### Embodiment

1. Decreases empathy – encourages us to engage only with things we can materially effect so we

#### Practicing policy making in debate is the best way to promote activism. Coverstone [[1]](#footnote-1)995:

Coverstone, A. (1995). An inward glance: a response to Mitchell’s outward activist turn. The Debater’s Research Guide. Winston-Salem, NC. Retrieved June 15, 2007 from http://groups.wfu.edu/debate/MiscSites/DRGArticles/Coverstone1995China.htm

However, contest debate teaches students to combine personal experience with the language of political power. Powerful personal narratives unconnected to political power are regularly co-opted by those who do learn the language of power. One need look no further than the annual state of the Union Address where personal story after personal story is used to support the political agenda of those in power. The so-called role-playing that public policy contest debates encourage promotes active learning of the vocabulary and levers of power in America. Imagining the ability to use our own arguments to influence government action is one of the great virtues of academic debate. Gerald Graff (2003) analyzed the decline of argumentation in academic discourse and found a source of student antipathy to public argument in an interesting place.¶ I’m up against…their aversion to the role of public spokesperson that formal writing presupposes. It’s as if such students can’t imagine any rewards for being a public actor or even imagining themselves in such a role. This lack of interest in the public sphere may in turn reflect a loss of confidence in the possibility that the arguments we make in public will have an effect on the world. Today’s students’ lack of faith in the power of persuasion reflects the waning of the ideal of civic participation that led educators for centuries to place rhetorical and argumentative training at the center of the school and college curriculum. (Graff, 2003, p. 57)¶ The power to imagine public advocacy that actually makes a difference is one of the great virtues of the traditional notion of fiat that critics deride as mere simulation. Simulation of success in the public realm is far more empowering to students than completely abandoning all notions of personal power in the face of governmental hegemony by teaching students that “nothing they can do in a contest debate can ever make any difference in public policy.” Contest debating is well suited to rewarding public activism if it stops accepting as an article of faith that personal agency is somehow undermined by the so-called role playing in debate. Debate is role-playing whether we imagine government action or imagine individual action. Imagining myself starting a socialist revolution in America is no less of a fantasy than imagining myself making a difference on Capitol Hill. Furthermore, both fantasies influenced my personal and political development virtually ensuring a life of active, pro-social, political participation. Neither fantasy reduced the likelihood that I would spend my life trying to make the difference I imagined. One fantasy actually does make a greater difference: the one that speaks the language of political power. The other fantasy disables action by making one a laughingstock to those who wield the language of power. Fantasy motivates and role-playing trains through visualization. Until we can imagine it, we cannot really do it. Role-playing without question teaches students to be comfortable with the language of power, and that language paves the way for genuine and effective political activism.¶ Debates over the relative efficacy of political strategies for pro-social change must confront governmental power at some point. There is a fallacy in arguing that movements represent a better political strategy than voting and person-to-person advocacy. Sure, a full-scale movement would be better than the limited voice I have as a participating citizen going from door to door in a campaign, but so would full-scale government action. Unfortunately, the gap between my individual decision to pursue movement politics and the emergence of a full-scale movement is at least as great as the gap between my vote and democratic change. They both represent utopian fiat. Invocation of Mitchell to support utopian movement fiat is simply not supported by his work, and too often, such invocation discourages the concrete actions he argues for in favor of the personal rejectionism that under girds the political cynicism that is a fundamental cause of voter and participatory abstention in America today.

### 1AR – AT: Set Col

#### The role of the ballot is to determine who did the best debating. Evaluate the plan relative to opportunity costs – anything else is self-serving and arbitrary. Anything else erases the AC which means we can’t catch up which crushes competitive equity. Prior questions are regressive, unpredictable, and make generating offense impossible.

#### No link and turn – stopping private companies from colonizing space is key to anti-colonialist efforts

#### Perm do both –

#### Reform makes revolution more likely. Rejecting it condescendingly asserts the possibility of radical change is better than the certainty of real improvement.

**Delgado ’87 -** Delgado, Richard [teaches civil rights and critical race theory at University of Alabama School of Law. He has written and co-authored numerous articles and books], “The Ethereal Scholar:  Does Critical Legal Studies Have What Minorities Want?”, Harvard Civil Rights - Civil Liberties Law Review, 1987

Critical scholars reject the idea of piecemeal reform. Incremental change, they argue, merely postpones the wholesale reformation that must occur to create a decent society.38 Even worse, an unfair social system survives by using piecemeal reform to disguise and legitimize oppression. 39 Those who control the system weaken resistance by pointing to the occasional concession to, or periodic court victory of, a black plaintiff or worker as evidence that the system is fair and just.40 In fact, Crits believe that teaching the common law or using the case method in law school is a disguised means of preaching incrementalism and thereby maintaining the current power structure.41 To avoid this, CLS scholars urge law professors to abandon the case method, give up the effort to find rationality and order in the case law, and teach in an unabashedly political fashion. 42

**The** CLS **critique of piecemeal reform is** familiar, **imperialistic and wrong.** **Minorities know from bitter experience that occasional court victories do not mean the Promised Land is at hand.**43 **The critique** is imperialistic in that it **tells minorities and other oppressed peoples how they should interpret events affecting them.**44 **A court order directing a housing authority to disburse funds for heating** in subsidized housing **may postpone the revolution, or it may not. In the meantime, the order keeps a number of poor families warm.** This may mean more to them than it does to a comfortable academic working in a warm office. **It smacks of paternalism to assert that the possibility of revolution later outweighs the certainty of heat now**, unless there is evidence for that possibility**.** The Crits do not offer such evidence.

Indeed, some **incremental changes may bring revolutionary changes closer**, not push them further away**.** Not all **small reforms** induce complacency; some may **whet the appetite for further combat.** The welfare family may hold a tenants' union meeting in their heated living room. CLS scholars' **critique of piecemeal reform** often **misses these possibilities, and neglects the question of whether total change, when it comes, will be what we want.**

#### Their all-or-nothing framing reifies the power of settler colonialism and shuts down alt solvency

Busbridge, 18—Research Fellow at the Centre for Dialogue, La Trobe University (Rachel, “Israel-Palestine and the Settler Colonial ‘Turn’: From Interpretation to Decolonization,” Theory, Culture & Society Vol 35, Issue 1, 2018, dml)

The prescription for decolonisation—that is, a normative project committed to the liberation of the colonised and the overturning of colonial relationships of power (Kohn & McBride, 2011: 3)—is indeed one of the most counterhegemonic implications of the settler colonial paradigm as applied to IsraelPalestine, potentially shifting it from a diagnostic frame to a prognostic one which offers a ‘proposed solution to the problem, or at least a plan of attack’ (Benford & Snow, 2000: 616). What, however, does the settler colonial paradigm offer by way of envisioning decolonisation? As Veracini (2007) notes, while settler colonial studies scholars have sought to address the lack of attention paid to the experiences of Indigenous peoples in conventional historiographical accounts of decolonisation (which have mostly focused on settler independence and the loosening of ties to the ‘motherland’), there is nevertheless a ‘narrative deficit’ when it comes to imagining settler decolonisation. While Veracini (2007) relates this deficit to a matter of conceptualisation, it is apparent that the structural perspective of the paradigm in many ways closes down possibilities of imagining the type of social and political transformation to which the notion of decolonisation aspires. In this regard, there is a worrying tendency (if not tautological discrepancy) in settler colonial studies, where the only solution to settler colonialism is decolonisation—which a faithful adherence to the paradigm renders largely unachievable, if not impossible.

