# 1NC vs Lexington BF

## 1NC

### 1

#### Interpretation: The affirmative may not specify a country.

#### By means:

Oxford dictionary <https://www.google.com/search?q=by+definition&oq=by+definition&aqs=edge..69i57l2j69i59l2j69i60j69i64j69i60l3.1219j0j1&sourceid=chrome&ie=UTF-8>

identifying the agent performing an action. 2. indicating the means of achieving something.

#### Countries are not private entities:

[https://www.lawinsider.com/dictionary/private-entity //](https://www.lawinsider.com/dictionary/private-entity%20//) ella

**Private entity** means **any entity other than a State,** local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25. Includes:

Entities is plural

https://www.wordhippo.com/what-is/the-plural-of/entity.html

What is the plural of entity? The plural form of entity is entities.

#### Violation: they specify the USFG

#### Prefer –

#### 1] Limits –

#### 2] Jurisdiction -

#### Competing interps on T – you can’t be reasonably topical and 2 brightlines collapses to 2 competing interps

#### DTD – T indicts the entire aff

#### No RVIs - 1] encourages abusive advocacies to bait theory 2] illogical to win just for being topical

### 2

#### Interpretation: Affirmatives may not specify types of appropriation being unjust.

#### “The” means ALL

US District Court of Massachusetts ‘3

Opinion written by Saris, District Judge. 238 F.Supp.2d 347 (2003) VLT CORPORATION and Vicor Corporation, Plaintiffs v. LAMBDA ELECTRONICS, INC., Defendant No. 01-CV-10957-PBS. United States District Court, D. Massachusetts. January 3, 2003.

1. It Depends On What the Word "The" Means

The first skirmish involves the word "the." The claim language states "circuitry for recycling *the* magnetizing energy stored in said transformer to reset it." (Emphasis added). Lambda asserts that the word "the" means all of the magnetizing energy in the transformer. Vicor contends that the claim allows for the possibility that some of the energy may be recycled to reset the core while other energy is delivered to the load. In other words, it argues that the word "the" can mean "some of the," and explains that the word "the" was used to distinguish "the magnetizing" energy from the more general term "energy" that is used earlier in the preamble. Nice linguistic jousting, but the use of the word "magnetizing" alone would have been an adequate adjective to single out the kind of energy intended for recycling. If only some of the transformer's energy needed to be recycled, the word "the" would not have been used.

Lambda's argument that the word "the" connotes all the magnetizing energy is persuasive because it gives ordinary and common sense effect to the word "the" in the claim language. See Merriam-Webster's 352\*352 Collegiate Dictionary 1221 (10th ed.1993) (giving one definition of "the" as: "used as a function word before a noun ... to indicate reference to a group as a whole"). This claim thus describes an invention that recycles all of the magnetizing energy to reset the transformer core.

#### Violation: they spec exploration and tourism

#### Prefer –

#### 1] Ground –

#### 2] Precision -

#### CA Paradigms

### 3

#### Abled subjectivity is tied up in a two-tiered affective response that explains disabled life – primary pity which reflects disability upon the ego threatening its ability status, which invokes secondary pity to overcorrect for the shattered-ego necessitating disabled death.

Mollow 15 The Disability Drive by Anna Mollow A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in English in the Graduate Division of the University of California, Berkeley Committee in charge: Professor Kent Puckett, Chair Professor Celeste G. Langan Professor Melinda Y. Chen Spring 2015 //ACCS JM

Much as the differentiation between the inseparable processes of primary and secondary narcissism rests on a distinction between building up and breaking down the ego, a similar heuristic distinction gives structure to my concepts of primary and secondary pity. To be clear, pity and narcissism are not the same thing: if narcissism can be understood as love of the self, pity involves a complex affective reaction to the suffering of someone else. Primary pity entails a response to the image of another person succumbing to what I have termed the “tragedy of disability.”121 Primary pity arises when one witnesses a fall of the self, a collapse of the ego; such falling is at once painful and pleasurable to observe. In other words, primary pity could be described as a vicarious experience of the tragedy of disability. A great deal of the pain and pleasure of primary pity center on questions about what, or who, this fallen self is. When most people think about pity, we refer to an affect in which, to adopt Edelman’s phrase, we purport to “feel for the other.” But as with primary narcissism, in which the self has not yet been constituted, and therefore cannot be said to enter into intersubjective relations with an “other,” primary pity entails a mixing up of self and other such that the ego, in becoming permeable to pain that may properly belong to “someone else,” is profoundly threatened in its integrity. Primary pity is that intense pain-pleasure complex that is provoked by the image of a suffering other who, it seems momentarily, both is and is not one’s self. This affective response can feel unbearable, as seen in Siebers’s formulation: one “cannot bear to look...but also cannot bear not to look.” Primary pity is difficult to bear because it involves a drive toward disability (one cannot bear not to look), which menaces the ego’s investments in health, pleasure, and control—because to contemplate another person’s suffering is to confront the question, “Could this happen to me?” Such a prospect, although frightening, may also be compelling; in this way, primary pity replicates the self-rupturing aspects of sexuality. Indeed, the unbearability of primary pity reflects its coextensiveness with sexuality. Sex, or the Unbearable, a book coauthored by Edelman and by Lauren Berlant, argues that sex “unleashes unbearable contradictions that we nonetheless struggle to bear” (back cover). This claim accords with Freud’s account of sexuality as a “pleasurable” “unpleasure” that the ego can never fully master or control (Three 49,75). As Leo Bersani puts it in his reading of Freud, “the pleasurable unpleasurable tension of sexual enjoyment occurs when the body’s ‘normal’ range of sensation is exceeded, and when the organization of the self is momentarily disturbed”; thus, “sexuality would be that which is intolerable to the structured self” (Freudian 38). Primary pity is also intolerable to the structured self, because it entails a fascination with the fantasy of a self in a state of disintegration or disablement. Secondary pity is something else, although it cannot wholly be differentiated from primary pity. Secondary pity attempts to heal primary pity’s self-rupturing effects by converting primary pity into a feeling that is bearable. As with secondary narcissism, secondary pity involves both an attempt to get back to that ego-shattering state of painfully pleasurable primary pity, and at the same time to defend against that threat to the ego by aggrandizing oneself at someone else’s expense. Secondary pity refers to all those ego-bolstering behaviors that most people think of when they talk about pity. Disabled people are all too familiar with these behaviors: the saccharin sympathy, the telethon rituals of “conspicuous contribution,” the insistence that “they” (i.e., nondisabled people) could never endure such suffering. More commonly known in our culture simply as “pity,” secondary pity encompasses our culture’s most clichéd reactions to disability: charity, tears, and calls for a cure. Correlatives of these commonplace manifestations of secondary pity are the obligatory claims that disabled people’s suffering is “inspiring.” Indeed, the speed with which conventional cultural representations of disability segue from overt expressions of pity to celebrations of “the triumph of the human spirit” highlights the ways in which secondary pity, as a defense against primary pity’s incursions, reinforces the ego’s fantasy of sovereignty. Secondary pity, in other words, can be seen as a variation of secondary narcissism: these affects enlarge the ego of the pitier or the narcissist at the expense of someone else. But primary pity is not the same as either primary narcissism, secondary narcissism, or secondary pity. Unlike primary narcissism, a feeling that emerges out of a relation to the world in which notions of “self” and “other” do not obtain, primary pity does depend upon the constructs of self and other, although these constructions are unstable and are continually threatening to come undone. Primary pity can thus be envisioned as a threshold category occupying a liminal position between the total denial of the other that is inherent to primary narcissism and the rigid structure of (superior) self and (inferior) other that constitutes secondary narcissism and secondary pity. My concept of primary versus secondary pity also differs from Freud’s primary- secondary narcissism distinction at the level of genealogy. Like Freud’s account of primary and secondary narcissisms, my model of primary and secondary pities involves a temporal transition; but whereas Freud imagines the movement from primary to secondary narcissism as a passage from an earlier to a later stage of an individual’s development, the temporal shift from primary to secondary pity happens much more quickly than this. It happens in an instant: that moment in which we feel primary pity and then, almost before we can blink, deny that we feel or have felt it. The denial is understandable: who wants to admit that one gets pleasure from the sight of another person’s suffering—or, to make matters worse, that this pleasure derives in part from the specter of disability’s transferability, the possibility that this suffering could be—and, fantasmatically, perhaps already is—an image of one’s own self undone?

