depart from crisis diagnoses such as the one provided by Jason Moore, who assumes that there is a ‘tendency of the ecological surplus to fall’ and that the options of capitalist societies for containing this tendency are exhausted. 22 For Moore, contemporary capitalism is confronted with the ‘end of cheap nature’, i.e. the vanishing prospect of appropriating labour, food, energy and raw materials for free or close to free. A ‘peak appropriation’, expressed by rising prices for these ‘big four inputs’, increases production costs and decreases the rate of profit. It may be counteracted in the short term by the ‘cheap money’ of a neoliberal and financialized capitalism. In the long run, however, a debt-driven strategy to cope with rising prices, especially for energy, is hardly viable. From a regulation-theoretical point of view, the ecological crisis of capitalism looks different. Without denying the basic and sharpening ecological contradictions of capitalism and the impossibility of coping with them in the long run by using the mechanisms of capitalist societalization, regulation theory would ask how and to what extent a spatially exclusive and temporally limited ecological stabilization of capitalism might occur. Raising this question is much more than merely an academic exercise. Rather, it is a precondition for understanding the specific manifestations of capitalism’s ecological contradictions and for identifying starting points for progressive alternatives. A regulation-theoretical perspective assumes that capitalist society– nature relations, despite all of their fundamental continuities, are also characterized by spatiotemporal disruptions that may give rise to different forms of appropriating nature. Thus the development of biotechnologies will establish new genetic resources that are very important to certain factions of capital, such as the seed and pharmaceutical industries. These resources differ from fossil ones insofar as their use is not accompanied by their material transformation and thus their destruction, but to a certain extent requires their very protection. This need for protection arises from the fact that the interest in their valorization does not focus on their material or energetic properties but on the information that their genetic material contains (of course, once the information has been obtained and exploited, the interest in protection can quickly disappear). In this case, as Christoph Görg points out, ‘the protection of nature … no longer occurs opposed to its capitalistic use, but as an inherent element of its valorization.’ 23 As recent analyses and debates suggest, such forms of valorization seem to have become particularly important in the present multiple crises. Thus the term green grabbing describes the capitalist valorization of noncapitalist areas as framed by environmental and energy policy. 24 This valorization includes payments for ecosystem services, such as conserving forests as CO 2 sinks and reserves of biodiversity. Such payments are geared towards offsetting the opportunity costs of exploiting nature, thus compensating companies for forgoing otherwise economically lucrative but ecologically destructive practices. 25 Their effect on the functionality of a green capitalist accumulation regime should, however, be assessed with caution, as they very likely contribute only indirectly to new forms of value creation. This would be the case if the proceeds were used for the ecological modernization of agriculture, forestry or industrial production. Otherwise, as in the case of emissions trading, the incentives will at best create short-term opportunities to invest over-accumulated capital. At worst, a new speculative (financial) market segment will develop around these incentives, with inherent economic and ecological risks, because offset trading relies on continuing, rather than overcoming, the ecologically destructive imperial mode of living. If the latter were overcome, there would be nothing left to trade. Designed as an incentive to reduce environmental pollution, offset markets institutionalize the influence of forces whose economic success depends on the continuation of the imperial mode of living, albeit in an ecologically modernized form. 26 But their highly questionable economic and environmental impact is only one aspect of payments for ecosystem services. From the perspective of hegemony theory, their symbolic dimension is just as interesting: if private individuals or companies can pay ‘indulgences’ in the form of a variety of offsets for the environmental damage of consumption and production, then a broadly shared conviction may emerge that nature is in principle replaceable – emissions in one place are offset by reforestation measures elsewhere; ecosystems that are annihilated for a motorway junction in one place will be restored in another; a vacation flight ceases to be ecologically suspicious if you pay for a tree to be planted that will absorb the emissions generated by your flight over the course of its life cycle. The idea of neoclassical environmental economics, according to which ‘natural capital’ can be easily replaced as long as the total capital stock continues to grow, thus becomes common sense. Furthermore, payments for ecosystem services in the receiving countries shift the positions of subjects and transform social power relations. Thus Thomas Fatheuer describes how the UN’s REDD+ forest protection programme has formed new and broad social alliances and reinforced support for ‘market solutions’ to ecological problems in Amazonia. 27 Indigenous communities are thereby integrated into entirely different logics of action. Maintenance of their economic practices increasingly depends on the fact that they are ‘integrated in a REDD+ scheme’. 28 Kathleen McAfee has referred to this aspect as ‘inclusionary neoliberalism’ and ‘neoliberal environmentalism’. 29 In essence, these are new forms of containment that – through consensus and coercion or the marginalization of opposing actors – pursue economic and ecological objectives simultaneously . The trade-off is then no longer between economics and ecology, but between a market-driven ecological modernization and the social rights of those excluded in the process. 30 While payments for ecosystem services are aimed at preserving or substituting for ‘natural capital’, and while the accompanying hegemonic consolidation of socially and ecologically destructive patterns of production and consumption seems to be more important than their contribution to the creation of economic value, the second form of valorization we consider here directly contributes to value creation. What is valorized here is not so much nature as the built environment. According to David Harvey, the built environment is the totality of immobile artefacts that together form the general conditions of production and consumption, or are used as fixed capital in the production process: ‘factories, dams, offices, shops, warehouses, roads, railways, docks, power stations, water supply and sewage disposal systems, schools, hospitals, parks, cinemas, restaurants – the list is endless’. 31 The built environment, in the form of infrastructure for energy supply, is currently at the centre of social conflicts. The German ‘energy transition’ offers plenty of illustrative examples for this. As a result of the German Renewable Energy Act of 2000, many decentralized facilities have been created; these not only undermine the central structures of fossil and nuclear power generation but have also pushed traditional energy companies into a crisis. Insofar as wind and solar energy is free and – although to varying degrees – universally available, it poses an existential threat to the traditional companies. 32 They cannot change the availability of free, renewable energy. What they can do, however, is influence the forms of its delivery: centralized or decentralized. And that is exactly at the core of the current conflict in German energy policy. The fact that the promotion of decentralized facilities has been capped and that the development of large offshore wind farms and new power lines has been accelerated in a recent amendment to the Renewable Energy Act indicates that the traditional energy industry is going on the offensive when faced with an existential crisis. It is trying to penetrate a space that has so far remained closed to it as a result of social and political struggles, the institutionalization of their outcomes and the specific materiality of renewable energies. Accordingly, this industry push can be identified as an attempt at capitalist appropriation in the energy sector. If successful, the result would be a treatment of the environmental and energy crisis in a key social area that would, due to necessary investments in infrastructure, create considerable potential for value creation and thus also serve economic crisis management. 33 The imperial mode of living would be modernized without being fundamentally challenged. In the absence of a significant reduction in the level of energy consumption, the externalization of its socio-ecological costs would only be shifted to other fields: from fossil fuels (the continued use of which is still fiercely defended) and CO 2 sinks to metals such as copper and rare minerals that are mostly extracted from deposits in the global South and built into the renewable energy infrastructure of the global North. 34 A third form of valorization that could form part of a green capitalism is land grabbing in its narrow sense, i.e. the purchase or lease of large tracts of land, often previously declared ‘degraded’, by domestic or foreign investors who take advantage of indeterminate land tenure. Land grabbing can also serve the purpose of energy policy, as when biofuels are grown on the appropriated land. Although agrofuel production is currently very controversial, it is expanding in many countries of the global South. Depending on the plant grown, small-holder farmers are integrated into the ‘agrofuel project’ through contract farming or are (violently) displaced. 35 The extent to which ecological and economic goals are met by this method is highly uncertain, but the significance of the tendency at the heart of it goes beyond agrofuel production: it hints at the possibility of handling the contradictions of the imperial mode of living by modernizing it ecologically. If the energy supply were to increasingly depend on continuously regenerating biomass rather than fossil biomass, then investing in land could prove to be a forward-looking strategy. 36 Changes such as greater meat consumption in emerging economies and projected population growth, which is framed in terms of food security, support this conclusion. From our perspective, the new ways of valorizing nature under the guise of the green economy are interesting in that they start (in different ways) at the epicentre of multiple crises, particularly its economic and ecological aspects. Their promise is to transform the relationships of social forces and the prevailing norms of production and consumption, basically in line with Gramsci’s ‘passive revolution’ (see Chapter 2 above) and thus without calling fundamental relations of power and domination into question. In valorizing land, for instance, new developments in the relationship between industrial capital and financial capital can be observed – a central ‘axis of accumulation’ that could be conducive to enhanced reproduction. 37 Thus Madeleine Fairbairn diagnoses a ‘return to the real’ in her study of the financialization of arable land since 2007. 38 Investors are indeed interested in the exchange value of arable land and have speculated on an increase in its value against the background of climate change, the energy crisis, rising meat consumption in countries of the global South, and population growth. Unlike urban real estate, however, the exchange value of arable land is difficult to separate from its use value, ‘given that the property itself acts as an essential substrate for the value-producing economic activity, rather than just the location for those activities’. 39 The current wave of investments in farmland can therefore also be interpreted as a real accumulation that is mediated by financialization: ‘many investors acquire farmland as part of a productive agricultural operation, and the trend is bolstered by broader discourses that stress the use value of farmland.’ 40 A finance-dominated valorization of nature would not necessarily equate to the continuation of neoliberal business as usual or the extension of financialization to new spheres with the usual problem ‘that the profit rates of real capital are not sufficient to fulfil monetary demands over the long term’. 41 In contrast, the relationship between industrial and finance capital could be transformed in a way that would be beneficial to both real accumulation and the selective management of the ecological crisis, if the developments outlined here prevail and are generalized, i.e. if they spread, for example, to the mining of raw materials needed for ecological modernization (copper, rare earth metals, lithium, etc.). The fact that a green capitalist project would not fundamentally challenge the imperial mode of living supports our argument. Just as such a project seeks to place the crisis-laden relationship between industrial and financial capital on a new footing, it lures with the promise of modernizing the established norms of production and consumption instead of fundamentally transforming them. The use of agrofuel blends, subsidies for electric cars, the inclusion of aviation in the European Emissions Trading System, the generation of electricity in offshore wind farms and the construction of huge power lines for its distribution – all these measures suggest the normality of the prevailing patterns of production and consumption. They build on deeply rooted everyday perceptions and practices and convey the message that the imperial mode of living can be perpetuated by its modernization.