To understand why this is the case, it is necessary to return to Wolfe’s (2013a: 257) account of settler colonialism as guided by a ‘zero-sum logic whereby settler societies, for all their internal complexities, uniformly require the elimination of Native alternatives’. The structuralism of this account has immense power as a means of mapping forms of injustice and indignity as well as strategies of resistance and refusal, and Wolfe is careful to show how transmutations of the logic of elimination are complex, variable, discontinuous and uneven. Yet, in seeking to elucidate the logic of elimination as the overarching historical force guiding settler-native relations there is an operational weakness in the theory, whereby such a logic is simply there, omnipresent and manifest even when (and perhaps especially when) it appears not to be; the settler colonial studies scholar need only read it into a situation or context. It thus hurtles from the past to the present into the future, never to be fully extinguished until the native is, or until history itself ends. There is thus a powerful ontological (if not metaphysical) dimension to Wolfe’s account, where there is such thing as a ‘settler will’ that inherently desires the elimination of the native and the distinction between the settler and native can only ever be categorical, founded as it is on the ‘primal binarism of the frontier’ (2013a: 258). It is here that the differences between earlier settler colonial scholarship on Israel-Palestine and the recent settler colonial turn come into clearest view. While Jamal Hilal’s (1976) Marxist account of the conflict, for instance, engaged Palestinians and Jewish Israelis in terms of their relations to the means of production, Wolfe’s account brings its own ontology: the bourgeoisie/proletariat distinction becomes that of settler/native, and the class struggle the struggle between settler, who seeks to destroy and replace the native, and native, who can only ever push back. Indeed, if the settler colonial paradigm views history in similar teleological terms to the Marxist framework, it does not offer the same hopeful vision of a liberated future. After all, settler colonialism has only one story to tell—‘either total victory or total failure’ (Veracini, 2007).

Veracini’s attempt to disaggregate different forms of settler decolonisation is revealing of the difficulties that come along with this zero-sum perspective. It is significant to note that beyond settler evacuation (which may decolonise territory, he cautions, but not necessarily relationships) the picture he paints is a relatively bleak one. For Veracini (2011: 5), claims for decolonisation from Indigenous peoples in settler societies can take two broad forms: an ‘anticolonial rhetoric expressing a demand for indigenous sovereign independence and self-determination… and an “ultra”-colonial one that seeks a reconstituted partnership with the [settler state] and advocates a return to a relatively more respectful middle ground and “treaty” conditions’. While both, he suggests, are tempting strategies in the struggle for change, though ‘ultimately ineffective against settler colonial structures of domination’ (2011: 5), it is the latter strategy that invites Veracini’s most scathing assessment. As he writes,

under settler colonial conditions the independent polity is the settler polity and sanctioning the equal rights of indigenous peoples has historically been used as a powerful weapon in the denial of indigenous entitlement and in the enactment of various forms of coercive assimilation. This decolonisation actually enhances the subjection of indigenous peoples… it is at best irrelevant and at worst detrimental to indigenous peoples in settler societies (2011: 6-7).

The ‘primal binarism of the frontier’ plays a particularly ambivalent role in Veracini’s (2011: 6) formulation, where the categorical distinction between settler and native obstructs the ‘possibility of a genuinely decolonised relationship’ (by virtue of its lopsidedness) yet is a necessary political strategy to guard against the absorption of Indigenous people into the settler fold, which would represent settler colonialism’s final victory. The battle here is between a ‘settler colonialism [that] is designed to produce a fundamental discontinuity as its “logic of elimination” runs its course until it actually extinguishes the settler colonial relation’ and an anti-colonial struggle that ‘must aim to keep the settler-indigenous relationship going’ (2011: 7). In other words, the categorical distinction produced by the frontier must be maintained in order to struggle against its effects. Given the lack of options presented to Indigenous peoples by Veracini (2014: 315), his conclusion that settler decolonisation demands a ‘radical, post-settler colonial passage’ is perhaps not surprising – although he has ‘no suggestion as to how this may be achieved and [is] pessimistic about its feasibility’.

Scholars have long reckoned with the ambivalence of the settler colonial situation, which is simultaneously colonial and postcolonial, colonising and decolonising (Curthoys, 1999: 288). Given the generally dreadful Fourth World circumstances facing many Indigenous peoples in settler societies, it could be argued that there is good reason for such pessimism. The settler colonial paradigm, in this sense, offers an important caution against celebratory narratives of progress. Wolfe (1994), it must be recalled, wrote the original articulation of his thesis precisely against the idea of ‘historical rupture’ that dominated in Australia post-Mabo, and was thus as much a scholarly intervention as it was a political challenge to the idea of Australia having broken with its colonial past. Nonetheless, the fatalism of the settler colonial paradigm—whereby decolonisation is by and large put beyond the realms of possibility—has seen it come under considerable critique for reifying settler colonialism as a transhistorical meta-structure where colonial relations of domination are inevitable (Macoun & Strakosch, 2013: 435; Snelgrove et al., 2014: 9). Not only does Wolfe’s ontology erase contingency, heterogeneity and (crucially) agency (Merlan, 1997; Rowse, 2014), but its polarised framework effectively ‘puts politics to death’ (Svirsky, 2014: 327). In response to such critiques, Wolfe (2013a: 213) suggests that ‘the repudiation of binarism’ may just represent a ‘settler perspective’. However, as Elizabeth Povinelli (1997: 22) has astutely shown, it is in this regard that the totalising logic of Wolfe’s structure of invasion rests on a disciplinary gesture where ‘any discussion which does not insist on the polarity of the [settler] colonial project’ is assimilationist, worse still, genocidal in effect if not intent. Any attempt to ‘explore the dialogical or hybrid nature of colonial subjectivity’—which would entail working beyond the bounds of absolute polarity—is disciplined as complicit in the settler colonial project itself, leaving ‘the only nonassimilationist position one that adheres strictly and solely to a critique of [settler] state discourse’. This gesture not only disallows the possibility of counter-publics and strategic alliances (even limited ones), but also comes dangerously close to ‘resistance as acquiescence’ insofar as the settler colonial studies scholar may malign the structures set in play by settler colonialism, but only from a safe distance unsullied by the messiness of ambivalences and contradictions of settler and Native subjectivities and relations. Opposition is thus left as our only option, but, as we know from critical anti-colonial and postcolonial scholarship, opposition in itself is not decolonisation.

#### Alt alone can’t solve - Political alliances with the state are key to effective anti-colonial protest

Julian Brave NOISECAT, enrolled member of the Canim Lake Band Tsq'escen in British Columbia and a graduate of Columbia University and the University of Oxford, 16 [“The Indigenous Revolution,” *Jacobin*, November 24, 2016, https://www.jacobinmag.com/2016/11/standing-rock-dakota-access-pipeline-obama/]