#### The 1AC’s belief of a better future becomes complicit in the logic of rehabilitative futurism, which is threatened by the Disabled Child – that comes prior to materialism because the underlying structures that create the problems within society can only be understood and explained by an ontological thesis stemming from ableism.

Mollow 2 The Disability Drive by Anna Mollow A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in English in the Graduate Division of the University of California, Berkeley Committee in charge: Professor Kent Puckett, Chair Professor Celeste G. Langan Professor Melinda Y. Chen Spring 2015 //ACCS JM

“Let us begin our reexamination of Tiny Tim with a discussion of No Future, a text in which Tiny Tim takes a prominent position. No Future is a text with a target: the book takes aim at “the Child whose innocence solicits our defense,” a trope that Edelman names as the emblem of an ideology that he terms “reproductive futurism” (2). According to Edelman, commonplace cultural invocations of the figure of the Child (“not to be confused with the lived experiences of any historical children”) uphold “the absolute privilege of heteronormativity” (11, 2). Defying pronatalist social imperatives, Edelman names queerness as “the side of those not fighting for the children‟” (3) and urges queers to accept the culture’s projection of the death drive onto us by saying explicitly what Law and the Pope and the whole of the Symbolic order for which they stand hear anyway in each and every expression or manifestation of queer sexuality: Fuck the social order and the Child in whose name we’re collectively terrorized; fuck Annie; fuck the waif from Les Mis; fuck the poor, innocent kid on the Net; fuck Laws both with capital ls and with small; fuck the whole network of Symbolic relations and the future that serves as its prop. (No Future 29) Elsewhere, I have argued that No Future’s impassioned polemic is one that disability studies might take to heart. Indeed, the figure that Edelman calls “the disciplinary image of the ‘innocent’ Child” is inextricable not only from queerness but also from disability (19). For example, the Child is the centerpiece of the telethon, a ritual display of pity that demeans disabled people. When Jerry Lewis counters disability activists’ objections to his assertion that a disabled person is “half a person,” he insists that he is only fighting for the Children: “Please, I’m begging for survival. I want my kids alive,” he implores (in Johnson, Too Late 53, 58). If the Child makes an excellent alibi for ableism, perhaps this is because, as Edelman points out, the idea of not fighting for this figure is unthinkable. Thus, when Harriet McBryde Johnson hands out leaflets protesting the Muscular Dystrophy Association, a confused passerby cannot make sense of what her protest is about. “You’re against Jerry Lewis!” he exclaims (61). The passerby’s surprise is likely informed by a logic similar to that which, in Edelman’s analysis, undergirds the use of the word “choice” by advocates of legal abortion: “Who would, after all, come out for abortion or stand against reproduction, against futurity, and so against life?” (16). Similarly, why would anyone come out for disability, and so against the Child who, without a cure, might never walk, might never lead a normal life, might not even have a future at all? The logic of the telethon, in other words, relies on an ideology that might be defined as “rehabilitative futurism,” a term that I coin to overlap and intersect with Edelman’s notion of “reproductive futurism.” If, as Edelman maintains, the future is envisaged in terms of a fantasmatic “Child,” then the survival of this future-figured-as-Child is threatened by both queerness and disability. Futurity is habitually imagined in terms that fantasize the eradication of disability: a recovery of a “crippled” or “hobbled” economy, a cure for society’s ills, an end to suffering and disease. Eugenic ideologies are also grounded in both reproductive and rehabilitative futurism: procreation by the fit and elimination of the disabled, eugenicists promised, would bring forth a better future.” (68-69)

#### The starting point of the 1AC is epistemically flawed and an independent link – anything that doesn’t begin from the question of disability allows for ableism to infiltrate modes of thought which means we’re an epistemic prerequisite. Thus, the role of the ballot is to vote for the debater who best challenges ableism.

**Campbell 13** Fiona Kumari (2013): Problematizing Vulnerability: Engaging Studies in Ableism and Disability Jurisprudence, Fiona Kumari Campbell undertakes research in Studies in Ableism, coloniality, disability studies as well as explorations about Buddhist formations of disability. Trained in sociology, theology and legal studies; she is interested in ways that law, new technologies and the governance of marginal populations produces understandings of the productive citizen, normative bodies, ideas of periphery and ways that ablement privileges and entitles certain groups in society. Campbell is the author of Contours of Ableism: The Production of Disability and Abledness (Palgrave, 2009) and numerous other journal articles and book chapters. SJCP//JG