#### Capitalism is terminally unsustainable and culminates in ecological collapse---its try or die to transition towards an Ecological Marxist analysis of Earth System Governance as a means towards ending capitalism

Michael J. Albert 20 (Michael J. Albert is a doctoral candidate in political science at the Johns Hopkins University, 5/1/20, accessed 10/6/21, “Capitalism and Earth System Governance: An Ecological Marxist Approach”, https://direct.mit.edu/glep/article/20/2/37/95042/Capitalism-and-Earth-System-Governance-An)

Growing recognition of the Anthropocene era has led to a chorus of calls for Earth System Governance (ESG). Advocates argue that humanity’s newfound sociotechnical powers require institutional transformations at all scales of governance to wield these powers with wisdom and foresight. Critics, on the other hand, fear that these initiatives embody a technocratic impulse that aims to subject the planet to expert management without addressing the political-economic roots of the earth system crisis. This article proposes a more affirmative engagement with existing approaches to ESG while also building on these critiques. While advocates of ESG typically ignore the capitalistic roots of the earth system crisis and propose tepid reforms that risk authoritarian expressions, their critics also have yet to systematically consider the potential for more democratic and postcapitalist forms of ESG. In response, I propose an **ecological Marxist** approach based on a structural **analysis** of **capitalism** as the primary **driver** of the **earth system crisis** and an “ecosocialist” vision of ESG that subordinates the market to democratic **planning** at multiple scales. I argue that an ecological Marxist perspective is needed to foreground the **structural political-economic constraints** on **earth system stability**, though existing approaches to ESG can in turn inform ecosocialist strategies for **global** **institutional** **design** and **democratization**.Planetary governance is on the theoretical (if not yet policy) **agenda**, catalyzed by growing recognition of the emerging ontological condition of the “**Anthropocene**,” in which human practices have become a force of planetary-scale transformation (Crutzen and Steffen 2003). Advocates argue that humanity’s newfound sociotechnical powers require institutional transformations at all scales of governance to wield these powers of planetary transformation with wisdom and foresight (Biermann 2014; Galaz 2014; Rockström et al. 2009; Steffen et al. 2011; Crutzen et al. 2005). The concept of “planetary boundaries” has become particularly influential, along with the entwined project of Earth System Governance (ESG). These **approaches** posit the **existence** of an **emergent earth system** that is more than the **sum** of its **parts**: a **self-regulating entity** that possesses **global-scale thresholds** at which **continuous quantitative changes** may give way to a **qualitative state shift** that irreversibly **transforms** all its key **subsystems across the planet**. The **purpose** of ESG, from this view, is to regulate the **global social-ecological systems** driving **planetary transformation** in order to maintain the **earth** system within the **planetary boundaries deemed hospitable** for human **development**, while **anticipating** and **warding off** a **state shift** that may **irreversibly degrade** such **conditions** (Biermann 2014, 21–22). While some critical scholars within the social sciences are sympathetic to emerging ESG initiatives (e.g., Angus 2016; Foster et al. 2011), most have approached them with suspicion. In particular, these scholars fear that these initiatives embody a technocratic impulse that aims to subject the planet to expert management without addressing the political-economic roots of the earth system crisis, thereby forging a depoliticized response that entrenches existing inequalities and risks legitimating authoritarian interventions (Lövbrand et al. 2015; Swyngedouw 2013; Baskin 2014; Mann and Wainwright 2018; Stirling 2014). In response, these critics tend to reject ESG initiatives as harbingers of a perpetual “neoliberal” and potentially authoritarian agenda, instead affirming the need for critical reflection and resistance from below. This article will propose a more affirmative engagement with existing approaches to ESG while also building on these critiques. The critics are for the most part correct that these approaches lack a sophisticated analysis of politicaleconomic power and focus on technocratic interventions from above that risk legitimizing authoritarian planetary governance. In particular, the vast majority of these approaches neglect the structure of global capitalism as the primary driver of (and constraint on resolving) the earth system crisis, which I will argue results in a contradiction between their stated aims of preventing transgression of planetary boundaries and the proposed means for doing so. However, their critics have yet to systematically consider the potential for more egalitarian and democratic forms of ESG capable of actualizing postcapitalist development trajectories. In response, I will formulate an ecological Marxist approach that conceives ESG not as a technocratic intervention from above that retains existing relations of power and production but rather as a counterhegemonic movement of political-economic transition beyond capitalism. This approach will involve a structural analysis of global capitalism as the primary driver of the earth system crisis and an “ecosocialist” vision of ESG that subordinates the global market to democratic planning at multiple scales. I will suggest that while ecological Marxists provide vital political-economic analysis that is lacking in existing approaches to ESG, they are in turn limited by an underdeveloped vision of ecosocialism that remains primarily on the level of principles while being vague on questions of institutional design (particularly at the global scale). Therefore, by staging an engagement between ecological Marxism and ESG, we can deepen our understanding of both the political-economic transformations needed to prevent transgression of planetary boundaries and the global institutional architectures this might entail. I will begin with a brief overview of the planetary boundaries framework and its corresponding ESG initiatives and will then give an overview of their critics. Next, I will present the ecological Marxist case for why capitalism is fundamentally incompatible with earth system stability and why an “ecosocialist” approach to ESG is needed instead. Next, I will pursue a synthesis between ecological Marxism and ESG to address blind spots in both, which will suggest that global institutional reforms envisioned by ESG scholars can and should be rethought according to ecosocialist principles. Finally, I will conclude with some tentative speculations on how a transition to global ecosocialism might come about, which will show that this goal is not as utopian as it might appear at first glance. The Incipient Earth System Governance Agenda Environmental governance has been a staple of world politics for decades, but what differentiates ESG initiatives from earlier forms is their more holistic rather than sectoral approach (Biermann 2014, 16; Galaz 2014, 11). This new approach was made possible by the paradigm shift heralded by the rise of earth system science, which can be understood, in Clive Hamilton’s words, as “the integrative meta-science of the whole planet as a unified, complex, evolving system beyond the sum of its parts” (Hamilton 2016, 94). In this sense, earth system science follows in the footsteps of Gaia theory by understanding the planet as a complex system with self-regulating properties that maintain its key parameters within conditions conducive to biological flourishing, though it has been shown in geological time to periodically shift between radically altered states (Hamilton 2016). The “Anthropocene” marks the beginning of such a state shift, which threatens to unleash a cascade of positive feedbacks that will push the earth system toward a “no analogue state” or one with no parallel in the history of human evolution (Crutzen and Steffen 2003). Hence the emerging calls for new forms of Anthropocene governance, or “planetary stewardship,” which can be read as attempts to actualize the collective capacities to regulate humanity’s world-transforming powers to maintain the earth system within conditions that have historically been conducive to human development. In the words of Will Steffen and colleagues, The twenty-first century challenge is different from any other that humanity has faced. The planetary nature of the challenge is unique, and demands a global-scale solution that transcends national boundaries and cultural divides. (Steffen et al. 2011, 749) One of the most productive approaches developed so far for grappling with the implications of earth system change is the planetary boundaries framework, which has been endorsed by the UN High-Level Panel on Global Sustainability and embraced by NGOs like Oxfam and the World Wildlife Fund. As Johan Rockström and colleagues explain, planetary boundaries represent judgments on the value of key control parameters in the earth system deemed to be a “safe” distance from dangerous levels. Whereas thresholds refer to inflection or tipping points at which feedback mechanisms produce nonlinear transformations away from a previous state, boundaries, on the other hand, are more like “guard rails” set a distance from these estimated thresholds, which are judged based on an “ethical time horizon” such that political decisions could be taken in time to avoid the threshold after a boundary is crossed (Rockström et al. 2009). Rockström and colleagues identify nine boundaries that encompass key control variables in the earth’s biogeochemical cycles, circulation systems, and biophysical features that contribute to the earth’s overall self-regulating capacity. These include climate change, the rate of biodiversity loss, interference with the nitrogen and phosphorous cycles, stratospheric ozone depletion, ocean acidification, global freshwater use, changes in land use, chemical pollution, and atmospheric aerosol loading (Rockström et al. 2009). For each boundary, Rockström and colleagues quantitatively estimate values at which gradual changes may begin to accelerate through feedbacks based on historical data on similar nonlinear changes in the past. The planetary boundaries framework has in turn been used as one of the primary conceptual underpinnings of the ESG project. In the words of Frank Biermann, the ESG project studies the sum of the formal and informal rule systems and actor networks at all levels of human society that are set up to steer societies toward preventing, mitigating, and adapting to environmental change and earth system transformation. (Biermann 2014, 9) This encompasses both empirical and normative ambitions, in the sense that it investigates the emerging “architecture” of global environmental governance—“the overarching system of inter-governmental and non-state institutions operating in a governance domain” (Biermann 2014, 12–13)—while also prescribing institutional reforms deemed necessary to stabilize the earth system. Biermann calls his project a “realistic utopianism,” in the sense that it envisions radical yet plausible global institutional transformations that would be needed to ward off a planetary state shift. He echoes long-standing concerns that global environmental governance overall remains weak and fragmented (Bernstein and Brunée 2011; Kanie et al. 2012), with lack of harmonization among multilateral environmental treaties as well as between the economic, environmental, and social pillars of “sustainable development” (Biermann 2014, 93–94). To address these weaknesses, Biermann and colleagues propose upgrading the UN Environmental Program into a World Environment Organization (WEO) with the capacity to harmonize existing agreements and draft legally binding treaties, creating a high-level UN Sustainable Development Council (SDC) that would strengthen coordination between environmental and economic institutions and policies, and “mainstreaming” environmental goals into global trade and financial regimes (Biermann et al. 2012a, 2012b; Biermann 2014, 141; for similar proposals, see Rockström and Klum 2015, 142, 149). Critiques of Planetary Boundaries and Earth System Governance Initiatives The response to the **planetary boundaries** and **ESG** **frameworks** from critical social scientists has so far been predominantly marked by suspicion.1 While the critiques are too numerous to provide an exhaustive survey, they could be roughly summarized as critiquing what are perceived to be “postpolitical” tendencies that (1) ignore the **political-economic structures** and **relations of power** fueling the contemporary earth system **crisis**, and thereby frame the problem as one of expert management rather than political-economic transformation, and (2) advocate potentially authoritarian governmental and geoengineering solutions based on the specter of “planetary emergency.” To start, the most common critique of ESG initiatives is that they lack an analysis of power, inequality, and political economy and thus fail to identify the sociopolitical roots of the earth system crisis or imagine alternative forms of political-economic organization. As Eva Lövbrand and colleagues argue, this impoverished social imaginary “runs the risk of producing a post-political **narrative** that invites **techno-managerial** planning and **expert** **administration** at the expense of **democratic debate** and **contestation**” (Lövbrand et al. 2015, 217). It produces what they call a “**postpolitical** **ontology**” in which, somewhat paradoxically, the need for fundamental change to counter an apocalyptic threat is **recognized**, though it can only be countered via the very same **institutions** that have **created the problem** in the first place (Lövbrand et al. 2015, 212). Eric Swyngedouw similarly contends that these **approaches** reduce the **politics of environmental change** to **scientific consensus** and **consensual policy making**, which **marginalizes** conflicting **perspectives** and visions for **alternative political economic worlds**. It is thus recognized that “we have to change radically, but within the contours of the existing state of the situation … so that nothing really has to change” (Swyngedouw 2013, 4). In this way, deeper analyses of the problem are marginalized, and the underlying political-economic architecture of planetary crisis is repackaged as the “solution.” Second, critics of ESG initiatives fear not only that they feed into a **paradoxical defense** of the **neoliberal status quo** but also that they may **promote** more **authoritarian interventions** that use the **specter** of “**planetary emergency**” to cement **new forms** of **hierarchical rule**. Melissa Leach, for example, argues that the planetary boundaries framework “leads all too easily to new forms of environmental authoritarianism,” since it aligns with “**top-down approaches**” that ignore **political questions** of **justice**, **resource access**, and the need for **deeper transformations** (Leach 2014). Jeremy Baskin similarly argues that calls for **Anthropocene governance** legitimate the “the need for **exceptional rule** and **authoritarian responses**,” which emphasize the role of expert-based management reliant on technological innovation and geoengineering (Baskin 2014, 13). Geoff Mann and Joel Wainwright contend that these initiatives are **pushing toward** the **creation** of what they call “**Climate Leviathan**,” or a planetary sovereign with the capacity to “**seize command**, **declare** **an emergency**, and **bring order to the Earth**, all in the **name** of **saving life**” (Mann and Wainwright 2018, 31). For them this would entail a **world government** with **binding technical authority** on scientific issues, a **panopticon-like capacity** to **monitor** and **intervene** within the **planet’s biogeochemical flows**, and **the rights to engage** in **geoengineering experiments** and more **generally** to **decide** which **populations** and ways of life **must live** and **which must be sacrificed** for the good of **biospheric life** (Mann and Wainwright 2018, 30, 150). Thus, while many critics focus on the ostensibly “neoliberal” character of incipient ESG initiatives, others fear that they will actualize even greater authoritarian potential as the unfolding earth system crisis intensifies calls for emergency governance. Toward an Alternative ESG Agenda