As Standing Rock has shown, indigenous nations that use their unique standing to advocate for viable alternatives to unjust systems will gain supporters. Our traditional territories encompass the rivers, mountains, and forests that capital exploits with abandon. Our resistance — to the pipelines, bulldozers, and mines that cut through our lands and communities — has greater potential than yet realized. Ours is a powerful voice envisioning a more harmonious and sustainable relationship with the natural world rooted in the resurgence of indigenous sovereignty. As long as indigenous people continue to make this argument, we are positioned to win policies, court decisions, and international agreements that protect and enlarge our sovereignty and jurisdiction. As our jurisdiction and sovereignty grow, we will have more power to stop, reroute, and transform carbon-based, capitalist, and colonial infrastructure. When the Justice Department halted construction of DAPL in October, they also said they would begin looking into Free Prior Informed Consent legislation. This is a minimal first step, and we must hold them to it. Longstanding alliances with progressive parties and politicians are key to our success. In the United States, Native people have worked with Democratic elected officials like Bernie Sanders and Raúl Grijalva to advance bills like the Save Oak Flat Act, which aimed to stop an international mining conglomerate from exploiting an Apache sacred site in Arizona. In Canada, First Nations have supported the New Democratic Party. In New Zealand, the Maori Rātana religious and political movement has an alliance with the Labour Party that stretches back to the 1930s. Some indigenous leaders, such as outspoken Aboriginal Australian leader Pat Dodson, a Labour senator for Western Australia, have won prominent positions in these parties. This does not mean, of course, that we should pay deference to elected officials. In 2014, Obama became one of the first sitting presidents to visit an Indian reservation when he travelled to Standing Rock. His visit was historically symbolic and emotionally important, but if Obama fails to stop DAPL, indigenous people should renounce him. Politicians are helpful when they change policies and outcomes. We cannot and should not settle for symbolic victories. If there is to be an enduring indigenous-left coalition, the Left must support indigenous demands for land, jurisdiction, and sovereignty. At their core, these demands undermine the imperial cut-and-paste model of the nation-state, stretching from Hobbes to the present, which insists that there is room for just one sovereign entity in the state apparatus. Thomas Piketty’s call for a global wealth tax implies an international governance structure to levy such a tax. He pushes us to think beyond the state. Similarly, indigenous demands for lands, jurisdiction, and sovereignty imply that we must think beneath it.

#### Scholarly discourse and engagement with politics is key to effective structural reform - critique is insufficient.

**Purdy ’20 -** Jedediah S. Britton-Purdy et al, 20 - ("Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis by Jedediah S. Britton-Purdy, David Singh Grewal, Amy Kapczynski, K. Sabeel Rahman :: SSRN," 3-2-2020, <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3547312)//ey/>

To embrace the possibility of democratic renewal requires rejecting the terms of the Twentieth-Century Synthesis. We believe that the legal realists—and thinkers in a much longer history of political thought—were right in believing that "the economy" is neither self-defining nor self-justifying. The emphasis in these traditions has been the right one: on power, distribution, and the need for legitimacy as the central themes in the organization of economic life. Moreover, precisely because economic ordering is a political and legal artifact, the idea of an "autonomous" economic domain has always been obscurantist and ideological, even when accepted in good faith.' Law does not and never could simply defer to such a realm. Rather, law is perennially involved in creating and enforcing the terms of economic ordering, most particularly through the creation and maintenance of markets. One of its most important roles, indeed, is determining who is subject to market ordering and on what terms, and who is exempted in favor of other kinds of protection or provision.' Thus the program of law, politics, and institution building often called "neoliberalism" is, and can only be, a specific theory of how to use state power, to what ends, and for whose benefit.'The ideological work of the Twentieth-Century Synthesis has been to naturalize andembed in legal institutions from the Supreme Court to the Antitrust Office andWorld Trade Organization a specific disposition of power. This power represents a deployment of market ordering that produces intense and cross-cutting forms of inequality and democratic erosion. However, Twentieth-Century Synthesis theorists tend not to see this, precisely because the Synthesis makes it so hard to see (or at least so easy to overlook). If it is to succeed, law and political economy will also require something beyond mere critique. It will require a positive agenda. Many new and energized voices, from the legal academy to political candidates to movement activists, are already building in this direction,' calling for and giving shape to programs for more genuine democracy that also takes seriously questions of economic power and racial subordination;171 more equal distribution of resources and life chances;172 more public and shared resources and infrastructues;173 the displacement of concentrated corporate power and rooting of new forms of worker power;174 the end of mass incarceration and broader contestation of the long history of the criminalization andcontrol of poor people and people of color in building capitalism;175 the recognition of finance and money as public infrastructures;176 the challenges posed by emerging forms of power and control arising from new technologies;177 and the need for a radical new emphasis on ecology.178 These are the materials from which a positive agenda, over time, will be built. Political fights interact generatively with scholarly and policy debates in pointing the waytoward a more democratic political economy. The emergence of new grassroots movements, campaigns, and proposals seeking to deepen our democracy is no guarantee of success. But their prevalence and influence make clear the dangers and opportunities of this moment of upheaval—and highlight the stakes of building a new legal imaginary. 179 Neoliberal political economy, with its underlying commitments to efficiency, neutrality, and anti-politics, helped animate, shape, and legitimate a twentieth-century consensus that erased power, encased the market, and reinscribed racialized, economic, and gendered inequities. By contrast, a legal imaginary of democratic political economy, that takes seriously underlying concepts of power, equality, and democracy, can inform a wave of legalthought whose critique and policy imagination can amplify and accelerate these movements for structural reform and, if we are lucky, help remake our polity in more deeply democratic ways.

### Util

#### The standard is maximizing expected wellbeing. Prefer it:

#### No intent-foresight distinction – If we foresee a consequence, then it becomes part of our deliberation which makes it intrinsic to our action since we intend it to happen.

#### Use epistemic modesty – view the framework debate as impact defense. They have to win 100% of their framework to exclude 100% of our impacts.

#### Extinction comes first – it’s the worst of all evils

Baum and Barrett 18 - Seth D. Baum & Anthony M. Barrett, Global Catastrophic Risk Institute. 2018. “Global Catastrophes: The Most Extreme Risks.” Risk in Extreme Environments: Preparing, Avoiding, Mitigating, and Managing, edited by Vicki Bier, Routledge, pp. 174–184.