Studies in Ableism What is meant by the concept of ableism? The literature suggests that the term is often used fluidly with limited definitional or conceptual specificity. The work of Carlson (2001)5 and Campbell (2001) represented a turning point in bringing attention to this new site of subordination not just in terms of disablement but also ableism’s application to other devalued groups. Ableism is deeply seeded at the level of knowledge systems of life, personhood and liveability. Ableism is not just a matter of ignorance or negative attitudes towards disabled people; it is a schema of perfection, a deep way of thinking about bodies, wholeness and permeability.6 As such integrating ableism into social research and advocacy strategies represents a significant challenge to practice as ableism moves beyond the more familiar territory of social inclusion and usual indices of exclusion to the very divisions of life. Bringing together the study of existence and knowledge systems, ableism is difficult to pin down. Ableism is a set of processes and practices that arise and decline through sequences of causal convergences influenced by the elements of time, space, bodily inflections and circumstance. Ability and the corresponding notion of ableism are intertwined. Compulsory ablebodiedness is implicated in the very foundations of social theory, therapeutic jurisprudence, advocacy, medicine and law; or in the mappings of human anatomy. Summarised by Campbell (2001, 44) Ableism refers to; …A network of beliefs processes and practices that produces a particular kind of self and body (the bodily standard) that is projected as the perfect, speciestypical and therefore essential and fully human. Disability then is cast as a diminished state of being human. Writing today (2013) I add an addition to this definition: ‘The ableist bodily configuration is immutable, permanent and laden with qualities of perfectionism or the enhancement imperative orientated towards a self-contained improvability’. Sentiency applies to not just the human but the ‘animal’ world. As a category to differentiate the normal from the pathological, the concept of abledness is predicated on some preexisting notion about the nature of typical species functioning that is beyond culture and historical context. Ableism does not just stop at propagating what is typical for each species. An ableist imaginary tells us what a healthy body means – a normal mind, the pace, the tenor of thinking and the kinds of emotions and affect that are suitable to express. Of course these ‘fictional’ characteristics then are promoted as a natural ideal. This abled imaginary relies upon the existence of an unacknowledged imagined shared community of able-bodied/minded people held together by a common ableist world view that asserts the preferability and compulsoriness of the norms of ableism. Such ableist schemas erase differences in the ways humans express our emotions, use our thinking and bodies in different cultures and in different situations. This in turn enacts bodily Otherness rendered sometimes as the ‘disabled’, ‘perverted’ or ‘abnormal body’, clearly demarcating the boundaries of normal and pathological. A critical feature of an ableist orientation is a belief that impairment or disability is inherently negative and at its essence is a form of harm in need of improvement, cure or indeed eradication.

#### The only ethical alternative is to affirm crippessimism – only a refusal of the world can disrupt the current notion of optimism to validate the fragmented subject. If we win their starting point is ableist they cannot weigh the consequences of it.

Selck 16 [Selck, Michael L. "Crip Pessimism: The Language of Dis/ability and the Culture that Isn't." (Jan 2016) // WHSRS and Lex VM]