The critiques enumerated above undoubtedly illuminate problematic tendencies within the emerging literature on planetary boundaries and ESG, though they also tend to be based on strawman portraits of these approaches. For one, many ESG advocates are clearly aware of the need for far-reaching institutional transformations rather than incremental market-based reforms (e.g., Steffen et al. 2011, 13; Rockström and Klum 2015, 153). Second, many (if not most) of them are also highly critical of both the plausibility and desirability of technological and geoengineering solutions, instead advocating rapid decarbonization schemes and a just distribution of planetary resources (e.g., Steffen and Smith 2013; Biermann 2014, 28). Third, while there are certainly technocratic tendencies among many (if not most) ESG proponents, many also emphasize the need for new forms of democratic accountability, as well as a pluralistic approach to knowledge that doesn’t fetishize scientific expertise, to ward off the authoritarian dangers discussed by their critics (e.g., Crutzen et al. 2005; Biermann 2014, 134). However, as the critics show, it remains true that these approaches lack an adequate political-economic analysis of the roots of the contemporary earth system crisis or a vision of ESG that clearly breaks from these roots. For example, Johan Rockström and Mathias Klum emphasize the need for going “beyond GDP” to define new criteria for growth and progress (Rockström and Klum 2015, 142), yet they stop short of confronting the relations of political-economic power that reinforce the imperative of GDP growth. More problematically, they refuse to think beyond the “**growth** imperative” itself, instead believing that growth can instead be “**decoupled**” from **environmental impact** through **exponential technologies**, **resource efficiency**, and **circular economic models** (Rockström and Klum 2015, 133). Thus the solutions they offer remain handicapped by their reticence to challenge the core relations of power and structural imperatives of the global capitalist economy, instead putting faith in decoupling (a dangerous bet, as I’ll discuss below) and ignoring the massive redistributions of wealth and ownership needed to institute an “equitable sharing of remaining biophysical space” (Rockström and Klum 2015, 142). Relatedly, Biermann and colleagues call for useful global governance reforms that constitute steps in the right direction, though they don’t address the political-economic roots of the present crisis by advocating a deep transformation of the organizing principles of the global economy, let alone a shift beyond capitalist social relations. They recognize that “global sustainability cannot be achieved without fundamental reforms in the global economic system,” though they are ambiguous on what this means beyond “mainstreaming” environmental goals into the activities of global economic institutions and developing “multilaterally harmonized systems that allow for discriminating between products on the basis of production processes” (Biermann et al. 2012b, 53). Such moves might constitute genuine steps toward sustainability, yet they ignore the degree to which global institutions like the International Monetary Fund (IMF), World Bank, and World Trade Organization (WTO) would need to be radically transformed if such policies were to provide any significant check on (let alone reversal of ) market-driven development priorities. Biermann’s own work goes further in proposing the creation of a WEO with the capacity to draft treaties and counterbalance the WTO’s investor dispute settlement mechanism, and his call for “global citizen assemblies” adds a much-needed mechanism for democratizing ESG (Biermann 2014, 99–100, 141). However, without more farreaching transformations of the relations of power that drive the dynamics of global capitalism, Biermann’s proposed WEO may be more likely to give birth to the sort of Climate Leviathan feared by Mann and Wainwright—one that does little to address existing inequalities and only mildly counterbalances the untrammeled rule of global capital (Mann and Wainwright 2018), whereas global citizen assemblies would likely be ineffectual unless accompanied by deeper restraints on capitalist power. In short, despite increasing recognition of the need for deep structural reforms of the global economy, scholars of ESG remain reluctant to extend their gaze beyond capitalist horizons, even as those horizons appear increasingly inadequate. The critics of ESG therefore make vital interventions to politicize and deepen these debates. However, they have to this point remained critical rather than constructive and have also yet to systematically consider the potential for more egalitarian and postcapitalist approaches to ESG.2 The reluctance to propose alternative visions of ESG is likely due to the perception that the earth system perspective is inherently depoliticizing and technocratic, since it ostensibly subsumes all local specificity and multiplicity within a totalizing vantage point from which the earth and human societies can be controlled (e.g., Stirling 2014; Baskin 2014). However, this view simultaneously downplays the need for globalscale institutional regulation to rapidly transform global production systems (not to mention constrain the power of global capital) and exaggerates the technocratic impetus of the earth system perspective, which (at least in certain expressions) is less concerned with centralized control than with attunement to emergent global patterns and thresholds, multiscalar interactions, and the limits of human knowledge (Crutzen et al. 2005). In short, the **earth** **system** **sciences** alert us to the need to think **holistically** about our **planetary life-support systems** and to **develop** **modes** of **political-economic analysis**, **struggle**, and **governance** that are **adequate** to the **scale of the problems** we **face**, though this should not obviate the need for analysis, struggle, and creative autonomy at multiple scales (e.g., according to the principle of “subsidiarity”). In this sense, rather than downplaying the need for new forms of global governance or merely advocating local and pluralistic forms of resistance (e.g., Stirling 2014; Mann and Wainwright 2018), we can show that the **insights** of earth system science **demonstrate** the need for a **postcapitalist project** of **ESG** based on a **structural analysis** of **global capitalism** and a **vision** of **political-economic** and **global institutional transformation** that would break from these **constraints**. To develop the foundations of this approach, I turn now to ecological Marxism. Ecological Marxism, the Structural Unsustainability of Capitalism, and the Imperative of Ecosocialism The field of ecological Marxism has grown over the past three decades as scholars in the historical materialist tradition have rediscovered the ecological dimensions of Marx’s thought, which were occluded by the “productivist” leanings of Marxist-Leninism in the early twentieth century (Foster 2000). While the field is itself diverse, with sometimes fractious debates between those favoring a “methodologically dualist” approach to nature-society relations (Foster et al. 2011; Malm 2018) and those promoting a more “hybridist” approach (Moore 2015; Smith 2008), they are united by a shared critique of the structural unsustainability of capitalist socioecological relations and emphasis on the need for an “ecosocialist” transition to resolve the earth system crisis in a socially just manner. Ecological Marxism builds on Marx’s concept of the “**metabolic rift**,” which refers to the “**material** **estrangement** of human beings within capitalist **society** from the **natural** **conditions** which formed the basis for their existence,” thereby **disrupting** the **biogeochemical cycles** through which **ecological systems** are **reproduced** (Foster 2000, 163). While metabolic rifts are not specific to capitalism, capitalism is nonetheless **unique** due to the **particular system** of “**value**” that **drives** its **historical** **dynamics** of **expansion**, **crisis**, and **renewal**. Simply stated, **capitalism** is a **mode of production** organized by the **imperative** of **accumulating** and **circulating exchange-value** rather than **use-value**; rather than producing with an eye toward the satisfaction of immediate needs, capitalism as a system organizes production for the purpose of creating commodities to be sold on the market for a profit, while the profits are then reinvested in production in an everexpanding circuit (Foster et al. 2011, 39). Under the hegemony of exchangevalue relations, which creates an emergent structure often referred to as the “law of value,” **producers** are forced to **orient** the **scale** and **intensity** of **production** in **accordance** with **market signals** **rather than natural rhythms**, thereby **creating** a “**rift**” between **production** and **ecological reproduction** (Foster 2000, 164). Rather than being a sign of an ecologically deficient market system that simply needs to price ecosystem services more effectively, for ecological Marxists, this rift between production and ecological reproduction is a central feature of how capitalism has actually worked historically and which has enabled its dynamism and profitability. In the words of Jason Moore, “the great secret and great accomplishment of capitalist civilization has been to not pay its bills. … To call for capitalism to pay its way is to call for the abolition of capitalism” (Moore 2015, 87, 145). The **capitalist law of value** **creates** not only selection pressures to externalize costs but also a **structural reliance** on continuous compound **growth**. Under **constant pressure** from the **discipline** of **market competition**, **firms** are **structurally** **incentivized** to **reinvest** their **profits** in **productivity-enhancing innovations**, **new products**, **and** **finding new markets**, while those that subordinate profit maximization to alternative goals risk being driven out of the market (Smith 2016, 15). While many view growth as an “ideology” or “fetish” that could be done away with while keeping capitalist social relations intact (e.g., Daly 1996), most economists agree with Schumpeter’s view that “stationary capitalism is a contradiction in terms” (quoted in Tanuro 2014, 74). After all, a condition of low or **no growth** is a **condition** of “**crisis**” within a **capitalist system**, which leads to a **reinforcing** cycle of **slowing investment**, **rising unemployment**, **weakened demand**, and **political** **instability** (Smith 2016, 47). For the same reasons, capitalism cannot exist without rampant consumerism, which is not simply a bug but rather a fundamental feature that has been critical to its continuous reproduction since the ascent of advertising in the post–World War II world (Foster et al. 2011, 379–380). Humanity thus finds itself in a double bind under capitalism, as starkly articulated by Richard Smith: “**insatiable growth** and **consumption** are **destroying** the **planet** and will **doom humanity** in the long run—but without ceaselessly growing production and insatiably rising consumption, we would **have** **economic collapse** in the **short run**” (Smith 2016, 23). To escape this predicament, mainstream environmentalists (including planetary scientists like Johan Rockström) argue that growth can be “decoupled” from ecological impact via efficiency improvements and “green” technologies (Rockström and Klum 2015, 133). However, **multiple studies** demonstrate that **decoupling** is an **illusion** (made clear by focusing on the global economy as a whole instead of individual nation-states) and that **efficiency** **improvements** often lead to an increase in **environmental impact** by **lowering** **costs** and **raising demand** (the “**rebound effect**”) (Wiedmann et al. 2015; Kallis and Hickel 2019). Some may point out that decoupling economic growth at least from CO2 emissions appears achievable, since the global economy has grown faster than CO2 emissions in recent years (Figueres 2017). However, this ignores both rising methane emissions (driven largely by the conversion from coal to natural gas plants) (Howarth 2019) and the fact that the estimated reductions likely needed to prevent 1.5°C of warming (7% annually, reaching net zero by 2050) are well beyond what current models estimate would be feasible in a context of compound growth (Intergovernmental Panel on Climate Change 2018, 15; Kallis and Hickel 2019). Thus even mainstream economists like Anil Markandya acknowledge that reducing emissions 50 percent by 2050, thereby stabilizing atmospheric CO2 concentrations around 550 parts per million (PPM), is likely the “lowest credible target” in a context of continuous economic growth (Markandya 2009, 1145). Even though Rockström and colleagues estimate that 450 PPM constitutes the upper end of a likely threshold of runaway climate change (Rockström et al. 2009), Markandya notes that “no one seriously believes this [450 ppm] is possible” (Markandya 2009, 1145). Similarly, David Victor claims that “even a realistic crash program to cut emissions will blow through 2 degrees; 1.5 degrees is ridiculous” (Victor 2015). **Given mounting evidence** that **positive feedbacks** in the **earth system**— including **arctic ice loss**, **Amazon and boreal forest dieback**, and **permafrost carbon and methane release**—may be activated at 1.5°C and especially 2°C (Lenton et al. 2019), these economists appear to be accepting catastrophic climate change as the necessary cost of capitalist survival. And if we include other planetary boundaries that may have already been overshot—including biodiversity loss, land conversion, and nitrogen/phosphorous loading—the prospect of genuine solutions to the earth system crisis in a context of compound growth recedes ever further into implausibility, given that these boundaries are primarily stressed by global market pressures for agricultural intensification, commercial expansion into formerly intact ecosystems, megainfrastructural development, and resulting fragmentation of habitats (Kallis 2018, 100). It should thus be clear that any **program** of ESG that **does not involve** a **system-wide assault** on and eventual negation **of the capitalist law of value**, one that goes far beyond “**mainstreaming**” **environmental goals** into **global** **trade**, **investment**, and **finance regimes** (Biermann et al. 2012a, 1307) (which themselves rely on and exist to perpetuate continuous compound growth), would be **radically insufficient**. A genuine solution, then, to the earth system crisis cannot lie within a capitalist system, no matter what global institutions are grafted onto it, but requires a transition toward “**ecosocialism**.” As Ian Angus explains, ecosocialism will be based on **collective ownership** of the means of **production**, and it will work actively to eliminate **exploitation**, **profit**, and **accumulation** as the **driving forces of our economy**.