What Is GCR And Why Is It Important? Taken literally, a global catastrophe can be any event that is in some way catastrophic across the globe. This suggests a rather low threshold for what counts as a global catastrophe. An event causing just one death on each continent (say, from a jet-setting assassin) could rate as a global catastrophe, because surely these deaths would be catastrophic for the deceased and their loved ones. However, in common usage, a global catastrophe would be catastrophic for a significant portion of the globe. Minimum thresholds have variously been set around ten thousand to ten million deaths or $10 billion to $10 trillion in damages (Bostrom and Ćirković 2008), or death of one quarter of the human population (Atkinson 1999; Hempsell 2004). Others have emphasized catastrophes that cause long-term declines in the trajectory of human civilization (Beckstead 2013), that human civilization does not recover from (Maher and Baum 2013), that drastically reduce humanity’s potential for future achievements (Bostrom 2002, using the term “existential risk”), or that result in human extinction (Matheny 2007; Posner 2004). A common theme across all these treatments of GCR is that some catastrophes are vastly more important than others. Carl Sagan was perhaps the first to recognize this, in his commentary on nuclear winter (Sagan 1983). Without nuclear winter, a global nuclear war might kill several hundred million people. This is obviously a major catastrophe, but humanity would presumably carry on. However, with nuclear winter, per Sagan, humanity could go extinct. The loss would be not just an additional four billion or so deaths, but the loss of all future generations. To paraphrase Sagan, the loss would be billions and billions of lives, or even more. Sagan estimated 500 trillion lives, assuming humanity would continue for ten million more years, which he cited as typical for a successful species. Sagan’s 500 trillion number may even be an underestimate. The analysis here takes an adventurous turn, hinging on the evolution of the human species and the long-term fate of the universe. On these long time scales, the descendants of contemporary humans may no longer be recognizably “human”. The issue then is whether the descendants are still worth caring about, whatever they are. If they are, then it begs the question of how many of them there will be. Barring major global catastrophe, Earth will remain habitable for about one billion more years 2 until the Sun gets too warm and large. The rest of the Solar System, Milky Way galaxy, universe, and (if it exists) the multiverse will remain habitable for a lot longer than that (Adams and Laughlin 1997), should our descendants gain the capacity to migrate there. An open question in astronomy is whether it is possible for the descendants of humanity to continue living for an infinite length of time or instead merely an astronomically large but finite length of time (see e.g. Ćirković 2002; Kaku 2005). Either way, the stakes with global catastrophes could be much larger than the loss of 500 trillion lives. Debates about the infinite vs. the merely astronomical are of theoretical interest (Ng 1991; Bossert et al. 2007), but they have limited practical significance. This can be seen when evaluating GCRs from a standard risk-equals-probability-times-magnitude framework. Using Sagan’s 500 trillion lives estimate, it follows that reducing the probability of global catastrophe by a mere one-in-500-trillion chance is of the same significance as saving one human life. Phrased differently, society should try 500 trillion times harder to prevent a global catastrophe than it should to save a person’s life. Or, preventing one million deaths is equivalent to a one-in500-million reduction in the probability of global catastrophe. This suggests society should make extremely large investment in GCR reduction, at the expense of virtually all other objectives. Judge and legal scholar Richard Posner made a similar point in monetary terms (Posner 2004). Posner used $50,000 as the value of a statistical human life (VSL) and 12 billion humans as the total loss of life (double the 2004 world population); he describes both figures as significant underestimates. Multiplying them gives $600 trillion as an underestimate of the value of preventing global catastrophe. For comparison, the United States government typically uses a VSL of around one to ten million dollars (Robinson 2007). Multiplying a $10 million VSL with 500 trillion lives gives $5x1021 as the value of preventing global catastrophe. But even using “just" $600 trillion, society should be willing to spend at least that much to prevent a global catastrophe, which converts to being willing to spend at least $1 million for a one-in-500-million reduction in the probability of global catastrophe. Thus while reasonable disagreement exists on how large of a VSL to use and how much to count future generations, even low-end positions suggest vast resource allocations should be redirected to reducing GCR. This conclusion is only strengthened when considering the astronomical size of the stakes, but the same point holds either way. The bottom line is that, as long as something along the lines of the standard riskequals-probability-times-magnitude framework is being used, then even tiny GCR reductions merit significant effort. This point holds especially strongly for risks of catastrophes that would cause permanent harm to global human civilization. The discussion thus far has assumed that all human lives are valued equally. This assumption is not universally held. People often value some people more than others, favoring themselves, their family and friends, their compatriots, their generation, or others whom they identify with. Great debates rage on across moral philosophy, economics, and other fields about how much people should value others who are distant in space, time, or social relation, as well as the unborn members of future generations. This debate is crucial for all valuations of risk, including GCR. Indeed, if each of us only cares about our immediate selves, then global catastrophes may not be especially important, and we probably have better things to do with our time than worry about them. While everyone has the right to their own views and feelings, we find that the strongest arguments are for the widely held position that all human lives should be valued equally. This position is succinctly stated in the United States Declaration of Independence, updated in the 1848 Declaration of Sentiments: “We hold these truths to be self-evident: that all men and 3 women are created equal”. Philosophers speak of an agent-neutral, objective “view from nowhere” (Nagel 1986) or a “veil of ignorance” (Rawls 1971) in which each person considers what is best for society irrespective of which member of society they happen to be. Such a perspective suggests valuing everyone equally, regardless of who they are or where or when they live. This in turn suggests a very high value for reducing GCR, or a high degree of priority for GCR reduction efforts.

#### Non util ethics are impossible

Greene 07 – Joshua, Associate Professor of Social science in the Department of Psychology at Harvard University (The Secret Joke of Kant’s Soul published in Moral Psychology: Historical and Contemporary Readings, accessed: <https://www.gwern.net/docs/philosophy/ethics/2007-greene.pdf>, pages 47-50)

**What turn-of-the-millennium science** **is telling us is that human moral judgment is not a pristine rational enterprise**, that our **moral judgments are driven by a hodgepodge of emotional dispositions, which themselves were shaped by a hodgepodge of evolutionary forces, both biological and cultural**. **Because of this, it is exceedingly unlikely that there is any rationally coherent normative moral theory that can accommodate our moral intuitions**. Moreover, **anyone who claims to have such a theory**, or even part of one, **almost certainly doesn't**. Instead, what that person probably has is a moral rationalization. It seems then, that we have somehow crossed the infamous "is"-"ought" divide. How did this happen? Didn't Hume (Hume, 1978) and Moore (Moore, 1966) warn us against trying to derive an "ought" from and "is?" How did we go from descriptive scientific theories concerning moral psychology to skepticism about a whole class of normative moral theories? The answer is that we did not, as Hume and Moore anticipated, attempt to derive an "ought" from and "is." That is, our method has been inductive rather than deductive. We have inferred on the basis of the available evidence that the phenomenon of rationalist deontological philosophy is best explained as a rationalization of evolved emotional intuition (Harman, 1977). Missing the Deontological Point I suspect that **rationalist deontologists will remain unmoved by the arguments presented here**. Instead, I suspect, **they** **will insist that I have simply misunderstood what** Kant and like-minded **deontologists are all about**. **Deontology, they will say, isn't about this intuition or that intuition**. It's not defined by its normative differences with consequentialism. **Rather, deontology is about taking humanity seriously**. Above all else, it's about respect for persons. It's about treating others as fellow rational creatures rather than as mere objects, about acting for reasons rational beings can share. And so on (Korsgaard, 1996a; Korsgaard, 1996b). **This is, no doubt, how many deontologists see deontology. But this insider's view**, as I've suggested, **may be misleading**. **The problem**, more specifically, **is that it defines deontology in terms of values that are not distinctively deontological**, though they may appear to be from the inside. **Consider the following analogy with religion. When one asks a religious person to explain the essence of his religion, one often gets an answer like this: "It's about love**, really. It's about looking out for other people, looking beyond oneself. It's about community, being part of something larger than oneself." **This sort of answer accurately captures the phenomenology of many people's religion, but it's nevertheless inadequate for distinguishing religion from other things**. This is because many, if not most, non-religious people aspire to love deeply, look out for other people, avoid self-absorption, have a sense of a community, and be connected to things larger than themselves. In other words, secular humanists and atheists can assent to most of what many religious people think religion is all about. From a secular humanist's point of view, in contrast, what's distinctive about religion is its commitment to the existence of supernatural entities as well as formal religious institutions and doctrines. And they're right. These things really do distinguish religious from non-religious practices, though they may appear to be secondary to many people operating from within a religious point of view. In the same way, I believe that most of **the standard deontological/Kantian self-characterizatons fail to distinguish deontology from other approaches to ethics**. (See also Kagan (Kagan, 1997, pp. 70-78.) on the difficulty of defining deontology.) It seems to me that **consequentialists**, as much as anyone else, **have respect for persons**, **are against treating people as mere objects,** **wish to act for reasons that rational creatures can share, etc**. **A consequentialist respects other persons, and refrains from treating them as mere objects, by counting every person's well-being in the decision-making process**. **Likewise, a consequentialist attempts to act according to reasons that rational creatures can share by acting according to principles that give equal weight to everyone's interests, i.e. that are impartial**. This is not to say that consequentialists and deontologists don't differ. They do. It's just that the real differences may not be what deontologists often take them to be. What, then, distinguishes deontology from other kinds of moral thought? A good strategy for answering this question is to start with concrete disagreements between deontologists and others (such as consequentialists) and then work backward in search of deeper principles. This is what I've attempted to do with the trolley and footbridge cases, and other instances in which deontologists and consequentialists disagree. **If you ask a deontologically-minded person why it's wrong to push someone in front of speeding trolley in order to save five others, you will get** characteristically deontological **answers**. Some **will be tautological**: **"Because it's murder!"** **Others will be more sophisticated: "The ends don't justify the means**." "You have to respect people's rights." **But**, as we know, **these answers don't really explain anything**, because **if you give the same people** (on different occasions) **the trolley case** or the loop case (See above), **they'll make the opposite judgment**, even though their initial explanation concerning the footbridge case applies equally well to one or both of these cases. **Talk about rights, respect for persons, and reasons we can share are natural attempts to explain, in "cognitive" terms, what we feel when we find ourselves having emotionally driven intuitions that are odds with the cold calculus of consequentialism**. Although these explanations are inevitably incomplete, **there seems to be "something deeply right" about them because they give voice to powerful moral emotions**. **But, as with many religious people's accounts of what's essential to religion, they don't really explain what's distinctive about the philosophy in question**.