“The disabled are dying and with them dis/abled culture is being eradicated. In the time between formulating this project and its completion already too many disabled souls have been taken from this world, including pivotal disability studies influences for this research. I barely had enough time to mourn the loss of disability advocate and inspiration porn critic Stella Young before grieving the loss of disability studies exemplar Tobin Siebers. Attached to the grief I feel as a result of the fading disability studies community is the perpetual grief I harbor since my disabled Father’s suicide and in turn the grief concomitant to the claiming of a disabled identity. I choose to start out this project with grief because it communicates the tenor of this research; this is not the disability studies project of inspiration or utopia. My entry point to the disability studies dialogue is riddled with grief, anger, and pain and it is as such that this project plots a course of disability research that attempts to make a space free from the ideological constraints of optimism. The language surrounding dis/ability is highly political. Entire words, phrases, and identities are stretched between, in, and out of the nexus of dis/ability. The choice, for instance, to include a backslash in the word dis/ability represents for Goodley (2014) a desire to delineate and expand each of the categories in the face of global neoliberalism. My initial research inquired about the impact of dis/abled terms and phrases. I went to interrogate rhetoric like “special education”, “handicapable”, and one of the most glaringly overused insults in the American education system “retard”. The scholarship I was coming up with was plentiful but was for the most part located entirely outside of intercultural communication programs like the one I was attending. For the most part the few and far between intercultural communication projects about dis/ability I was able to locate were without modal complexity and didn’t bear semblance to so many of my own experiences. I was beginning to notice a layer of optimism that has been communicatively imprinted upon the negotiation of dis/abled identity. The angst started to manifest as I questioned if I was in the correct field or if dis/ability even was ‘cultural’. I felt a very real cultural erasure of dis/ability in academia and ultimately that glaring lack of consideration is what pushed me to performance studies. I first worked to close the apparent research gap by crafting a collaborative performance titled Under the Mantle (UTM), which put dis/ability, communication scholarship, and pessimist philosophy on stage. The larger purpose of this research report is to antagonize the erasure of dis/ability from communication studies by autoethnographically analyzing the crip-pessimist performance art project Under The Mantle.” (1-2) This research report will first detail the components of the theoretical work that was drawn on to create UTM. Next I offer a literature review to demonstrate the combination of optimism and neglect dis/ability has undergone in intercultural communication models. Following that section I mark my shift to performance methods as I explain how narrative autoethnography can illuminate cultural misconceptions regarding the dis/abled. In the last sections of this report I offer a textual analysis of the performance UTM and analyze three significant arguments of the instillation before concluding. Contextualizing Critical Dis/Ability Theory Often used interchangeably, critical disability theory (CDT) and critical disability studies (CDS) contest dis/ablism (Goodley, 2011, 2014; Devlin & Pothier, 2006; Hosking, 2008). There are several unique additions made to CDS with every new instantiation. Scholars in European countries and Canada attend to the theory, with United States academics often underrepresented. There are three concurrent themes of CDT that I will synthesize in this section with some dis/ability studies authors claiming there are as many as seven themes of CDT (Hosking, 2008). In the introduction to their edited collection of dis/ability essays, Richard Devlin and Dianne Pothier (2006) present three themes of CDT as, first, to highlight the unequal status to which persons with disabilities are confined; second, to destabilize necessitarian assumptions that reinforce the marginalization of persons with disabilities; and third, to help generate the individual and collective practical agency of persons with disabilities in the struggles for recognition and redistribution. (p. 18, emphasis mine) Already the connections between the CDT and the critical communication paradigm are visible as each respectively forefronts notions of power, privilege, identity, and agency. Outlined in more detail, the first theme of CDT argues that there is systemic micro and macro level discrimination against bodies with disabilities. To some critical communication scholars, this theme might be obvious, but it seldom is when “the resulting exclusion of those who do not fit able-bodied norms may not be noticeable or even intelligible” (Delvin & Pothier, 2006, p. 7). As the bumper sticker on my laptop proudly disclaims, “Not all disabilities are visible,” which necessarily adds a level of nuance and complexity to the way that dis/ability studies attend to the prospect of discrimination and violence. Often times, “social organization according to able-bodied norms is just taken as natural, normal, inevitable, necessary, even progress” (Delvin & Pothier, 2006, p. 7). It might be true that the lack of collaborative work between critical communication studies and dis/ability studies is because neoliberalism is supremely effective at rebranding marginalized oppression as a marker of its progress. The implications of this assertion are dire but essential to the basis of crip-pessimism. Theoretical approaches based in pessimism and skepticism are often necessary to distinguish the instruments of self destruction that have been mistaken for those of self betterment. Thus, a key question remains, what is regarded as progress and to whom does it count? The politics of progress call for the second tenet of CDT, which is a destabilization of neoliberal practices that strip power and agency from bodies with disabilities. Devlin and Pothier (2006) use the language of “anti-necessitarian” (p. 2), which refers to the efficacy of social organizations and an unflinching skepticism of liberalism. For Shildrick and Price (1999), “disabled bodies call into question the ‘giveness’ of the ‘natural body’ and, instead, posit a corporeality that is fluid in its investments and meanings” (p. 1). Anti-necessitarian logics ask questions that remain innocuous to the critical communication paradigm. Can the architectural proliferation of stairs and multiple levels on buildings be attributed to neoliberalism and active disablism? If stairs seem to focus too exclusively on physical impairments, then what about the sensitivity of the building’s lighting, acoustics, and spatiality? Finally, if neoliberalism fights to protect its grand narrative of progress then is the social exclusion of bodies with disabilities necessary for the day-to-day operation of our globalized world? As Donaldson (2002) posits: “theories of gendered, raced, sexed, classed, and disabled bodies offer us critical languages for ‘denaturalising’ impairment’” (p. 112) at the level of the subjective and inter-subjective. The third theme of CDT is to attend to the agency of bodies with disabilities in the struggle for recognition. One key element of extending agency to the disabled is the use of social experience. Experience is subjective “but experience remains intimately connected to political and social existence, and therefore individuals and societies are capable of learning from their experiences” (Siebers, 2008, p. 82). Though absolutely necessary, it is not enough to write treatises on the oppression of the disabled over time. Academics, theorists, intercultural trainers, and storytellers alike should be aware of the constant risks of representation. Representation and context are at the core of critical disability studies. The notion of agency is as unstable as the notions of dis/ability. There is no one-size-fits-all human rights based approach that will be suitable to address all disabled experiences, as the theoretical call for crip-pessimism will remind us. Instead of a universal abstract Rawlsian concept of social justice, CDS “attend(s) to the relational components of dis/ablism” (Goodley, 2011, p. 159). By a Rawlsian concept of social justice I mean a model that relies on distributive justice with utopist equality at its core. Where utopist equality projects highlight human sameness to the point of purity. CDT unavoidably invites a discussion about difference into the folds as postmodern and post-structural thinkers position the self as defined constantly in relation to others. Therein lies the difference between an equality model and a justice model of social identity. Often in the attempt to open up spaces for reconsidering self and other, CDS celebrates disability as a positive identity marker. This essay offers a strong argument of caution that the inclusion of CDS in critical communication studies might rely too heavily on celebrations of disabled identity. Nothing better demonstrates that reliance on celebrating identity than the myriad language choices used to describe a disabled identity including: differently-abled, special needs, person with disability, disabled person, temporarily able-bodied, and others. Often, able- bodied audiences have a tendency to sensationalize the presence of disability in a space that has not traditionally welcomed it. Examples of this are highlighted by the increasingly popular discussion of ‘inspiration porn’ (Young, 2014) and Hollywood’s representation of disability. The tendency is to inspirationalize the disabled for achieving tasks that would not be celebrated if they were accomplished by an unimpaired body. Crossing the street, showing up on time, entering a building by oneself are all tasks profoundly routine to the non-disabled and yet simultaneously cherished as markers of progress for the disabled. Philosophical pessimism is articulated next as a way to temper the risk of sensationalizing dis/ability. The theories ultimately fuse together like orchids and wasps to generate the larger theme of crip-pessimism. Philosophical Pessimism Throughout the 19th century pessimism was one of the most popular intellectual and philosophical strains, crossing countries and continents. Authors such as Rousseau, Leopardi, Schopenhauer, and Nietzsche overwhelmingly created and lead the spirit of pessimism. Contemporarily however, the word ‘pessimism’ is pejorative and describes a body’s emotional discontent rather than intellectual engagement with the world. Dienstag (2009) writes, “Since pessimism is perceived more as a disposition than as a theory, pessimists are seen primarily as dissenters from whatever the prevailing consensus of their time happens to be, rather than as constituting a continuous alternative” (p. 3). Power is responsible for ontological shifts, and during shifts some populations benefit while others are harmed. The turn in thinking about pessimism from an intellectual position to an emotional state has been particularly gratuitous for bodies with disabilities. I come to pessimism because of my experience with disability. My anxiety disorder comes with an exteriority of anti-social behavior that has branded me pessimistic. The concern for my anxiety in public situations is often commented on as overly critical, negative, narcissistic, and most often pessimistic. I experience an anxious state of becoming different, and after years of failing to rehabilitate my sameness to able-bodied standards, I have come to a comfort with pessimism.

### 4

#### US wins the commercial space race now, securing competitiveness into the future.

Tepper 8-30 [Eytan Tepper,  research coordinator and adjunct professor, space governance, at Laval University, Canada and Adjunct Research Professor of Law and Faculty Member, Institute for Earth and Space Exploration at Western University, 8-30-2021, "The Space Review: The billionaires compete and the US wins the 21st century space race," No Publication, <https://www.thespacereview.com/article/4233/1> [accessed 12-5-21] lydia

Whoever is declared the winner in the so-called billionaire space race, the US wins the new space race. In the new era of space exploration, where commercial companies are taking the lead, they are mostly US-based. Symbolically, British billionaire Richard Branson, the first in space, launched from Spaceport America in New Mexico, where his company is based. “New Space”, new race In what is dubbed as “New Space”, the commercial sector is gradually taking the lead in space activities. One of the characteristics of the current New Space era is the so-called billionaire space race, in which billionaires who made their fortune elsewhere invest their wealth and talent in daring projects to accomplish their visions. Elon Musk (PayPal) established SpaceX, Jeff Bezos (Amazon) established Blue Origin, and Richard Branson (Virgin Records, Virgin Atlantic) established Virgin Galactic. Together with the many not-yet-famous space entrepreneurs and startups, they are bringing a boom to space activities.