… [It] will imply the **limitation** of **growth** and the **transformation** of **needs** by a **profound shift away** from **quantitative** and **toward qualitative economic criteria**. (Angus 2016, 202–203) Whereas earlier forms of socialism followed capitalism’s industrial model of development (due in large part due to the imperatives of competition and survival within a global capitalist system) and were responsible for comparable environmental horrors, eco-socialists revive the ecological dimensions of historical materialism to rethink socialism as the “rational regulation of human–nature relations by the associated producers in line with their needs and those of future generations” (Foster et al. 2011, 59–69). In practice, this would **subordinate global markets** to **democratic** **planning** to **reorient production systems** and **enterprises** away from **profit maximization** toward **sustainably meeting basic needs** (Baer 2018, 132). For example, Angus envisions “a **democratically created** and **legally** **binding global plan**” that would govern the **transition** to **renewables** and **phase out wasteful industries** (e.g., arms production, advertising, factory farming, and wasteful consumer goods) (Angus 2016, 191). Richard Smith similarly calls for “a comprehensive global plan, a number of national or regional plans, and a multitude of local plans—and we need to coordinate them all” (Smith 2016, 147). Most ecosocialists agree that such a plan must coordinate a transition to a “steady-state economy” in which the consumption of energy and raw materials remains constant, though this would need to be preceded by “managed degrowth” in the Global North to secure development space for populations in the Global South—a process of “contraction and convergence” (Smith 2016, 114; Tanuro 2014, 72; Wallis 2018, 79–80; Kallis 2018, 154). Synthesizing Earth System Governance and Ecological Marxism While ecological Marxism provides much-needed analysis of the structural political-economic constraints on genuine planetary stewardship, I do not claim that they have all the answers. Rather, they have much to learn from contemporary scholars of ESG regarding the problems of global institutional design and democratization. Thus, by combining ESG and ecological Marxism, we can develop a framework for ecosocialist ESG that would simultaneously be more capable of preventing transgression of planetary boundaries and constraining the authoritarian dangers perceived by ESG critics. First, the ESG literature offers more concrete proposals that can help ecological Marxists think through the problems of institutional design in a global ecosocialist system. In particular, advocates of global planning like Richard Smith and Ian Angus have yet to consider how such plans could be democratically designed and implemented on a global scale, and ESG scholars can help Marxists on this front. For example, proposals for a WEO to harmonize UN environmental programs and agreements (Biermann 2014, 74–75) and a UN SDC to integrate economic and environmental agencies (Biermann 2014, 102–103; Bernstein and Brunée 2011; Kanie et al. 2012) should be considered by ecological Marxists and others envisioning ways to supplant neoliberalized global institutions. More ambitiously, we should consider how these organizations could enable a global forum for democratic deliberation on crucial questions of economic-environmental planning—for example, those regarding the use of risky technologies like nuclear power and biotechnology, the sharing and distribution of “remaining biophysical space” (Rockström and Klum 2015, 142), and the level of risk populations are willing to accept vis-à-vis different planetary boundaries. Building on these proposals, we could envision a **global architecture** of **nested planning authorities** at **multiple scales** that **make use** of **market mechanisms** while **subordinating** them to **democratically determined ends**,3 thereby **institutionalizing** the dominance of **use-value considerations** over **exchange-value**. At the highest scale would be a reformed and empowered UN in which economic and environmental organs are integrated under a UN SDC, which would form an umbrella organization with the aim of setting, monitoring the progress of, and coordinating sectoral policies and programs to meet the Sustainable Development Goals (SDGs) (modified to exclude the goal of GDP growth) (Biermann 2014, 103; Hickel 2018).4 A WEO would be created to coordinate the multitude of environmental agreements on climate change, biodiversity, land use, and ocean governance, while the WTO, IMF, and World Bank would be transformed beyond recognition to design policies for trade, finance, and investment that are in line with agreements established by the WEO and SDC.5 The latter would in this way form something akin to a global planning agency that ensures coherence between economic and environmental policies to meet the SDGs, whose key tasks would include setting limits on global material-energetic throughput, distributing emissions and other resource allowances according to historic inequalities and urgent developmental needs, restructuring trade relations to relocalize economies where possible and ensure ecologically efficient trade where necessary, and supplanting GDP with alternative metrics for measuring economic health and well-being. This would ideally involve a global agreement for equitably sharing the world’s remaining carbon, land, nitrogen, phosphorous, and freshwater budgets, as Rockström and Klum suggest (Rockström and Klum 2015, 142), though this would require drastic and imminent carbon emissions reductions and other consumption cuts in the Global North well beyond rates that would be compatible with compound economic growth (perhaps requiring 40–50% reductions in their biophysical footprints, according to Jason Hickel, 2018). It would also create “multilaterally harmonized systems that allow for discriminating between products on the basis of production processes,” as Biermann and colleagues advocate (Biermann et al. 2012b, 53), though it would go well beyond market mechanisms like carbon pricing to involve democratic input on which technologies and production policies should be prioritized, which should be abolished, and when and where certain forms of trade should be allowed or curtailed. More radically, transnational **firms** above a certain size **would be nationalized**—especially those in the **fossil fuel**, **agribusiness**, and **financial sectors**, which is needed to catalyze a rapid transition to renewable energy and carbon sequestering agroecology—but tightly regulated national and regionalscale markets composed of small and medium-sized firms would be allowed (Baer 2018, 132). New forms of **democratized ownership** of **public utilities** and **businesses** would not only be an end in **themselves** but may be **necessary** to enlist the **support** of **working-class populations** for the **transition** (Smith 2016, 140) and should thereby be **encouraged** and **incentivized**. Perfect “contraction and convergence” may be unrealistic, though such an ideal can at least be approached through moderate downscaling of **production** and **consumption** in the Global North combined with **direct aid**, **technology transfers**, and **debt** **cancellation**. But at least equally important as redistribution between **rich** and **poor countries** will be **redistribution** of **resources** from **wasteful sectors of the economy** (e.g., arms production, advertising, and luxuries), which **would be gradually phased out**, to the “caring” sectors aimed at sustainably meeting basic needs (Wallis 2018, 51). Second, the emerging literature on ESG can help ecological Marxists grapple with the problem of how to balance between the potentially competing dictates of ecological sustainability and democratization. This arguably constitutes the most difficult “governance puzzle” facing ESG initiatives (Galaz 2014, 34), one that cannot be pushed away simply through nebulous appeals to “democratic planning.” After all, critics of ESG may be understandably wary of calls for a UN SDC to coordinate global planning and set limits on material energy throughput, and there is no guarantee that ecosocialism would be able to avoid authoritarian expressions (Mann and Wainwright 2018, 38). While trade-offs may to some extent be **unavoidable**, Biermann and Galaz suggest that “**polycentric**” **governance** can **attenuate tendencies** toward **centralized** **control** (Biermann 2014, 24–25; Galaz 2014, 62). In this model, **states**, **cities**, and **local communities** would **retain** decision-making **control** over the **means** of **pursuing their development priorities** (following the principle of “subsidiarity”), though these would need to be constrained by **global plans** for **limiting material-energetic** **throughput** and **redistributing** **resources**. Thus there may be risks that scientists, who would play a crucial role in defining the “safe operating space” within which global development unfolds, would acquire unchecked power in such a formation. However, the legitimacy and feasibility of such plans would be largely contingent on democratic mobilization from below to force governments to adopt pledges in line with SDC agreements. Furthermore, as Biermann suggests, deliberative global citizen assemblies, composed of individuals randomly selected across the global population, could be empowered to shape economic planning priorities, determine the level of risk populations are willing to accept, and debate policy alternatives within the SDC (Biermann 2014, 141). John Dryzek and Hayley Stevenson show that real-world examples of deliberative assembles—seen for example in the United Kingdom’s 2007 Climate Change Citizens’ Summit, the 2009 World Wide Views project, and the Alberta Climate Dialogue in Canada—usually agree to follow more precautionary principles and adopt stronger mitigation policies than their governments, demonstrating that democratization need not come at the expense of sustainability (Stevenson and Dryzek 2014, 18–19, 183). To make these models of deliberative planning more viable at the global scale, new forms of “crowdsourcing” that take advantage of digital technology could facilitate discussion and input from citizens around the world, similar to the way crowdsourcing processes were used to gather input for formulating the SDGs (Gellers 2016). In this way, a global plan to determine hard caps on the “risk threshold” populations are willing to tolerate vis-à-vis different planetary boundaries, distribute remaining biophysical space, and prioritize certain trajectories of technoscientific research and development could be arrived at through a dialectic of scientific expertise and democratic engagement. However, risks will inevitably remain, in particular the risk that indigenous and other underprivileged groups will continue to be marginalized while inequalities persist, which will require continuous vigilance and struggle to ensure democratic accountability and inclusion. But the risks should not obviate the importance of working toward more egalitarian and democratic forms of ESG; if anything, they should enhance the urgency of systematically thinking through its possible contours, challenges, and strategies for addressing them. As Hans Baer emphasizes, the point is not to design a perfect utopia but rather to make “the best possible world within existing constraints,” which will continue to pose its own problems and demand new struggles (Baer 2018, 2). Sheer Utopianism? The Problem of Transition Those who I critique for failing to go beyond capitalist horizons may very well agree with the desirability of something like the ecosocialist ESG sketched herein, though they might argue that it is **simply too remote** and **utopian** of a prospect to **merit serious scholarly investigation**. From this view, the moderate reforms proposed by scholars like Biermann and Rockström may be the best we can hope for, while the **urgency** of the **climate crisis** calls for **solutions** that could be **implemented** under **capitalist constraints**. This is an understandable concern, and it is therefore necessary to move from “abstract” to “concrete” utopianism by providing a plausible scenario for an evolutionary transition to ecosocialism (Kallis 2018, 125). In this way, it is possible to show that the prospect of **ecosocialism** may be less **utopian** than **many believe**, though it would most likely need to be preceded by systemic reforms (e.g., a “Green New Deal”; GND) to begin immediately reducing emissions and buy time for a more far-reaching postcapitalist transformation To start, it is necessary to emphasize that **global capitalism** faces not only an **earth system crisis** but also a **structural political-economic crisis**—a contextual condition that has been ignored by ESG scholars—that will in turn be **exacerbated** by the **intensifying earth system crisis**. This structural crisis (often described as “secular stagnation” by mainstream economists) is driven by a combination of **diminishing outlets for profitable productive investment**, **unprecedented inequality**, and **stagnant wages** that limit effective demand while relying on credit-fueled consumerism, the **depletion** of “conventional” or **easy-to-access oil**, and the **funneling of accumulated surpluses** into **financial speculation** instead of **production** (Wolf 2014; Bello 2019; Robinson 2014; Moore 2015). Global growth remains **precariously reliant** on **historically** **low interest rates** and **burgeoning corporate** and **household debt** (with total global debt reaching 318% of GDP in 2018) (Oguh and Tanzi 2019), and the IMF warns that easy credit has “encouraged more financial risk-taking and a further buildup of financial vulnerabilities” (International Monetary Fund 2019, viii). Many economists across the spectrum therefore believe that the underlying weaknesses that contributed to the 2007–2008 financial crisis have yet to be resolved, leaving **global capitalism** stuck in an **unsustainable growth trajectory** that will be **punctured** by **subsequent crises** (Wolf 2014; Bello 2019). When we consider how **capitalist stagnation** and **financial systemic risk** will **converge** with **intensifying climate impacts**, it becomes **clear** that **global economic turmoil** in the coming years is very **likely**, and it is even possible that **capitalism** may be facing an “**irreversible decline** in [its] **capacity** to **restructure its way out of great crises**” (Moore 2015, 27). In this context, initiatives for **system change** will be able to **garner widespread appeal** and **enhance their agency**. But this would not in itself, of course, enable the emergence of ecosocialism. It is likely that anything like ecosocialist ESG would need to be preceded by a global GND, or a globally coordinated response to economic and ecological crises that combines state-led investment in “green” technologies with massive job creation and infrastructure programs (Lawrence 2019). However, it is possible that a GND would succeed neither in sustaining “healthy” growth rates—given the potentially debilitating consequences of possible energy constraints,6 increasing public debt, and “internalizing” ecological costs for an already precarious and over-indebted global economy (Moore 2015, 145)—nor in catalyzing the rapid emissions reductions needed to meet the 1.5°–2°C target (let alone preventing transgression of other planetary boundaries). In a context of persistent low growth (particularly if promises of abundant “green jobs” turn out to be oversold7 ), worsening climate impacts, and evidence that even a global GND is unable to reduce emissions with the necessary speed, a strong enough network of **socioecological movements** across the globe might succeed in **pushing governments** to **radicalize** the GND in the direction of **planning**, **contraction** of **wasteful consumerism** (especially in the Global North), and **radical redistribution** as a **substitute for economic growth**. Of course, there are many ifs here. It is possible that a global GND would generate a sustainable trajectory of inclusive “green growth” and climate stabilization, as Newell and Paterson envision in their “Climate Keynesianism” scenario (Newell and Paterson 2010, 172–173). More likely, persistent stagnation and crisis in a global GND regime may precipitate nationalist backlash and reversion to “growth at all costs” (“green” or otherwise), leading to ecological breakdown and conflicts over dwindling resources. Nonetheless, it is plausible, as William Robinson contends, that something like ecosocialism could “snowball out of efforts to bring about a reform of the [global capitalist] system” (Robinson 2014, 233). But rather than unfolding naturally from the socioecological contradictions of a global GND, it could only emerge through counterhegemonic struggle at multiple scales. The question of how counterhegemonic movements will simultaneously be able to overcome entrenched capitalist resistance and right-wing reaction is a difficult one, and, given the current balance of class and social forces, this is admittedly not the most probable outcome. Yet the **combination** of **capitalist stagnation**, **intensifying earth system crisis**, **growing discontent with capitalism** and **increasing support for socialism** in core states (particularly in the United States and United Kingdom),8 and strengthening movements for climate justice shows that the **preconditions** for **such a transition** may be **coming** into place. And as Nafeez Ahmed suggests, “by **2030**, and even more so by 2050—as the manifestations of global capitalism’s selfcatabolic trajectory become more obvious—it will appear increasingly realistic” (Ahmed 2017, 91). It is thus necessary to develop **postcapitalist** **visions** that may capture **collective imagination** and inspire transformative action as the crises of **global capitalism** and the earth system create windows of **opportunity** for system transformation, rather than focusing solely on short-term reforms that will almost certainly be inadequate for addressing these crises.