#### That justifies util – it’s impartial, specific to public actors, and resolves infinite regress which explains all value.

Greene 15 — (Joshua Greene, Professor of Psychology @ Harvard, being interviewed by Russ Roberts, “Joshua Greene on Moral Tribes, Moral Dilemmas, and Utilitarianism”, The Library of Economics and Liberty, 1-5-15, Available Online at <https://www.econtalk.org/joshua-greene-on-moral-tribes-moral-dilemmas-and-utilitarianism/#audio-highlights>, accessed 5-17-20, HKR-AM) \*\*NB: Guest = Greene, and only his lines are highlighted/underlined

Guest: Okay. So, I think utilitarianism is very much misunderstood. And this is part of the reason why we shouldn't even call it utilitarianism at all. We should call it what I call 'deep pragmatism', which I think better captures what I think utilitarianism is really like, if you really apply it in real life, in light of an understanding of human nature. But, we can come back to that. The idea, going back to the tragedy of common-sense morality is you've got all these different tribes with all of these different values based on their different ways of life. What can they do to get along? And I think that the best answer that we have is--well, let's back up. In order to resolve any kind of tradeoff, you have to have some kind of common metric. You have to have some kind of common currency. And I think that what utilitarianism, whether it's the moral truth or not, is provide a kind of common currency. So, what is utilitarianism? It's basically the idea that--it's really two ideas put together. One is the idea of impartiality. That is, at least as social decision makers, we should regard everybody's interests as of equal worth. Everybody counts the same. And then you might say, 'Well, but okay, what does it mean to count everybody the same? What is it that really matters for you and for me and for everybody else?' And there the utilitarian's answer is what is sometimes called, somewhat accurately and somewhat misleadingly, happiness. But it's not really happiness in the sense of cherries on sundaes, things that make you smile. It's really the quality of conscious experience. So, the idea is that if you start with anything that you value, and say, 'Why do you care about that?' and keep asking, 'Why do you care about that?' or 'Why do you care about that?' you ultimately come down to the quality of someone's conscious experience. So if I were to say, 'Why did you go to work today?' you'd say, 'Well, I need to make money; and I also enjoy my work.' 'Well, what do you need your money for?' 'Well, I need to have a place to live; it costs money.' 'Well, why can't you just live outside?' 'Well, I need a place to sleep; it's cold at night.' 'Well, what's wrong with being cold?' 'Well, it's uncomfortable.' 'What's wrong with being uncomfortable?' 'It's just bad.' Right? At some point if you keep asking why, why, why, it's going to come down to the conscious experience--in Bentham's terms, again somewhat misleading, the pleasure and pain of either you or somebody else that you care about. So the utilitarian idea is to say, Okay, we all have our pleasures and pains, and as a moral philosophy we should all count equally. And so a good standard for resolving public disagreements is to say we should go with whatever option is going to produce the best overall experience for the people who are affected. Which you can think of as shorthand as maximizing happiness--although I think that that's somewhat misleading. And the solution has a lot of merit to it. But it also has endured a couple of centuries of legitimate criticism. And one of the biggest criticisms--and now we're getting back to the Trolley cases, is that utilitarianism doesn't adequately account for people's rights. So, take the footbridge case. It seems that it's wrong to push that guy off the footbridge. Even if you stipulate that you can save more people's lives. And so anyone who is going to defend utilitarianism as a meta-morality--that is, a solution to the tragedy of common sense morality, as a moral system to adjudicate among competing tribal moral systems--if you are going to defend it in that way, as I do, you have to face up to these philosophical challenges: is it okay to kill on person to save five people in this kind of situation? So I spend a lot of the book trying to understand the psychology of cases like the footbridge case. And you mention these being kind of unrealistic and weird cases. That's actually part of my defense.

### AT Kant

#### Space debris violates the universal maxim because it incentivizes free-riding - that was our Dovey 21 card - no company wants to be the one to do the hard work to clean up their orbits and instead just wait for the governments to pick up the pieces.

#### Corporate colonialism violates the universal maxim because exploitation fails to treat people in ends in themselves and rather uses them as a means to gather profit

### PPWT

#### Fiat solves the link – the plan doesn’t allow for strategic bargaining or concessions. Anything else makes it impossible to be aff because the debate becomes a question of would and not should

#### Impact turn – PPWT is good because it stops space weaponization.

Jaramillo 09 [Cesar Jaramillo, “In Defence of the PPWT Treaty: Toward a Space Weapons Ban,” The Ploughshares Monitor Winter 2009 Volume 30 Issue 4, <https://ploughshares.ca/pl_publications/in-defence-of-the-ppwt-treaty-toward-a-space-weapons-ban/>>]CT

The PPWT draft treaty

What, then, makes the PPWT proposal worthy of serious consideration by the international community? In other words, why is it an appealing alternative to the status quo? The PPWT is the first draft treaty on outer space ever presented at the UN Conference on Disarmament, which is the quintessential international forum for addressing multilateral disarmament agreements. In fact, the PPWT builds upon elements contained in a 2002 Working Paper presented at the CD by a group of countries that also included Russia and China. Technically speaking, though, the PPWT Treaty focuses not on disarmament but prevention, as outer space is currently considered to be weapons-free and, thus, there is nothing to disarm. Still, the CD seems to be the obvious repository for such a proposal and most member states have welcomed its introduction.

Specifically, as implied in the name of the treaty, the PPWT seeks to ban two different yet interrelated conducts:

the placement of weapons in outer space and

the threat or use of force against outer space objects.

The first initiative sensibly eliminates the fundamental prerequisite for the actual utilization of space weapons: their placement in space. The PPWT treaty defines weapon in outer space in a thorough and comprehensive manner as:

Any device placed in outer space, based on any physical principle, which has been specially produced or converted to destroy, damage, or disrupt the normal functioning of objects in outer space, on the Earth or in the Earth’s atmosphere, or to eliminate a population or components of the biosphere which are important to human existence or to inflict damage on them. (Article 1C)

Clearly, if the Treaty enters into force, such a broad definition would contribute decisively to the goals of PAROS and preventing space from becoming an arena of military confrontation. Notably, it encompasses weapons placed in space that can be used not only against other space objects, but also against Earth-based objects. Thus, it seems apparent that the framers of the PPWT strove to minimize the room for ambiguity and interpretation with regard to the conditions under which a device in space can be considered a weapon. Again, a weapon in space need not be used against an adversary for there to be a violation of the treaty, as its mere placement in space would be considered a breach of the treaty.