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| The model of centralized, government-directed space activities born in the 1960s has, over the last two decades, made way for a new model in which the private sector shares the stage. |

On July 11, billionaire Richard Branson rode Virgin Galactic's Unity 22 mission to space, making him the first of the racing billionaires to go to space, and by that launch his company’s space tourism business. Jeff Bezos rode Blue Origin’s New Shepard to space just nine days later. Elon Musk hasn’t yet been to space himself, but his company SpaceX carried astronauts to the International Space Station, and his red Tesla roadster, launched to space in 2018, orbits the Sun. You can follow its current whereabout [here](https://www.whereisroadster.com/). [“Jealousy among teachers increases wisdom”](https://www.sefaria.org/Bava_Batra.21a.11?lang=bi) provides the Babylonian Talmud; in the space context, the competition, perhaps jealousy, among billionaires and other space entrepreneurs is bringing a boom to space activities. The future of space exploration is commercial activities The commercial space sector is rapidly growing and taking the lead from national space agencies. It is reducing the costs of launch and introducing new activities and business models, including tourism, space-based Internet, factories in space, and manufacturing pharmaceuticals in microgravity. [Harvard business professor Matthew Weinzierl pointed that](https://www.hbs.edu/ris/Publication%20Files/jep.32.2.173_Space,%20the%20Final%20Economic%20Frontier_413bf24d-42e6-4cea-8cc5-a0d2f6fc6a70.pdf) the model of centralized, government-directed space activities born in the 1960s has, over the last two decades, made way for a new model in which the private sector shares the stage. [Three quarters the global space activity ($400 billion) are commercial space revenues](https://apps.bea.gov/scb/2019/12-december/pdf/1219-commercial-space.pdf), spearheaded by the satellite communications segment. The US already reaps the lion’s share in the traditional space segments, [with 44% of the global satellite industry revenues](https://www.nasa.gov/sites/default/files/atoms/files/sia_ssir_2017.pdf). It is now on track to lead the way also in the new segments. American pie A new dataset built at Laval University by Prof. Jean-Frédéric Morin and I as part of the [Astro-environmentalism project](http://www.institutions.space/) reveals trends in the global space sector. The dataset includes details on more than 1,500 space actors from around the world and preliminary findings from its analysis [were presented in June at the 60th Session of the Legal Subcommittee of the UN Committee on the Peaceful Uses of Outer Space](https://unoosa.org/documents/pdf/copuos/lsc/2021/tech-08E.pdf). The data shows the sharp increase in the share of the private space actors compared with the first decades of the space age (1957 onwards), and while there is more geographical diversity today in where actors are based, the US is widening the gap. Between 2010 and 2019 the number of space actors almost doubled (an 89% increase), with more than 86% of them private actors, of which 34% are based in the US; this amounts to five times those based in the second and third places, the UK and China, respectively. The number of new organizations based in EU countries taken together (without the UK) is bit over half of that of the US (56%). The new organizations are significantly smaller than before, with an average size index (combining number of employees and budget) of 2.9 versus 8 in the early days of space exploration. Space startups is a thing.

#### The plan upends a foundation for US competitiveness---the private space-value chain touches all sectors of the economy.

George 19 [Kelly, Professor, Embry-Riddle Aeronautical University. “The Economic Impacts of the Commercial Space Industry.” Space Policy 47: 181-186.] brett

As the 1960s was known as the height of the space race propelled by government funding, the 21st century may be known as the commercial space race propelled by private investors that will lend to stimulus to the U.S. and Florida's economy's future structure. Continued domination by government investment in the space industry is a topic of debate as new commercial companies began working in and acting as disruptors to the commercial space sector [3], [21], [24]. Those that may have thought there would not be a stand-alone commercial space industry were surely dealt a blow with the visual of Elon Musk's red sports car driven by Spaceman past the earth that had been launched into orbit by SpaceX on February 6, 2018 [23]. However, in recent years, more evidence of advancements in the commercial space industry have been fulfilled by other private commercial space companies, most notably Blue Origin, Virgin Galactic, Moon Express, and Orbital ATK [8]. The U.S. government policy intentionally embarked on a direction intended to speed innovation and drive costs down by expanding the role of commercial space companies in manufacturing and launch activities [2]; hence, the orbiting sports car. Yet more importantly, reusable rockets, satellites, and associated services have developed as a result of the deliberate shift in federal policy initiated by the Commercial Space Launch Act of 1984 and follow-on public private partnerships that supported launch efforts and satellites [4], [24]. This analysis chose the United States and then more narrowly, the state of Florida as the region to study because of the importance of the industry to the U.S. and the state's specific geographical characteristics and its economy: specifically, the launch/landing facilities and support resources. Also, Florida's governor appointed a commission on space and aeronautics whose goals include advancing the state's economic development across the global aerospace enterprise further emphasizing the role of commercial space in the economy.

Various bodies forecast significant future growth in commercialization of the space industry and its importance for the U.S. economic competitiveness within the global market. The space sector is not solely comprised of launches and satellites but now includes direct consumer applications and personal entertainment. As the commercial space industry has some history of growth and its growth is expected to accelerate, input-output (IO) analysis is useful to help predict what industries will benefit from its growth and inform the government that may want to use this information in their policy or public investment decisions [27], [28], [29]. Discussions regarding expansion of industries often led to polarizing aspects of the debate. This analysis can be useful for researchers, practitioners, and policy-makers in mitigating debate or enhancing discussions by contributing unbiased, accurate quantitative data about the economic impacts of the expansion of an industry.

The Space Project Team of the Organization for Economic Cooperation and Development International Futures Program (IFP) determined that the future demand for commercial space applications is likely to be substantial. They presented 3 likely scenarios that have different geopolitical, socio-economic, and energy and environment characteristics. Using the 3 IFP scenarios for Space 2030 and the presented cost of access to space, this research determines a potential impact from the change in final demand of the space value chain to the U.S. economy. The IFP's estimates spanned a range of 18–40% growth in the industry from 2004 to 2030 [17]. These projections appear to be on track with a $339 billion in economic activity according to a June 2017 Satellite Industry Association report showing growth of 7% from 2013 to 2016. This estimate is a conservative one as Morgan Stanley estimates the industry to be over $1 trillion by 2040 [24]. Because of the interrelations of applications, the space-value chain is made up of 4 broad categories: ground equipment, launch industry and satellite manufacturing which make up the core of the space industrial base, and satellite services [22].