## 3

### 1NC—OFF

#### CP: Private entities ought not appropriate lunar heritage sites, except for the extraction of scientific samples.

#### Space samples are appropriated for scientific study—it’s uncontroversial as customary law but the plan bans it

**Pershing 19** (Abigail D., J.D. from Yale Law School. Robina Fellow at the Europcean Court of Human Rights. “Interpreting the Outer Space Treaty's Non-Appropriation Principle: Customary International Law from 1967 to Today,” 44 *Yale Journal of International Law* 149 2019)DR 22

The earliest hint of a change in customary international law relating to the interpretation of the non-appropriation clause came in 1969, when the United States first sent astronauts to the moon. As part of his historic journey, astronaut Neil **Armstrong** collected moonrocks that he brought back with him to Earth and promptly handed off to the National Aeronautics and Space Administration (NASA) as U.S. property.5 4 Later, the USSR similarly claimed lunar material as government property, some of which was eventually sold to private citizens.55

**These** first instances of space resource appropriation did not draw much attention, but they presented a distinct shift marking the beginning of a new period in State practice. Having previously been limited by their technological capabilities, States could now establish new practices with respect to celestial bodies. This was the beginning of a pattern of appropriation that slowly unfolded over the next few decades and has since solidified into the general and consistent State practice necessary to establish the existence of customary international law.

Currently, the U.S. government owns 842 pounds of lunar material.56 There is little question that NASA and the U.S. government consider this material, as well as other space materials collected by American astronauts, to be government property.5 7 In fact, NASA explicitly endorses U.S. property rights over these moon rocks, stating that "[1]unar material retrieved from the Moon during the Apollo Program is U.S. government property."

#### It competes – relies on private space resource rights.

Foust 20 “NASA offers to buy lunar samples to set space resources precedent” Jeff Foust [He earned a Ph.D. in planetary sciences from the Massachusetts Institute of Technology and a bachelor’s degree with honors in geophysics and planetary science from the California Institute of Technology.], September 10, 2020 <https://spacenews.com/nasa-offers-to-buy-lunar-samples-to-set-space-resources-precedent/> SM

WASHINGTON — NASA is offering to buy lunar samples collected by companies for a token sum primarily to set a precedent for space resource rights on the moon.

In a solicitation issued Sept. 10, NASA requested quotations from companies willing to go to the moon and sell between 50 and 500 grams of lunar rocks or regolith. Once the company collected the sample and provided evidence of doing so, NASA would take ownership of the sample and pay the company. The company would not have to return the sample to Earth, instead letting NASA collect it on a future mission.

The primary purpose of the transaction is to set a precedent for the extraction and transfer of lunar resources, rather than to actually obtain the samples for scientific or other use. “We’re going to buy some lunar soil for the purpose of demonstrating that it can be done,” NASA Administrator Jim Bridenstine said in remarks Sept. 10 at the Secure World Foundation’s Summit for Space Sustainability.

While the request for quotations did not specify a price NASA would pay for the samples, Bridenstine said the agency was willing to pay $15,000 to $25,000 for the samples. In a panel discussion later in the conference, Mike Gold, acting associate administrator for international and interagency relations, estimated the total amount available under the program at $50,000. Those figures are a tiny fraction of the cost to go to the moon and scoop up lunar material.

“What we’re trying to do is make sure that there is a norm of behavior that says that resources can be extracted and that we’re doing it in a way that is in compliance with the Outer Space Treaty,” Bridenstine said.

#### Private extraction key to study of space samples—costs

**OSI ND** (Outer Space Institute, network of world-leading space experts united by their commitment to highly innovative, transdisciplinary research that addresses grand challenges facing the continued use and exploration of space. http://outerspaceinstitute.ca/resources.html. No date but is referencing asteroid probes from 2021.)DR 22

Public-private partnerships are fostering the development of ISRU technology. NASA contracted [four private companies](https://www.nasa.gov/press-release/nasa-selects-companies-to-collect-lunar-resources-for-artemis-demonstrations/) to collect samples of regolith from the Moon’s south pole. Once collected, ownership of the samples will be [transferred to NASA in-situ](https://www.nasa.gov/press-release/nasa-selects-companies-to-collect-lunar-resources-for-artemis-demonstrations) as a move to kick-start space commerce and incentivize further investment in the development of ISRU technology. Additionally, [NASA awarded SpaceX](https://www.nasa.gov/press-release/as-artemis-moves-forward-nasa-picks-spacex-to-land-next-americans-on-moon) a $2.9 billion contract to build a human landing system that will carry astronauts to the lunar surface.

China has also made significant progress on the technological front with the success of their [Chang’e 5 spacecraft,](https://spaceflightnow.com/2021/01/01/chinese-mission-returned-nearly-4-pounds-of-lunar-samples/) which extracted a four-pound sample of lunar regolith and returned it to Earth.

The sample-return missions underway by [NASA](https://www.nasa.gov/osiris-rex) and [JAXA](https://www.hayabusa2.jaxa.jp/en/) serve as technological demonstrations of the possibilities, challenges, and dangers when interacting with asteroids. Other teams planning to do the same in the near future, some of which are commercial actors, will learn greatly from these missions

Mining asteroids could also become a very real prospect decades from now. New sample and return technology, namely the probes deployed by [JAXA](https://www.hayabusa2.jaxa.jp/en/) and [NASA,](https://www.nasa.gov/mission_pages/osiris-rex/about) have extracted material from the asteroids Ryugu and Bennu, respectively, and are returning it to Earth. Meanwhile, commercial launch companies, such as SpaceX, are drastically lowering the cost of launching equipment into space, making it accessible to a wider range of actors.

Despite[the declining investment into asteroid mining start-ups,](https://www.technologyreview.com/2019/06/26/134510/asteroid-mining-bubble-burst-history/) some ambitious companies remain waiting for a future date when it becomes economically feasible. In the meantime, they undertake other space activities, such as operating Earth imaging satellites, to maintain revenue streams.

Mining space resources, such as the Moon and asteroids, could greatly expand humanity’s knowledge about the origins of the solar system, the Earth, the abundance of water, and the origin of life. Ice and water-bearing minerals could be used to produce rocket fuel; fuel that, being sourced in space, will not need to be lifted – at great expense – out of Earth’s heavy gravity. Studying material from asteroids may also prove to be vital in humanity's defence against potential major impactors.