Similarly, the second focal point of this treaty, against the threat or use of force against outer space objects, provides a comprehensive ban on any aggressive action against objects in space, defined as:

Any hostile actions against outer space objects including, inter alia, actions aimed at destroying them, damaging them, temporarily or permanently disrupting their normal functioning or deliberately changing their orbit parameters or the threat of such actions. (Article 1E)

A positive characteristic of this definition is that there is no indication that hostile actions must originate in space. That is, according to the treaty, outer space objects should be free from hostile interference regardless of where it originates. The implication is that Earth-based weapons systems capable of striking targets in space are included.

Challenges to the implementation of the PPWT

Perhaps the biggest obstacle to the adoption of the PPWT has been the staunch US opposition—to the draft treaty in particular and to any legal measure designed to restrict its options in space. In 2007, the US Permanent Representative to the CD, Christina Rocca, said, “We continue to believe that there is no arms race in space, and therefore no problem for arms control to solve” (US Mission to the UN in Geneva, 2007). Such opposition by the Bush Administration was hardly surprising, as the US has recently rejected any binding mechanisms that could restrict its ability to operate freely in outer space. Moreover, this reluctance to abide by multilateral legal regimes related to space security has been codified in its National Space Policy (US Office of Science & Technology Policy 2006), which specifically states that:

The United States will oppose the development of new legal regimes or other restrictions that seek to prohibit or limit U.S. access to or use of space. Proposed arms control agreements or restrictions must not impair the rights of the United States to conduct research, development, testing, and operations or other activities in space for U.S. national interests.

It is highly unlikely that the PPWT draft treaty will ever see the light of day as a binding multilateral legal instrument unless the recalcitrant US position is somehow moderated. That said, the US National Space Policy is currently under review by the Obama Administration, with an expected completion date of early 2010. If the position taken by the Obama administration on issues such as nuclear disarmament is any indication, the review may warrant cautious optimism about a change in position on space security to one that embraces multilateralism.

Several observers have also pointed to areas of the treaty in which shortcomings and inconsistencies can be identified. For instance, the treaty has been criticized because it does not specifically ban the development and testing of earth-based anti-satellite weapons (ASAT). The proponents of the PPWT, Russia and China, have argued that while such a ban was omitted because such activities cannot be readily verified, the PPWT “does prohibit the use of such systems against space objects for hostile purposes” (CD 2009, p. 4).

Certainly, there is an inconsistency to be observed in this case. That is, if ASATs are not to be used, their development and testing would seem counterintuitive and contrary to the overall aims of the treaty.

Likewise, it is not entirely clear if, under the treaty, an attack by a state on its own satellite would be considered a hostile act, not to mention the implications that this would have on the creation of space debris. If so, then some might argue that the PPWT lacks a provision for instances when there may be a legitimate need to strike one’s own satellite. This could be due to satellite malfunction, risk of reentry, sensitivity of information that could potentially be extracted from the satellite, etc.

To be sure, there are other points where the PPWT lacks precision, has potential loopholes, or is subject to interpretation. These shortcomings notwithstanding, the PPWT remains the most highly structured state-originating proposal that has been introduced in the CD with the aim of preventing the weaponization of space. With the necessary revisions and consultations, it could serve as a building block in a broader space security legal regime.

An urgent matter

Time is of the essence for a weapons ban. General Xu Qiliang, chief of the Chinese People’s Liberation Army Air Force, was recently quoted as saying, “as far as the revolution in military affairs is concerned, the competition between military forces is moving towards outer space… this is a historical inevitability and a development that cannot be turned back” (Daily Telegraph 2009). Beyond the paradox of his nationality—China being one of the primary sponsors of the PPWT—and the degree to which his statement reflects the official stance of the Chinese government, his words are a grim reminder of the risks associated with the weaponization of space.

If space weapons are indeed placed in orbit, with the utilization or threat of utilization by any state, the event will likely trigger an arms race, with potentially disastrous results. It is imperative to act now in moving toward a space weapons ban, before the first hostile weapon is launched.

If the international community fails to act decisively, there will probably be a ratchet effect, whereby the process of space weaponization will not go backwards once it is set in motion. The PPWT could stand in the way of that dangerous possibility and should be afforded the attention it deserves, so that space can be preserved as a peaceful global commons.

#### Space weaponization and arms racing ensure space war goes nuclear

**Hitchens ’17** (Theresa Hitchens, Theresa Hitchens is Senior Research Scholar at the Center for International and Security Studies at Maryland, Prior to joining CISSM, Hitchens was the director of the United Nations Institute for Disarmament Research (UNIDIR) in Geneva from 2009 through 2014. Among her activities and accomplishments at UNIDIR, Hitchens served as a consultant to the U.N. Group of Governmental Experts on Transparency and Confidence Building Measures in Outer Space Activities, provided expert advice to the Conference on Disarmament regarding the prevention of an arms race in outer space (PAROS), and launched UNIDIR's annual conference on cyber security, From 2001 to 2008, Hitchens worked at the Center for Defense Information, where she served as Director, and headed the center’s Space Security Project, setting the strategic direction of the center and conducting research on space policy and other international security issues, “Space weapon technology and policy”, School of Public Policy University of Maryland, <https://aip.scitation.org/doi/pdf/10.1063/1.5009221?class=pdf>, November 2017)