#### US competitiveness underwrites global stability and non-prolif---great power war.

Daniel Bessner 17 [\*\*Assistant Professor in American Foreign Policy, University of Washington. \*\*Jim McDermott, Representative for Washington’s 7th District. \*\*Francis Wilson, BA, International Studies, University of Washington. “Redefining American Leadership for an Internationalized Era.” The Henry M. Jackson School of International Studies, University of Washington. Task Force Report. <https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/38693/TaskForceC-Bessner.pdf?sequence=1&isAllowed=y>] brett

America’s status as the world’s most vital nation is as dependent on its prosperity as it is on its military might and ability to project power worldwide. The federal government’s capacity to allocate resources to our armed forces, the private sector’s ability to develop beneficial products and technologies, and the satisfaction of the domestic public are all closely tied to the continued growth of American wealth at home and abroad. This has been proven repeatedly during periods where the United States has faced its greatest existential threats: Nazi Germany and Imperial Japan were unable to keep up with the sheer industrial output of the American heartland, while the Soviet Empire lost control of its satellites in great part due to their desire to benefit from the Western free market system.

Therefore, the formulation of a long-term strategy that anticipates the potential disruptions and opportunities of the new global economy is as important as questions of diplomacy and military strategy. As the United States evaluates how it will face the rapidly changing and increasingly interconnected world of the 21st century, it must take into account its economic interests as well as the potential economic costs associated with achieving its political objectives.

Since the beginning of the Cold War, America’s unparalleled ability to influence countries through nonviolent means has been critical to the preservation of global stability. The most relevant example of this in our history is the Marshall Plan, which leveraged American capital to provide a devastated post-War Europe with almost 120 billion dollars (adjusted for inflation) in aid. This aid was critical to preventing the spread of Soviet influence into Western Europe, and laid the foundation for an economically strong region stretching from Portugal to Austria that has been free from inter-state conflict since 1945. Because of the pragmatic exercise of economic influence, the European Union is now our strongest ally as well as our largest trading partner.

Worldwide, the liberal economic system that the United States has promoted through international trade organizations like the WTO has contributed to unprecedented economic cohesion between states. When countries are tied together in the mutually beneficial exchange of goods, the opportunity cost of war goes up significantly, making political leaders much more likely to de-escalate and rely on nonviolent means to resolve conflicts.

Our economy also plays a key role in helping the United States deal with states that threaten stability. The American ability to impose sanctions has been a formidable tool for discouraging nuclear proliferation and punishing violators of international norms. When more direct means of coercion are required, a powerful industrial and technological base enables the maintenance of a well-funded and technologically advanced military.

America’s advanced 17 trillion-dollar economy has allowed it to exert the influence that it does in the world today. However, our economic strength and the skill of our workforce, which have always underwritten our international influence, should not be taken for granted. Rapid growth in the developing world means that American companies and workers must now contend in an increasingly crowded global marketplace. In the new “knowledge economy,” educating America’s workers and ensuring that the United States retains its role as an innovation capital must take the highest priority. On the business side, reforming America’s institutions and removing barriers to expansion and innovation will encourage the companies of the future to make their start here.

### 5

#### Utilitarian calculus fails to account for moral atrocities.

Jeffrey **Gold**, Utilitarian and Deontological Approaches to Criminal Justice Ethics //Massa chan recut

According to utilitarianism, an action is moral when it produces the great-est amount of happiness for the greatest number of people. A problem arises, however, when the greatest happiness is achieved at the expense of a few. For example, if a large group were to enslave a very small group, the large group would gain **certain comforts and** luxuries (and **the** pleasure **that accompanies those comforts) as a result of the servitude of the few**. If we were to follow the utilitarian calculus strictly, the suffering of a few **(even intense suffering)** would be outweighed by the pleasure of a large enough majority. A thousand people’s modest pleasure would outweigh the suffer-ing of 10 others. Hence, utilitarianism would seem to endorse slavery when it produces the greatest total amount of happiness for the greatest number of people. This is obviously a problem for utilitarianism. Slavery and oppression are wrong regardless **of the amount of pleasure accumulated by the oppressing class.** In fact, when one person’s pleasure results from **the** suffering **of another,** the pleasure seems all the more abhorrent. The preceding case points to a weakness in utilitarianism, namely, the weak-ness in dealing with certain cases of injustice. Sometimes it is simply unjust to treat people in a certain way regardless of the pleasurable consequences for others. A gang rape is wrong even if 50 people enjoy it and only one suffers. It is wrong because it is unjust. To use Kant’s formulation, it is always wrong to treat anyone as a mere means to one’s own ends. When we enslave, rape, and oppress, we are always treating the victim as a means to our own ends.

#### Util justifies curing disability to increase the disabled’s “welfare.”

Stein 01 [(Yale University Press, 2006) Stein, Mark S. “Utilitarianism and the Disabled: Distribution of Life.” Social Theory and Practice, vol. 27, no. 4, 2001, pp. 561–578. JSTOR, [www.jstor.org/stable/23559190. Accessed 23 Nov. 2020](http://www.jstor.org/stable/23559190.%20Accessed%2023%20Nov.%202020).] //ACCS JM

Unfortunately, the same sensitivity to relative benefit that makes utilitarianism an appealing approach to the distribution of resources appears to make utilitarianism a counterintuitive and unappealing approach to the distribution of life. If the disabled have on average less welfare than nondisabled people, it seems to follow that the disabled benefit less from continued life than do nondisabled people. Utilitarianism would therefore place a lower value on disabled life than on nondisabled life, and if a choice had to be made between saving the lives of disabled people and saving the lives of nondisabled people, utilitarianism would counsel us to give less preference to the disabled. So, for example, disabled people would receive less preference, in the distribution of life-saving organ transplants, than nondisabled people. Moreover, the utilitarian preference against disabled people in the distribution of life would appear to be exactly proportional to the utilitarian preference in favor of disabled people in the distribution of resources. However morally urgent it might be to cure a given disabled person, increasing her welfare, it would seem that the same moral urgency must attach to a decision to preserve the life of a nondisabled person in preference to that disabled person, assuming that only one of them could survive. 13Mark Stein, "Utilitarianism and the Disabled: Distribution of Resources," Bioethics 16 (2002), forthcoming. 14See ibid.

#### The safety of the space is prima facie – we don’t know who’s winning if people can’t engage. Anything that doesn’t immediately denounce atrocities excludes people who have and can experience them.