#### Specifically, SpaceX’s Starship enables sample collection at an unprecedented rate.

Heldmann et al 21 “Accelerating Martian and Lunar Science through SpaceX Starship Missions” May 2021 Jennifer L. Heldmann [NASA Ames Research Center, Division of Space Sciences & Astrobiology, Planetary Systems Branch], other authors listed in the article <https://surveygizmoresponseuploads.s3.amazonaws.com/fileuploads/623127/5489366/111-381503be1c5764e533d2e1e923e21477_HeldmannJenniferL.pdf> SM

Given the Starship’s anticipated low cost, high payload capacity, and potential for high flight cadence, the opportunities presented for planetary science missions have the potential to dramatically increase our progress towards NASA Planetary Science & Astrobiology goals and objectives. Building upon the NASA CLPS paradigm (Bussey et al. 2019), use of SpaceX Starships will allow for increased flights for science experiments, technology demonstrations, and capability development to enable human spaceflight missions through NASA partnership and purchase of flight payload accommodation. High priority science objectives as outlined in the Decadal Survey and NASA Strategic Plan for the Moon and Mars can uniquely be achieved through flights to lunar/Martian orbit and/or to the surface of these planetary bodies. In addition, Starship has the ability to deploy orbiters on approach. This capability would provide the opportunity to deliver either relatively large orbital assets with sophisticated remote sensing instrumentation and/or many smaller satellites that could serve a variety of purposes, including development of communications or meteorology networks.

Starship is designed to lift off from its planetary destination and return to Earth, thereby allowing not only the return of crew members but also the return of unprecedented quantities of lunar and Martian samples to Earth for scientific analysis. Because Starship can return tens of tons of payload from the surface of the Moon, the return sample mass of lunar samples from a single mission would dwarf the combined total returned mass of all lunar samples from all sample return missions to date. Many samples with greater sample variety will allow for more scientifically robust analytical studies in laboratories on Earth. Removing the need to severely high-grade and down-select samples on the Moon and Mars will also enable opportunistic science from returned samples to degrees previously not achievable. Never before has the science or exploration community had the potential to send such payload capacity to these destinations and return as much sample material as can be accommodated by Starship. The scientific progress achieved would be unprecedented.

#### Uniquely key for moon samples – every aff arg for why dust samples from heritage sites are important proves the internal link of the PIC.

Thorbecke 20 “NASA is soliciting help from commercial companies to get moon samples” Catherine Thorbecke September 11, 2020 <https://abcnews.go.com/Business/nasa-soliciting-commercial-companies-moon-samples/story?id=72946193> SM

NASA is soliciting help from commercial companies to get moon samples

The agency is asking companies to submit their proposals now.

NASA is seeking help from the private sector to collect samples of moon dust and rock and bring them back to Earth.

As part of its ambitious Artemis program to land the first woman and the next man on the moon by 2024, the U.S. space agency said it is soliciting help from commercial sources to gain more information about the environment of the lunar surface.

NASA Administrator Jim Bridenstine announced the new initiative in a blogpost Thursday, writing that "leveraging commercial involvement as part of Artemis will enhance our ability to safely return to the Moon in a sustainable, innovative, and affordable fashion."

He said the agency is asking commercial companies to "provide proposals for the collection of space resources."

"The requirements we’ve outlined are that a company will collect a small amount of Moon 'dirt' or rocks from any location on the lunar surface, provide imagery to NASA of the collection and the collected material, along with data that identifies the collection location, and conduct an 'in-place' transfer of ownership of the lunar regolith or rocks to NASA," Bridenstine wrote.

After the ownership transfer, the collected material will become the sole property of NASA.

"The solicitation creates a full and open competition, not limited to U.S. companies, and the agency may make one or more awards," Bridenstine added.

The goal is to obtain and transfer the materials to NASA before 2024. NASA did not outline how much it will pay, but said the companies will receive 10% of the sum when they are awarded the task, 10% at launch and the remaining 80% upon successful completion.

Bridenstine said the program is consistent with international space law, citing President Donald Trump's April executive order that Bridenstine said "clarifies" that "it is the policy of the United States to encourage international support for the public and private recovery and use of resources in outer space, consistent with applicable law."

Bridenstine also said all proposals must be in full compliance with the Outer Space Treaty of 1967 and other international obligations.

#### Turns the aff – their solvency is based off research using moon dust samples.

## 4

## Case

### 1NC---Aquaculture

#### No food wars---no causal evidence, only maybe true for the poorest countries, and government responses solve the impact

Mark W. Rosegrant 13, Director of the Environment and Production Technology Division at the International Food Policy Research Institute, et al., 2013, “The Future of the Global Food Economy: Scenarios for Supply, Demand, and Prices,” in Food Security and Sociopolitical Stability, p. 39-40

The food price spikes in the late 2000s caught the world’s attention, particularly when sharp increases in food and fuel prices in 2008 coincided with street demonstrations and riots in many countries. For 2008 and the two preceding years, researchers identified a significant number of countries (totaling 54) with protests during what was called the global food crisis (Benson et al. 2008). Violent protests occurred in 21 countries, and nonviolent protests occurred in 44 countries. Both types of protest took place in 11 countries. In a separate analysis, developing countries with low government effectiveness experienced more food price protests between 2007 and 2008 than countries with high government effectiveness (World Bank 201la). Although the incidence of violent protests was much higher in countries with less capable governance, many factors could be causing or contributing to these protests, such as government response tactics, rather than the initial food price spike.

Data on food riots and food prices have tracked together in recent years. Agricultural commodity prices started strengthening in international markets in 2006. In the latter half of 2007, as prices continued to rise, two or fewer food price riots per month were recorded (based on World Food Programme data, as reported in Brinkman and Hendrix 2011). As prices peaked and remained high during mid-2008, the number of riots increased dramatically, with a cumulative total of 84 by August 2008. Subsequently, both prices and the monthly number of protests declined.

Several researchers have studied the connection between food price shocks and conflict, finding at least some relationship between food prices and conflict. According to Dell et al. (2008), higher food prices lead to income declines and an increase in political instability, but only for poor countries. Researchers also found a positive and significant relationship between weather shocks (affecting food availability, prices, and real income) and the probability of suffering government repression or a civil war (Besley and Persson 2009). Arezki and Bruckner (2011) evaluated a constructed food price index and political variables, including data on riots and anti-government demonstrations and measures of civil unrest. Using data from 61 countries over the period 1970 to 2007, they found a direct connection between food price shocks and an increased likelihood of civil conflict, including riots and demonstrations.

Other researchers have broadened the analysis by considering government responses or underlying policies that affect local prices, and consequently influence outcomes and the linkage between food price shocks and conflict. Carter and Bates (2012) evaluated data from 30 developing countries for the time period 1961 to 2001, concluding that when governments mitigate the impact of food price shocks on urban consumers, the apparent relationship between food price shocks and civil war disappears. Moreover, when the urban consumers can expect a favorable response, the protests only serve as a motivation for a policy response rather than as a prelude to something more serious, such as violent demonstrations or even civil war.

Many in the international development community see war and conflict as a development issue, with a war or conflict severely damaging the local economy, which in turn leads to forced migration and dislocation, and ultimately acute food insecurity. Brinkman and Hendrix (2011) ask if it could be the other way around, with food insecurity causing conflict. Their answer, based on a review of the literature, is "a highly qualified yes," especially for intrastate conflict. The primary reason is that insecurity itself heightens the risk of democratic breakdown and civil conflict. The linkage connecting food insecurity to conflict is contingent on levels of economic development (a stronger linkage for poorer countries), existing political institutions, and other factors. The researchers say establishing causation directly is elusive, considering a lack of evidence for explaining individual behavior. The debate over cause and effect is ongoing.

#### Little scholarly evidence AND wars are more complex

Jonah Vestby et al. 18 (Jonas Vestby is Senior Researcher at the Peace Research Institute Oslo (PRIO). His research focuses on the link between environmental change and violent conflict, including forecasting models that predict the future risk of conflict, taking climate change into consideration, Ida Rudolfsen is doctoral researcher at the Department of Peace and Conflict Research at Uppsala University and PRIO, Halvard Buhaug is Research Professor at the Peace Research Institute Oslo (PRIO); Professor of Political Science at the Norwegian University of Science and Technology (NTNU); and Associate Editor of the Journal of Peace Research. His research projects focus on security dimensions of climate change and geographic aspects of armed conflict, 5/18/18, accessed 10/12/21, “Does hunger cause conflict?”, https://blogs.prio.org/ClimateAndConflict/2018/05/does-hunger-cause-conflict/)

It is perhaps surprising, then, that there is **little** **scholarly** **merit** in the notion that a short-term reduction in access to **food** increases the probability that **conflict** will break out. This is because to start or participate in violent conflict requires people to have both the **means** and the **will**. Most people on the **brink of starvation** are not in the **position** to resort to violence, whether against the **government** or other **social groups**. In fact, the urban middle classes tend to be the most likely to protest against rises in food prices, since they often have the best opportunities, the most energy, and the best skills to coordinate and participate in protests. Accordingly, there is a widespread misapprehension that social unrest in periods of high food prices relates primarily to food shortages. In reality, the sources of **discontent** are considerably **more complex** – linked to **political structures**, **land ownership**, **corruption**, the desire for **democratic reforms** and general **economic problems** – where the price of food is seen in the context of general increases in the cost of living. Research has shown that while the international media have a **tendency** to seek **simple resource**-related **explanations** – such as drought or famine – for conflicts in the Global South, debates in the local media are permeated by **more complex** political relationships.

#### The countries most likely to draw in great powers have the best resilience.

Cliffe ’16 [Sarah; 3-29-2016; Director of the Center on International Cooperation at New York University; “Food Security, Nutrition, and Peace,” Center on International Cooperation at New York Universityhttp://cic.nyu.edu/news\_commentary/food-security-nutrition-and-peace]

However, current research does not yet indicate a clear link between climate change, food insecurity and conflict, except perhaps where rapidly deteriorating water availability cuts across existing tensions and weak institutions. But a series of interlinked problems---changing global patterns of consumption of energy and scarce resources, increasing demands for food imports (which draw on land, water, and energy inputs) can create pressure on fragile situations.

Food security---and food prices---are a highly political issue, being a very immediate and visible source of popular welfare or popular uncertainty. But their link to conflict (and the wider links between climate change and conflict) is indirect rather than direct.

What makes some countries more resilient than others?

Many countries face food price or natural resource shocks without falling into conflict. Essentially, the two important factors in determining their resilience are:

First, whether food insecurity is combined with other stresses---issues such as unemployment, but most fundamentally issues such as political exclusion or human rights abuses. We sometimes read nowadays that the 2006-2009 drought was a factor in the Syrian conflict, by driving rural-urban migration that caused societal stresses. It may of course have been one factor amongst many but it would be too simplistic to suggest that it was the primary driver of the Syrian conflict.

Second, whether countries have strong enough institutions to fulfill a social compact with their citizens, providing help quickly to citizens affected by food insecurity, with or without international assistance. During the 2007-2008 food crisis, developing countries with low institutional strength experienced more food price protests than those with higher institutional strengths, and more than half these protests turned violent. This for example, is the difference in the events in Haiti versus those in Mexico or the Philippines where far greater institutional strength existed to deal with the food price shocks and protests did not spur deteriorating national security or widespread violence.

#### No correlation between food shortages and conflict---other factors

Buhaug et al 15 [Halvard Buhaug, Peace Research Institute in Oslo an Norwegian University of Science and Technology. Tor Benjaminsen, Espen Sjaastad, Ole Magnus Theisen.] “Climate variability, food production shocks, and violent conflict in Sub-Saharan Africa” Environmental Research Letters, Volume 10, Number 12 (http://iopscience.iop.org/article/10.1088/1748-9326/10/12/125015) - MZhu

Across all models, we find relatively weak and insignificant effects for domestic food production and we also note that the sign of the coefficients shifts between outcome types. In this sense, table 1 implicitly contrasts both claims that political violence is more prevalent when basic needs are met (Salehyan and Hendrix 2014) and claims that agricultural income shocks increase civil conflict risk (von Uexkull 2014). The results are consistent with Koubi et al (2012) and van Weezel (2015), however, who conclude that rainfall—a significant determinant of yields in SSA—has little impact on conflict either directly or through economic performance.