Abstract. The military use of space, including in support of nuclear weapons infrastructure, has greatly increased over the past 30 years. In the current era, **rising geopolitical tensions between** the United States and Russia and China **have led to assumptions** in all three major space powers **that warfighting in space now is inevitable, and possible because of rapid technological advancements**. New capabilities for disrupting and destroying satellites include radio-frequency jamming, the use of lasers, maneuverable space objects and more capable direct-ascent anti-satellite weapons. **This situation, however, threatens international security and stability among nuclear powers. There is a continuing and necessary role for diplomacy, especially the establishment of normative rules of behavior, to reduce risks of misperceptions and crisis escalation, including** up to the **use of nuclear weapons**. U**.S. policy and strategy should seek a balance between traditional military approaches to protecting its space assets and diplomatic tools to create a more secure space environment.** I. INTRODUCTION Outer space is recognized by all nations as “the province of mankind” not subject to national boundaries or appropriation via both treaty – especially the 1967 Outer Space Treaty1 – and by the practice of nation states. Since the dawn of the space age, the use of satellites has become integral to the global economy, including providing communications, weather services, mapping, precision timing and navigation services for shipping, secure crossborder banking, and Internet connectivity. Every state has both an interest in making use of space, and reason to deal with its use by other states, because **the activities in space by one actor have the potential to impact all others**, for good or for bad. In addressing international and national security, and nuclear security in particular, the space environment has played a role of great importance from almost the beginning of the nuclear age. The first satellites launched by the Soviet Union and the United States were oriented toward seeking information on what was transpiring in areas controlled by the other, and to verify bilateral arms control agreements. While in short order space systems also were integrated to the offensive uses of long-range delivery systems by providing photographic information about potential targets, strategic space systems were during the Cold War widely viewed as stabilizing the Superpower nuclear competition. The use of space for military purposes has continued into the present era, with increasing capabilities to take advantage of large segments of the electromagnetic spectrum for acquiring intelligence, communicating globally, and generally supporting ways of using nuclear weapons both for deterrence, and, should deterrence fail, use of those weapons against an adversary. Most of the nuclear weapon possessing states operate satellites for these purposes. Perhaps as importantly, space systems over the last two decades have become integral to the tactical warfighting ability of many modern states – a situation that has complicated the status of space systems as strategically stabilizing. Indeed, the growing use of space by many countries to achieve victory on the battlefield has increased both the vulnerability of militaries to attacks on their space systems and has, at the same time, increased their value as potential targets in a war. Over the past 50 years, the Soviet Union, the United States, and China have carried out experiments in or aimed at the outer space environment – mostly the area close to the atmosphere in Low Earth Orbit (LEO) – that show the capability to destroy a satellite, or to disrupt its functions. The specter of space warfare for many years has, among other negative consequences, raised concerns that a state’s nuclear retaliatory capability could be compromised. This concern also applies more generally, of course, to an ability to disrupt communications functions for other military, or civilian, purposes. In the 1980s, there was a period when the United States, and perhaps others, explored whether systems based in space could be used to destroy an adversary’s intercontinental ballistic missiles, or their payloads. The so-called Star Wars program under the Reagan Administration envisioned the deployment of a system of satellites that would seek to destroy the missiles/warheads launched at the United States. One technology explored envisioned detonating a nuclear explosive to generate a beam of x-rays that would put out of commission the adversary’s warhead. Thus far, such technologies have not succeeded in playing a role in the nuclear-weapon situation globally. However, the U.S. descendant of the Star Wars program – currently limited to conventionally equipped, ground- and sea-based missile defense interceptors with limited capability against a full-blown nuclear attack – continues to stress nuclear deterrence and stability between the United States and Russia, as well as China, which maintains a much smaller nuclear arsenal than the Cold War adversaries. However, recent missile experiments by China have demonstrated the vulnerability of the geosynchronous equatorial orbit (GEO), where many hundreds of satellites are “parked” carrying out communications and other functions, including nuclear weapons support systems and spy satellites. II. INCREASED THREATS INVOLVING OUTER SPACE Since the first satellites were launched in the 1950s by the Soviet Union and then the United States, the Russian Federation, the United States, China, India, Japan, and other states have, without much coordination, launched so many satellites into space into various orbits and at various altitudes that there is currently a strong risk of both congestion and competition. There is no global regime for regulating outer space activities. The Outer Space Treaty of 1967, to which all the launching states, and most others, are party2 mandates that outer space be used solely for peaceful purposes, and prohibits the stationing of nuclear or other weapons of mass destruction in that environment. (The Treaty does not prohibit the transit of nuclear weapons, e.g. as a payload on a submarine-launched ballistic missile, through outer space; furthermore under common law practice, defensive military activities are tolerated as compliant with “peaceful purposes.”) The Outer Space Treaty, however, makes it clear that states are responsible for their own space activities, and compliance with international law. And while there are a number of other spacerelated treaties, UN principles and voluntary agreements managed by various UN and multilateral bodies, a nation’s activities in space are largely regulated by that nation alone. There is no international legal requirement for any one state to coordinate its satellite launches or maneuvers with others. Environmental Threats: Crowding and Debris Some 1,500 operational satellites are now in orbit, owned by more than 80 states or other entities. These states and entities have varying levels both of proficiency and of knowledge of the established laws and rules affecting space. In the radio frequency band of the electromagnetic spectrum, interference is rising, especially in the GEO regime. Some of this interference is deliberate, undertaken for political purposes, despite the fact that deliberate interference is one of the few legally binding restraints in the international space arena3 . The evolution in satellite technology has led to the wider use of smaller satellites, including so-called “Cubesats,” that can be deployed in constellations, especially in LEO. The number of operational satellites is expected to rise to many thousands within the decade. LEO, in particular, is becoming incredibly crowded with satellites, making tracking of on-orbit objects extremely difficult. Furthermore, many small satellites have no ability to maneuver to avoid collisions with other satellites and space debris. The half-century of using space has resulted, from the breakup of satellites and other activities, in a considerable amount of on-orbit debris – including satellites no longer in use, parts of satellites that have broken up, launcher stages, nuts and bolts, and debris from the deliberate destruction of satellites. The United States and others track some 23,000 orbiting pieces with a diameter of greater than 10 cm. This debris is especially dangerous if a satellite or transiting vehicle collides with a piece, since the closing velocity of such a collision on-orbit is very high – some 7.5 kilometers per second (faster than a bullet) in LEO. Worse yet, even very small debris, most of which cannot be detected much less tracked, can destroy an operational satellite; it is estimated that some 500,000 to one million pieces of debris smaller than 10 centimeters exist on orbit. **It is widely agreed that new international measures to better coordinate space activities are required to ensure that the space environment is sustained**. In 2007, the United Nations Committee for the Peaceful Uses of Outer Space (COPUOS) in Vienna, Austria, agreed on a set of guidelines for the mitigation of space debris, which are slowly being implemented by many space-faring states. It may be that such measures will eventually require removal of debris from orbit, as the decay of debris from space into the atmosphere where it burns up (or falls on Earth) is a very long-term prospect, taking as much as 25 years in LEO. Sadly, the lifetime of debris in GEO, like diamonds, is practically forever. COPUOS currently is working on a set of recommended best practices to ensure the “long-term sustainability of space.” COPUOS has a 2018 deadline to finish this work; however, there is already discussion of follow-on effort that may include international guidelines for debris removal. Increasing Military Tensions in Space In the geopolitical sphere, compared with the period following the breakup of the Soviet Union, the current decade is witnessing increased tensions between the United States and Russia, and between the United States and China. The geopolitical situation in space has been further eroded by the proliferation of experimentation with and/or deployment of dual-use technologies with “counterspace,” i.e. satellite attack, capabilities. As noted above, China, Russia and the United States all have tested (or in some cases deployed) such technologies in both LEO and GEO. The United States continues to have an advantage in military space capabilities, but its edge is eroding as China and Russia dedicate more resources. Most technologies involved in sustaining systems in orbit are dual-use, but certain specific activities are raising suspicions about potential intended weapons use. The capability to maneuver satellites is particularly relevant. Russia placed a satellite called Luch/Olymp in GEO that maneuvered or drifted over a considerable range, and at several points in 2015 came extremely close to commercial satellites owned by Intelsat.4 Intelsat called the move “irresponsible,” but their request for information from Russia went unanswered. The maneuvers further prompted concern at the U.S. Defense Department about the satellite’s mission, which has not been revealed by Moscow. The United States also has carried out programs in GEO that could have potential weapons capabilities. For example, the PAN, an acronym for Palladium at Night, is a classified program