**Teehan** Ryan Teehan [NSD staffer and competitor from the Delbarton School] – NSD Update comment on the student protests at the TOC in 2014. //Massa

Honestly, I don't think that 99% of what has been said in this thread so far actually matters. It doesn't matter whether you think that these types of assumptions should be questioned. It doesn't matter what accepting this intuition could potentially do or not do. It doesn't matter if you see fit to make, incredibly trivializing and misplaced I might add, links between this and the Holocaust. **All** of the **arguments that talk about how** debate isa **unique** space for questioning assumptions **make** an assumption of safety. They say that this is a space where one is safe to question assumptions and try new perspectives. **That is not true** for everyone. When we allow arguments that question the wrongness of racism, sexism, homophobia**, rape**, lynching, etc., we make debate unsafe for certain people. The idea that debate is a safe space to question all assumptions is the definition of privilege, it begins with an idea of a debater that can question every assumption. People who face the actual effects of the aforementioned things cannot question those assumptions, and making debate a space built around the idea that they can is hostile. So, you really have a choice. Either 1) say that you do not want these people to debate so that you can let people question the wrongness of everything I listed before, 2) say that you care more about letting debaters question those things than making debate safe for everyone, or 3) make it so that saying things that make debate unsafe has actual repercussions. On "**debate is not the real world**". **Only for people who can separate their existence in "the real world" from their existence in debate.** That means privileged, white, heterosexual males like myself. I don't understand how you can make this sweeping claim when some people are clearly harmed by these arguments. **At the end of the day, you have to figure out whether you care about debate being safe for everyone** involved. I don't think anyone has contested that these arguments make debate unsafe for certain people. If you care at all about the people involved in debate then **don't vote on these arguments**. If you care about the safety and wellbeing of competitors, then don't vote on these arguments. If you don't, then I honestly don't understand why you give up your time to coach and/or judge. The pay can't be that good. I don't believe that you're just in it for the money, which is why I ask you to ask yourselves whether you can justify making debate unsafe for certain people.

#### Drop them to deter further violent rhetoric in the debate space.

# Case

## A2: TL Case

## A2: ADV

## AT: Space Col

### TURN – Space Col Bad

#### Even if they win framing , we’ll concede that they solve for space col but we’re impact turning that

#### Space col causes inter-colony wars and war with ETs

Kovic 18 (Marko Kovic. Social scientist (PhD in political communication, University of Zurich), co-founder and CEO of the consulting firm ars cognitionis, co-founder and president of the thinktank ZIPAR, the Zurich Institute of Public Affairs Research. 06-12-18. “Political, moral, and security challenges of space colonization.” ZIPAR. https://zipar.org/discussion-paper/political-moral-security-challenges-space-colonization/)