The covariate that best and most consistently explains temporal variation in political violence is the time-lagged conflict incidence indicator. Models 1–2 show that a new civil conflict is unlikely to break out if another one is already ongoing in the same country whereas Models 3–6, which capture the occurrence of less organized conflict, demonstrate that violence begets violence. Coups d'état (Models 7–8) exhibit a comparatively weak temporal correlation pattern in our data and are generally regarded as a highly unpredictable phenomenon (Luttwak 1979).

Next, we estimate the same set of models on a subsample of 14 countries in SSA where rainfall has a large and significant positive effect on food production (figure 2(b); see supplementary information, section B for details). To better capture the influence of climate variability and reduce concerns with endogeneity, we further replace the standard OLS model with two-stage instrumental variable regression. The first stage in this model estimates the joint influence of annual rainfall (linear and squared terms) and temperature (linear) on contemporaneous food production. This effect then constitutes the exogenous instrument for food production in the second stage. The results are reported in table 2. Mirroring the results presented above, we fail to uncover a robust signal for agricultural performance, although the sign of the coefficient for food production now remains negative in seven of the eight specifications.

Food production shocks may have different consequences depending on the socioeconomic context, so next we consider a series of interactive relationships. Specifically, we investigate the joint effect of food production and (i) low level of development, (ii) extent of discriminatory political system, and (iii) economic dependence on agriculture; three conditions whereby loss of income from agriculture might constitute a particular challenge to society. To model these interactions, we include time-varying regressors instead of country-fixed effects where (i) is represented by infant mortality rate (IMR; World Bank 2014), (ii) is captured using the Ethnic Power Relations v.1.1 data (Cederman et al 2010), while (iii) uses an index of agricultural contribution to GDP (World Bank 2014). Moreover, to preserve focus on temporal dynamics, food production is now operationalized as yearly deviation from the country mean, 1961–2009. We use additive inverse deviation values to ensure theoretical consistency among the components in the interaction terms. All models control for (ln) population size, conflict history, and a common time trend, and models without IMR and agricultural dependence additionally control for (ln) GDP per capita. The results are presented in table 3.

Again, we are unsuccessful in establishing a consistent covariation pattern between agricultural performance and political violence. Interpreting the combined effect of interaction terms with continuous parameters is inherently difficult but figure 4 shows that food production is insignificantly related to all conflict outcomes across levels of socioeconomic development for all three interaction terms. The sole exception is the result in Model 24, where lower food production in highly discriminatory societies is negatively associated with non-state conflict. This result would seem to contradict the standard scarcity thesis (Homer-Dixon 1999) although it is consistent with observations that conflict is more prevalent during surplus years (Witsenburg and Adano 2009, Salehyan and Hendrix 2014).

Mirroring earlier research, ethnopolitical exclusion is strongly related to higher civil conflict risk, but not necessarily to other forms of political violence. Infant mortality rate and economic dependence on agriculture appear largely irrelevant. While this may come as a surprise, recall that most countries in SSA are characterized by underdevelopment and a large agricultural sector, implying that the variation in values on these indicators is modest.

Large parameter uncertainties and p-values above the conventional significance threshold (5%) may disguise substantively important effects (Ward et al 2010). Accordingly, as a final assessment, we conduct a set of out-of-sample simulations and compare predictions for models with and without food production. The models are estimated on a subset of the full sample, in this case all years before 2000, and the estimated effects are then used to predict conflict outcomes out of sample, i.e., the 2000–09 period. Figure 5 shows the predicted values from four pairs of models that are specified similarly to Models 17, 20, 23, and 26, except for the shorter time period and the fact that one model in each pair drops the food production deviation variable. For civil conflict and social unrest, the models generate very similar predictions, signaling that agricultural performance adds little to the models' predictive power. There is more spread in the predictions for the remaining two outcome categories. Puzzlingly, the model without food production performs better in both cases—i.e., the Receiver Operating Characteristics curves have higher 'Area Under the Curve' scores. We hesitate to put too much emphasis on the ROC tests, given the rareness of the outcomes (notably Models 17 and 26) and the relatively small training samples (Models 20 and 23), but nonetheless the patterns observed in the out-of-sample simulations substantiate the regression results reported above; fluctuations in agricultural output explain little of the observed variation in political violence in post-colonial Sub-Saharan Africa.

5. Concluding remarks

Emerging evidence suggests that food price shocks are associated with an increase in social unrest (Smith 2014, Bellemare 2015, Hendrix and Haggard 2015, Weinberg and Bakker 2015). Yet, the robust 'non-finding' presented here implies that so-called 'food riots' play out largely isolated from climate-sensitive production dynamics in the affected countries. Likewise, claims that adverse weather and harvest failure drive contemporary violence in Africa (e.g., Hsiang et al 2013, IFPRI 2015) are not supported by our analysis. Instead, social protest and rebellion during times of food price spikes may be better understood as reactions to poor and unjust government policies, corruption, repression, and market failure (e.g., Bush 2010, Buhaug and Urdal 2013, Sneyd et al 2013, Chenoweth and Ulfelder 2015).

### 1NC---Prolif

#### No prolif impact and it’s stabilizing.

Suzuki 15—Researcher at the Institute for International Conflict Resolution and Reconstruction [Akisato, “Is more better or worse? New empirics on nuclear proliferation and interstate conflict by Random Forests,” *Research and Politics*, Vol. 2, No. 2 Jun, Emory Libraries]

Given these conflict-reducing/provoking effects of nuclear proliferation, what overall effect would nuclear proliferation have on a systemic propensity for conflict? This is difficult to answer, not only due to the controversy over whether nuclear states are more or less prone to conflict, but also because the existing theories do not explain whether those conflict-reducing/provoking effects are large enough to influence a systemic propensity for interstate conflict, given the ratio of nuclear states to non-nuclear states in the system. This challenge motivates the empirical examination of the relationship between nuclear proliferation and a systemic propensity for conflict.

Empirical investigation by Random Forests

The interstate–systemic year data are used here to investigate the relationship between nuclear proliferation and a systemic propensity for interstate conflict. The dependent variable is the number of militarized interstate dispute onsets (Palmer et al., 2015; version 4.01 is used) per systemic-year, standardized as the ratio to the number of states in the interstate system (Correlates of War Project, 2011) – hereafter, the ‘dispute–state ratio’. Observations one year ahead (t+1) are used to make sure that causal effects precede a variation in the dispute–state ratio.2

Two regressors are used to examine the effect of nuclear proliferation: the number of nuclear states in the interstate system; and a count of the years since the number of nuclear states changes (hereafter ‘nuclear year counter’), measuring the effect of new nuclear states (Horowitz, 2009). The data about nuclear states are from Gartzke and Kroenig (2009); additionally, the current paper codes North Korea as a nuclear state since 2009 (Table 1).3

The model also includes the number of democratic states (Polity2 score ⩾ 6 in Marshall, 2013) in the interstate system, the gross world product (Earth Policy Institute, 2012), and the binary variable of unipolarity (coded zero until 1989 and one from 1990; see Monteiro, 2011/2012); these three variables control for democratic peace (Russett and Oneal, 2001), capitalist peace (Gartzke, 2007), and polarity (Monteiro, 2011/2012) respectively. The number of nuclear states and these control variables suffer from multicollinearity (see Table A-9 in the online appendix), and this paer later explains how to resolve this problem. A lagged dependent variable is also included to address the temporal dependence of time-series data. The temporal scope is 1950–2009 (i.e. N=59) due to the data availability and the use of the dependent variable at t+1. The descriptive statistics of all variables are displayed in Table 2.4.

As mentioned in the introduction, this paper uses the machine learning, non-parametric method Random Forests for the empirical investigation.5 Although it is unfamiliar to most political science and international relations analysts, Random Forests has been widely used in numerous scientific studies (Strobl et al., 2009: 324; Strobl et al., 2008). The popularity of the method is also apparent from the fact that Breiman’s (2001) original paper has been cited 12,721 times in the literature.6

Random Forests generates two useful analytics: first, ‘conditional variable importance’ measures how ‘important’ each regressor is, conditional on the remaining regressors (Hothorn et al., 2006; Strobl et al., 2007, 2008). This is analogous to statistical significance in conventional regression models. The significance threshold proposed by Strobl et al. (2009: 343) is whether the importance score of a regressor is negative, zero, or lower than the absolute value of the lowest negative score. If none applies, the regressor is considered as important; and the second relevant analytic is a partial dependence plot (Friedman, 2001). This estimates the marginal effect of each regressor on the dependent variable while taking the remaining regressors into consideration.

Random Forests has three attractive and distinctive characteristics for the purposes of this paper: first, the estimation of conditional variable importance and partial dependence plots enable conventional applied researchers to interpret non-parametric analysis in an intuitive way; second, Random Forests can examine non-linearity (Strobl et al., 2009: 339–341), which is desirable because, as already noted, some theories expect non-linearity between nuclear proliferation and a systemic propensity for conflict; and finally, it can cope with potential interactions and multicollinearity between regressors (Strobl et al., 2009: 339–341; Strobl et al., 2008). As noted before, most of the regressors here are highly correlated, and also it is plausible to anticipate some interaction effect between them (e.g. the number of democratic states and the gross world product). The specific capabilities of Random Forests are therefore essential.

The estimation of conditional variable importance shows that the nuclear year counter has a negative importance score.7 Thus, the nuclear year counter is not important in explaining the dispute–state ratio. This suggests that the optimist theory is supported. The remaining regressors have an importance score higher than the absolute value of the importance score of the nuclear year counter, meaning that they are all important. Controlling for democratic peace, capitalist peace, and polarity, the number of nuclear states is still a significant predictor in explaining a systemic propensity for interstate conflict.

Figure 1 presents the partial dependence plots of the model.8 First, on average, a larger number of nuclear states is associated with a lower dispute–state ratio, although the changes from two nuclear states to three and from six to seven increase the ratio instead. Thus, the relationship is empirically non-linear, as Bueno de Mesquita and Riker (1982) and Intriligator and Brito (1981) expected in part. Overall, however, the optimist theory is supported, and the change from two nuclear states to nine nuclear states decreases the dispute–state ratio approximately from 0.228 to 0.18. This means that, if there are 194 states in the system (as there were in 2009), the number of militarized interstate dispute onsets per system-year decreases approximately from 44 to 35. This is a substantively significant decline.

Second, the nuclear year counter shows a concave relationship with the dispute–state ratio, suggesting that new nuclear states are less prone to conflict than middle-aged nuclear states. Thus, the pessimist theory finds no support from either the variable importance estimation or the partial dependence plot.