apparently dealing with communications platforms, and perhaps providing other capabilities.5 The Geosynchronous Space Situational Awareness Program (GSSAP) is a U.S. military satellite constellation that also maneuvers in orbit, designed, according to the Pentagon, with the objective of inspecting other satellites orbiting in GEO. Such activities are known as Rendezvous and Proximity Operations (RPO), and have a number of benign applications such as satellite refueling, inspection and repair. Russia is carrying out other such experiments in LEO, as are China, the United States, Japan and Sweden. The commercial applications of maneuvering satellites are also increasing. Among the number of more directly identifiable counterspace technologies now available, the most widespread are ground-based radio-frequency jammers, which can be used to disrupt satellite communications and operations. In addition, there are efforts to develop lasers for disrupting or degrading systems based in space. Russia, China and the United States have also carried out projects involving terrestrially based missiles carrying anti-satellite payloads. The United States as early as the 1980s launched missiles from an F-15 fighter jet with this objective. A 2007 Chinese test, involving the destruction of a non-functional Chinese weather satellite in LEO, released a considerable quantity of debris. The United States subsequently launched a missile from an Aegis cruiser that was advertised to have the objective of destroying a satellite in a decaying orbit, but this did not prevent speculation that the mission also had the objective of demonstrating a similar capability to that of China. Over decades, the U.S. missile defense program has also heavily relied on the space environment, for early warning, for communications, and as a place for engaging and destroying hostile systems. Noted above is the Reagan Administration’s “Star Wars” program, pursued with the idea of creating a “shield” against intercontinental ballistic missiles. **The harder-line rhetoric that has been employed in recent years also has had an inevitable impact of raising tensions**. The United States has pivoted from an approach of “strategic restraint” to one emphasizing “warfighting.”6 In particular, the budgets for providing resiliency in space systems and counterspace capabilities have been increasing. At the same time, Russian accusations that U.S. activities have a hostile objective, and its responses to U.S. representations, have become shriller. Russia has called the anti-ballistic missile system SM-3 2A an anti-satellite weapon, while touting its own objectives for acquiring anti-satellite capabilities. In 2013, China tested a missile, the Dong Ning-2, which appears capable of reaching satellites in GEO. Chinese military space activities lack transparency, but it seems clear that such activities include the objective of being able to exercise counterspace actions. Most troubling, there has been a lack of serious dialogue among these Big Three states. Multilateral Efforts to Reduce Risks For many years, a direct approach to concerns about the potential for weaponizing space (space has been militarized since the dawn of the space age, but so far cannot be said to have been weaponized) has been debated within the United Nations, as well as at the Conference on Disarmament in Geneva. The Russian-Chinese cosponsored initiative, on the Prevention of an Arms Race in Outer Space, has been on the agenda of the Conference on Disarmament since 1985, and under that agenda item Moscow and Beijing have proposed a treaty to ban weapons in space.7 However, the Conference has been all but immobilized by wider disagreements since that time; and the United States remains firmly opposed to the proposed treaty. There have been a number of efforts to set norms of behavior in space in order to guard against misunderstanding and conflict in space. Most recently, the 2013 UN Group of Governmental Experts (GGE) on Transparency and Confidence-Building Measures in Outer Space Activities released a set of recommended initiatives for states to implement, including improved communications about objects in orbit.8 Unfortunately, little work has been done since to implement the recommendations, either at the multilateral level or by individual states. However, the United States, Russia and China have recommended that the UN Disarmament Commission, based in New York, and the deliberative body on arms control issues, take up the question of implementation of the GGE recommendations. While the initial proposal has been received favorably, a decision regarding whether to put the issue on the Commission’s formal agenda will not be made until Fall. III. POLICY QUESTIONS FOR THE UNITED STATES In view of the increased uncertainties affecting the use of outer space, particularly in the area of international security, the United States needs to address several issues with some urgency. First, what is the appropriate mix of resiliency measures to apply in the coming years? A subsidiary question in this regard is what is an appropriate role for commercial providers? And should the U.S. military switch to constellations of small satellites for some national security missions? The budgetary implications of achieving objectives, and establishing appropriate requirements, are important components of pursuing this mix. And there is the inevitable bureaucratic overlap between the Department of Defense and the Intelligence Community. Such “turf” issues require constant attention lest they adversely impact on the fulfillment of national, vice institutional, objectives. Lengthy acquisition programs put systems at risk of becoming obsolescent earlier than they would otherwise become outdated. As part of this latter issue, the United States will need to consider what reforms are needed in the acquisition process, and related organizational arrangements. The integration of Department of Defense and Intelligence Community programs and activities is inevitably a delicate matter; it will require especial focus from the White House, in particular as resiliency is now being embedded into the requirements for acquisition of new systems. A more far reaching issue is how best to strike a balance between the defensive aspects of counterspace and the offensive aspects. And integral to addressing this balance is the impact of U.S. options to respond to hostile space activities on the stability of the strategic/nuclear relationships: U.S.-Russia, U.S.-China, and a large number of other such relationships involving the nuclear-weapon-possessing states. If “arms racing” resumes, or, in the case of India and Pakistan, continues, how will the use of space, specifically for counterspace activities, impact on these races, and vice-versa? Will there be a deterioration in nuclear deterrence? Will an offensive strategy involving the targeting of an adversary’s nuclear-related satellites emerge? These are questions that beg answers in the near-term, as budgetary and policy decisions are being made. **It is also important to consider the role of diplomacy in dealing with international security for outer space.** Diplomacy, in the form of both self-restraint and in reassurance of potential adversaries regarding intentions, has been a part of the tool kit for managing competition in space from the beginning of the space age. Can effective “rules of the road” be further developed? The limited success, but slow pace, of multilateral efforts should not be seen as failure, however. Diplomacy is a difficult business, often characterized by a “one step forward, one step back” dynamic. There is some optimism to be found in the ongoing COPUOS effort, which while a slightly sideways approach, will have positive impacts on international security if successful. While the Disarmament Commission has little power, the advent of discussions there would provide a much needed multilateral forum for addressing the security issues for space given the decades-long impasse at the Conference on Disarmament. Finally, **one should not overlook the value of bilateral diplomacy, particularly among the Big Three space powers. Further work will also be needed to regulate the proliferation of technologies in the commercial sector**. This will likely involve export control, and measures for the management of “traffic” in space (STM). However, care must be given to weigh national security concerns against the needs of commercial industry to thrive in the international marketplace. There is a tendency in the national security community to try to “close the barn door after the horses have escaped” that must not be indulged in the space domain, given the reliance of the national security sector on commercial capabilities and technological innovation. IV. THE NEED FOR A “TIME OUT” To date, no state is deploying dedicated anti-satellite weapons. Testing of capabilities does not a program make. That said, the trend lines are currently negative and require both time and analysis to mitigate. It would be irresponsible for the United States, or any other country, to leap to conclusions about the “inevitability” of all-out war in space. A balanced strategy, which combines resiliency, deterrence, and diplomacy **will be required to** protect national security and **ensure international security**. While development of some anti-satellite capabilities for potential future use may be wise, a run-away space arms race is not desirable for any party. It may be that a viable modus vivendi could be a situation of “implied deterrence:” i.e., the development of dual-use technologies with inherent weapons capabilities in a transparent manner so as to provide the knowledge to others that, if pushed, antisatellite weapons could be deployed. And despite the difficulties to date, **the prospect of the multilateral establishment of norms shows some possibility of promise.** This involves the implementation of recommendations by the Group of Governmental Experts discussed above; of the COPUOS LTS (long-term sustainability) best practices work making progress by 2018; the successful efforts to codify the legal regime that are underway (e.g., those at McGill University in Montreal), and perhaps the UN Disarmament Commission addressing TCBMs in 2018. These efforts must be given a chance to ripen, however much frustration is involved in the processes. It can perhaps be helpful to think of the world as being surrounded on all sides by a large fishbowl, of indefinite dimensions in the outward direction, with the atmosphere at the intersection between “outer” space and the land and waters below. Looked at in this way, human activities in outer space have little room to be confined to a single state: the world as a whole is impacted by those activities. Accordingly, when dealing with outer space, traditional concepts of absolute roles for state sovereignty must inevitably be modified to serve the objectives of global peace, security and stability. Whether this reality will at some point lead to an appreciation that reliance on force, nuclear weapons in particular, cannot play the role in space that it does on the Earth, remains to be seen.

1. Alan H. Coverstone**,** 2005 **–** masters in communication from Wake Forest and longtime debate coach. “Acting on Activism: Realizing the Vision of Debate with Pro-social Impact,” Paper presented at the National Communication Association Annual Conference, 11/17/05. [↑](#footnote-ref-1)