Finally, as for the control variables, the number of democratic states and the gross world product have a complex non-linear relationship with the dispute–state ratio, but if the number of democratic states and the gross world product are sufficiently large, they tend to decrease the dispute–state ratio. Their substantive effects are also significant, though not as much as the number of nuclear states. When comparing the effect of their lowest and highest values (23 and 94 in the number of democratic states and 7 and 71.2 in the gross world product), the number of democratic states decreases the number of militarized interstate dispute onsets per system-year approximately from 40 to 37, and the gross world product from 44 to 37. Unipolarity is also associated with a decline in the dispute–state ratio, suggesting that unipolarity is better than bipolarity in terms of a systemic propensity for interstate conflict; however, its effect is negligible, as it reduces the number of militarized interstate dispute onsets per system-year from 39 to 38. One caveat is, as explained in the online appendix, that the results of the number of democratic states and unipolarity are significantly sensitive to a parameter setting. Thus, these predictors are less robust, and the aforementioned points about them should be treated with caution.

Discussion and concluding remarks

The main findings reveal that the optimist expectation of the relationship between nuclear proliferation and interstate conflict is empirically supported:9 first, a larger number of nuclear states on average decreases the systemic propensity for interstate conflict; and second, there is no clear evidence that the emergence of new nuclear states increases the systemic propensity for interstate conflict. Gartzke and Jo (2009) argue that nuclear weapons themselves have no exogenous effect on the probability of conflict, because when a state is engaged in or expects to engage in conflict, it may develop nuclear weapons to keep fighting, or to prepare for, that conflict. If this selection effect existed, the analysis should overestimate the conflict-provoking effect of nuclear proliferation in the above model. Still, the results indicate that a larger number of nuclear states are associated with fewer disputes in the system.

This conclusion, however, raises questions about how to reconcile this study’s findings with those of a recent quantitative dyadic-level study (Bell and Miller, 2015). The current paper finds that nuclear proliferation decreases the systemic propensity for interstate conflict, while Bell and Miller (2015) find that nuclear symmetry has no significant effect on dyadic conflict, but that nuclear asymmetry is associated with a higher probability of dyadic conflict. It is possible that nuclear proliferation decreases conflict through the conflict-mitigating effects of extended nuclear deterrence and/or fear of nuclear states’ intervention, to the extent that these effects overwhelm the conflict-provoking effect of nuclear–asymmetrical dyads. Thus, dyadic-level empirics cannot solely be relied on to infer causal links between nuclear proliferation and a systemic propensity for conflict. The systemic-level empirics deserve attention.

#### Proliferation dampens conflict --- only our evidence does a statistical, controlled study.

Akisato Suzuki, June 2015. Akisato, Researcher at the Institute for International Conflict Resolution and Reconstruction, School of Law and Government, Dublin City University, MA in Violence, Terrorism and Security at Queen's University, “Is more better or worse? New empirics on nuclear proliferation and interstate conflict by Random Forests,” Research and Politics, SagePub

Given these conflict-reducing/provoking effects of nuclear proliferation, what overall effect would nuclear proliferation have on a systemic propensity for conflict? This is difficult to answer, not only due to the controversy over whether nuclear states are more or less prone to conflict, but also because the existing theories do not explain whether those conflict-reducing/provoking effects are large enough to influence a systemic propensity for interstate conflict, given the ratio of nuclear states to non-nuclear states in the system. This challenge motivates the empirical examination of the relationship between nuclear proliferation and a systemic propensity for conflict.

Empirical investigation by Random Forests

The interstate–systemic year data are used here to investigate the relationship between nuclear proliferation and a systemic propensity for interstate conflict. The dependent variable is the number of militarized interstate dispute onsets (Palmer et al., 2015; version 4.01 is used) per systemic-year, standardized as the ratio to the number of states in the interstate system (Correlates of War Project, 2011) – hereafter, the ‘dispute–state ratio’. Observations one year ahead (t+1) are used to make sure that causal effects precede a variation in the dispute–state ratio.2

Two regressors are used to examine the effect of nuclear proliferation: the number of nuclear states in the interstate system; and a count of the years since the number of nuclear states changes (hereafter ‘nuclear year counter’), measuring the effect of new nuclear states (Horowitz, 2009). The data about nuclear states are from Gartzke and Kroenig (2009); additionally, the current paper codes North Korea as a nuclear state since 2009 (Table 1).3

The model also includes the number of democratic states (Polity2 score ⩾ 6 in Marshall, 2013) in the interstate system, the gross world product (Earth Policy Institute, 2012), and the binary variable of unipolarity (coded zero until 1989 and one from 1990; see Monteiro, 2011/2012); these three variables control for democratic peace (Russett and Oneal, 2001), capitalist peace (Gartzke, 2007), and polarity (Monteiro, 2011/2012) respectively. The number of nuclear states and these control variables suffer from multicollinearity (see Table A-9 in the online appendix), and this paer later explains how to resolve this problem. A lagged dependent variable is also included to address the temporal dependence of time-series data. The temporal scope is 1950–2009 (i.e. N=59) due to the data availability and the use of the dependent variable at t+1. The descriptive statistics of all variables are displayed in Table 2.4.

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#### Limiting prolif raises the transaction costs and causes a de-fact shift to CBWs.

Neil Narang, 4/6/2016. Assistant Professor in the Department of Political Science at the University of California, Santa Barbara, Senior Advisor in the Office of the Secretary of Defense for Policy on a Council on Foreign Relations International Affairs Fellowship. “All Together Now? Questioning WMDs as a Useful Analytical Unit for Understanding Chemical and Biological Weapons Proliferation,” The Nonproliferation Review. Volume 22. Issue 3-4. pp. 457-468. Taylor and Francis.

The first inference that one may be tempted to draw from past findings is that a policy focused on achieving reductions in the global nuclear stockpile could cause a rise in chemical and biological weapons proliferation as more states view them as a “poor man's atomic bomb.” As noted above, our findings suggested that states appear to seek chemical and biological weapons for many of the same reasons as they pursue nuclear weapons. Furthermore, our findings also indicate that states that do not possess nuclear weapons appear to be systematically more likely to pursue chemical and biological weapons than states that do possess them. When combined, it may seem reasonable to suppose that, conditional on some level of demand for one of these types of weapons, reductions in the global supply of nuclear weapons could cause some states to pursue chemical and biological weapons as “imperfect substitutes” for the deterrence and compellence benefits of nuclear weapons.

A second inference that one may be tempted to draw is that a strengthened NPT may increase the risk of chemical and biological weapons proliferation. Understood in the terms of our study, policies and institutions designed to monitor and sanction the unilateral pursuit or dissemination of nuclear weapons material and technical expertise—like the NPT or the Nuclear Suppliers Group—might be understood as supply constraints that effectively increase the transaction costs of nuclear weapons acquisition. Furthermore, previous research has shown that the supply of sensitive nuclear assistance and civilian nuclear assistance are both positively associated with the risk of nuclear weapons pursuit and acquisition across states and over time.17

When combined, it may seem reasonable to suppose that, given some demand for a “weapon of mass destruction,” chemical and biological weapons could seem like relatively cheaper pursuits under a more robust global nuclear nonproliferation regime that further regulates the supply of nuclear weapons.

A third inference that one may be tempted to draw is that reductions in the global supply of nuclear weapons and a strengthening of the nuclear nonproliferation regime could increase the risk of chemical and biological weapons pursuit by terrorist groups. If one is willing to assume terrorist groups aim to influence governments by threatening to impose costs in order to achieve concessions— whether this be through strategies like coercion, provocation, spoiling, or outbidding—then it may seem reasonable to suppose that limiting the availability of nuclear weapons might shift the demand to other coercive instruments such as chemical or biological weapons.18

#### Extinction- Outweighs nuclear war.

Clifford Singer, Spring 2001. Director of the Program in Arms Control, Disarmament, and International Security at the University of Illinois at Urbana—Champaign. “Will Mankind Survive the Millennium?” The Bulletin of the Program in Arms Control, Disarmament, and International Security, University of Illinois at Urbana-Champaign, 13.1, http://www.acdis.uiuc.edu/research/S&Ps/2001-Sp/S&P\_XIII/Singer.htm

In recent years the fear of the apocalypse (or religious hope for it) has been in part a child of the Cold War, but its seeds in Western culture go back to the Black Death and earlier. Recent polls suggest that the majority in the United States that believe man would survive into the future for substantially less than a millennium was about 10 percent higher in the Cold War than afterward. However fear of annihilation of the human species through nuclear warfare was confused with the admittedly terrifying, but much different matter of destruction of a dominant civilization. The destruction of a third or more of much of the globe’s population through the disruption from the direct consequences of nuclear blast and fire damage was certainly possible. There was, and still is, what is now known to be a rather small chance that dust raised by an all-out nuclear war would cause a socalled nuclear winter, substantially reducing agricultural yields especially in temperate regions for a year or more. As noted above mankind as a whole has weathered a number of mind-boggling disasters in the past fifty thousand years even if older cultures or civilizations have sometimes eventually given way to new ones in the process. Moreover the fear that radioactive fallout would make the globe uninhabitable, publicized by widely seen works such as “On the Beach,” was a metaphor for the horror of nuclear war rather than reality. The epidemiological lethal results of well over a hundred atmospheric nuclear tests are barely statistically detectable except in immediate fallout plumes. The increase in radiation exposure far from the combatants in even a full scale nuclear exchange at the height of the Cold War would have been modest compared to the variations in natural background radiation doses that have readily been adapted to by a number of human populations. Nor is there any reason to believe that global warming or other insults to our physical environment resulting from currently used technologies will challenge the survival of mankind as a whole beyond what it has already handily survived through the past fifty thousand years.

There are, however, two technologies currently under development that may pose a more serious threat to human survival. The first and most immediate is biological warfare combined with genetic engineering. Smallpox is the most fearsome of natural biological warfare agents in existence. By the end of the next decade, global immunity to smallpox will likely be at a low unprecedented since the emergence of this disease in the distant past, while the opportunity for it to spread rapidly across the globe will be at an all time high. In the absence of other complications such as nuclear war near the peak of an epidemic, developed countries may respond with quarantine and vaccination to limit the damage. Otherwise mortality there may match the rate of 30 percent or more expected in unprepared developing countries. With respect to genetic engineering using currently available knowledge and technology, the simple expedient of spreading an ample mixture of coat protein variants could render a vaccination response largely ineffective, but this would otherwise not be expected to substantially increase overall mortality rates. With development of new biological technology, however, there is a possibility that a variety of infectious agents may be engineered for combinations of greater than natural virulence and mortality, rather than just to overwhelm currently available antibiotics or vaccines. There is no a priori known upper limit to the power of this type of technology base, and thus the survival of a globally connected human family may be in question when and if this is [[1]](#footnote-1)achieved.

#### 1AC Kroenig is wrong—their study uses the variable “militarized disputes,” which doesn’t mean war --- here is the data set their evidence cites.

COW 3 [Ghosn and Bennett 2003, http://www.correlatesofwar.org/COW2%20Data/MIDs/MID310.html#data]

Incident Level Data and Dyadic Data Updates for MID v.3.02

On October 10, 2003, we replaced version 3.01 of the MID data with version 3.02. The data sets for version 3.02 include the following:

Incident and Incident Participant level data files: Incidents are the building blocks of MIDs, and represent individual militarized actions incidents (specific threats, displays, or uses of force) that comprise the disputes. MIDs may consist of one or many specific incidents. The MID 3.0 incident data collection reports information on each of the militarized incidents occurring with MIDs (incidents may be either escalatory or de-escalatory). MID-I contains the essential elements of each militarized interstate incident from 1993-/2001 (incidents that belonged to disputes that began in 1992 and continued into 1993 were also collected). MID-IP describes the participants in each of those incidents.

1. [↑](#footnote-ref-1)