3.3 Extraterrestrial life The scientific understanding of the origins of humankind and of life on Earth thus far paints a clear picture: We are the “products” of biological evolution, just as all other life forms on Earth. Furthermore, we know that life can come into existence where there was no life before, through so-called abiogenetic mechanisms. These basic facts lead to a clear conclusion: It is very improbable that life on Earth is a once-in-a-universe event; it is highly probable that life has come into existence elsewhere in the universe as well. We do not know whether extraterrestrial life currently exists, and whether there is any extraterrestrial life in our vicinity (as far as we know, there is none in our Solar System). In theory, our galaxy might be full of life and even highly intelligent and technologically advanced life, but, as the famous Fermi paradox posits32, there is no trace of any extraterrestrial intelligence. Be that as it may, it is possible that there is extraterrestrial life beyond Earth, and it is possible that we will come into contact with extraterrestrial life due to colonization activity. What should our moral attitude towards extraterrestrial life look like? The moral issue of our attitudes towards extraterrestrial life can be divided into three classes of problems, according to the type of life we are dealing with: Primitive non-sentient life. Primitive sentient life. Non-primitive sentient life. Primitive non-sentient life are life forms that resemble microbial life forms on Earth, such as bacteria. Extraterrestrial microbial life can be of great instrumental value, specifically to humans, but also in a more general sense. That is a strong argument in favor of studying and preserving extraterrestrial microbial life33; we should not go out of our way to destroy microbial life, because that life might be very useful. The main moral issue about primitive non-sentient life, however, is not the question of instrumental value, but rather the question of intrinsic value: Is there a moral obligation for humans not to manipulate or even end extraterrestrial microbial life forms? This problem is, in all likelihood, the most pressing moral issue about extraterrestrial life and space colonization and one that deserves greater practical attention34. A common argument in favor of the intrinsic value position is that of conation or goal-orientedness35 36: Because even microbial life forms act vaguely rational (they have goals and behave so as to achieve their goals), their existence has some intrinsic value. The problem with this moral argument is that it can easily lead to the conclusion of strong conservationism, whereby any habitable planet or moon should remain uncolonized, lest we interfere with microbes that we might have failed to detect37. In addition, if we accept a strong version of the intrinsic value argument, we already have immense moral problems: On Earth, we do not particularly care for any microbial life form on intrinsic grounds, and we even actively fight some of them. Primitive sentient life are life forms that are not as intelligent as humans, but that are sentient, in the sense of being able to experience positive or negative affective states. Even though sentience is not a perfectly precise concept38, and even though we lack the means for truly assessing qualia (subjective experiences) of life forms other than humans39, it is almost certain that we humans are not the only life form capable of experiencing pain and pain-related suffering and that many animals on our planet are sentient as well40. Sentient extraterrestrial life forms require a different moral stance than non-sentient life forms. Imagine, for example, that two human space ship are about to land on an exoplanet. As the space ships are landing, the exhaust from their engines heats up the ground. Space ship A is landing on a nest of insect-like non-sentient life forms, frying them alive in the process. Space ship B is landing on a herd of bunny-like sentient creatures, frying them alive in the process. Both outcomes are unfortunate, but undoubtedly, killing the sentient bunny-like creatures must be morally worse than killing the non-sentient insect-like creatures, because the bunnies experienced enormous pain while they were being killed. Our moral stance towards sentient primitive extraterrestrial life will have to take sentience into account. Avoiding suffering in sentient extraterrestrial life should be a universal rule of space colonization. Somewhat obviously, such a rule would also prohibit treating sentient extraterrestrial life forms as food (But it is highly improbable that humans would have to routinely rely on extraterrestrial sentient life forms as sources of nutrition, even though we would be technologically advanced enough to engage in intersolar space colonization. We are in the process of overcoming traditional agriculture today41; reverting to traditional agriculture on future extrasolar colonies would amount to an extraordinarily improbable and inefficient anachronism.). Non-primitive sentient life are life forms that are sentient and possess a general intelligence at least as great as our own (It is possible that highly intelligent life forms might be non-sentient, but at least on Earth, sentience seems to correlate with intelligence.). The moral challenge of this type of extraterrestrial life is the same as with primitive sentient life, and there are additional moral problems to consider. If there are intelligent life forms beyond Earth, their levels of technological development will have great variance; some life forms will be intelligent, but not yet developed, whereas others will be intelligent and much more technologically advanced than we are. Intelligent life forms that are less technologically developed than we are present us with a moral problem: Should we interact with such civilizations and try to help them develop faster and overcome problems? This moral problem has perhaps most famously been explored in the television show Star Trek with its “Prime Directive”: The fictional United Federation of Planets is never to interfere with a technologically undeveloped civilization in order to avoid doing damage (Alas, the protagonists of Star Trek end up violating the Prime Directive time and again; doing so makes for a good story.). More generally, the problem of non-interference can be described as a reversed Zoo hypothesis42, whereby it is not extraterrestrial civilizations treating Earth like a conservation project, but us humans pondering whether we should treat extraterrestrial civilizations as conservation projects. A strong argument in favor of non-interference is the risk of both causing bad outcomes, both in the short- as well as in the long-term. Interacting with less developed civilizations might inadvertently do more harm than good, and it might steer the affected civilizations away from a path to development that might be beneficial to humankind in the long run. On the other hand, however, not investing a small amount of resources to greatly improve lives and reduce suffering seems morally dubious. If an extraterrestrial civilization that is going through a historical era similar to our Middle Ages is confronted with some catastrophic disease like our Black Death pandemic, not helping that civilization fight that pandemic seems cruel; not least because the cost for helping that civilization would almost certainly be trivially low. 3.4 Cosmic suffering Imagine that humankind has successfully mastered phase II colonization (colonization beyond our Solar System). All the problems described in the previous sections and subsections have long been successfully solved, and humankind is progressing steadily and peacefully. Then, something happens. At some point and for some reason, future humans decide that they do not want to merely engage in space colonization, but to do more: Actively seed the universe with (non-human) life43. Given the technological development of future humankind, it is relatively easy to send out non-sentient primitive life forms across the galaxy. Unfortunately, something horrible happens: The primitive microbial life-forms sent out into the cosmos mutate into aggressive bacteria that attack any life form they encounter, including sentient life – and in doing so, they cause tremendous pain and agony in the organisms they attack. The benevolent idea of spreading life has quickly turned into unimaginable suffering of trillions of sentient beings across the galaxy. Colonizing humans have thus created suffering on a cosmic, or astronomical, scale44. Cosmic suffering is the risk of creating suffering on a scale that is either not possible or not as probable without space colonization. There are many potential scenarios in which successful space colonization results in cosmic suffering. For example, the general problem of the repugnant conclusion discussed further above can also be regarded as an example of this class of risks. Cosmic suffering is a severe problem because it is contingent on, or at least made more likely by, successful space colonization. The conceptually challenging aspect of cosmic suffering is the correlation of cosmic suffering with the degree of space colonization: The greater the level of space colonization, the greater the risks of cosmic suffering become. This is the opposite of the relationship between space colonization and existential risks: The greater the level of space colonization, the lower existential risks become – this is one of the main motivations for space colonization, after all. In other words, successful space colonization decreases the probability that something goes wrong for humankind in terms of existential risks, but it increases the probability that something goes wrong in terms of suffering for the whole universe. 4. Security challenges In the above discussions of political and moral challenges, it is presumed that the problems and challenges that arise do so in a generally peaceful system of colonization. However, peace in the sense of a lack of armed conflict is not guaranteed with space colonization. On the contrary: Space colonization might produce new kinds of security challenges. 4.1 Inter-colonial war Violence and war have been decreasing over the course of our civilization’s history45 46 47. The decrease in violent armed conflict has coincided with an increase in cultural, political, and economic interconnectedness. Even though major armed conflicts are not yet a thing of the past48, humankind will probably continue on its current trajectory of peace. With space colonization, however, the trend of growing closer together might reverse because of increasing fragmentation, and with that reversal, peaceful cooperation might again give way to armed conflict. Some amount of human fragmentation due to space colonization is almost inevitable. One of the strongest biases we humans have is the intergroup bias49: We tend to separate people into ingroups and outgroups, and we generally favor our own ingroup over any outgroup. Our ingroup favoritism is often the source of collective identity: We identify with our home city and think it is better than other cities; we identify with our favorite football team and think it is better than other teams; we identify with our country of origin and think it is better than other countries. In a future in which humans have successfully mastered type I colonization (colonization within our Solar System) and perhaps even type II colonization (intersolar colonization), belonging to one habitat rather than another will almost certainly also be a source of collective identity. Humans born and raised on Venus would probably have more positive general attitudes towards Venus than towards Earth. That is not a problem in and of itself, but it can become a problem: If humankind is very successful at space colonization and manages to establish colonies across the galaxy, the ingroup dynamics within colonies and regions of colonies might grow so much that the perceived benefits of armed conflict increase, and the perceived costs decrease. In part, this might be due to the infrahumanization (or dehumanization) bias50: Our intergroup bias can have the effect of perceiving members of the outgroup as less human than members of our own ingroup. The problem of intergroup bias and armed conflict could be compounded by real biological differences in the long-term future. In the long term, different colonies of humans might adopt different stances on human enhancement technology and embrace different kinds of enhancement technologies. These differential paths of human enhancement might result in technology-induced quasi-speciation, whereby different strands of humans have increasingly distinct biological traits. The ultimate result of such a development might be a strong fragmentation of humankind and an increasing arms race in order to defend against the outgroup of all the (former) humans that are different from the ingroup (former) humans51. 4.2 Extraterrestrial (existential) risks Space colonization will increase the probability of discovering and coming into contact with extraterrestrial intelligence, either biological or artificial (in the sense of hypothetical advanced artificial general intelligence52). That prospect poses some moral challenges, as argued in subsection 3.3. However, it might also pose a security challenge if an extraterrestrial intelligence more technologically advanced than humankind has goals and preferences that go against the goals and preferences of humankind. In general, there are three categories of attitudes an extraterrestrial intelligence can have towards humankind53. First, an extraterrestrial intelligence can be benevolent. A benevolent extraterrestrial intelligence is one that would change its goals and preferences upon learning of humankind. Humankind is a benevolent intelligence: If we, for example, came into contact with an extraterrestrial civilization, we would obviously take the goals and preferences of that civilization into account and update our own goals and preferences, since we are morally advanced enough to do so. Second, an extraterrestrial intelligence can be apathetic. An apathetic extraterrestrial intelligence is one that does not at all change its goals and preferences upon learning of humankind. An apathetic intelligence would neither try to accommodate humankind, nor would it react in some non-friendly way. It would not care at all. The attitude of an apathetic intelligence is similar to the attitude we humans have when it comes to some random microbial life form on Earth: We might understand that that life form exists, but we do not care either way. Third, an extraterrestrial intelligence can be hostile. Hostility in a general sense means that an intelligence reacts to learning of humankind by regarding its own goals and preferences as categorically more important than humankind’s. A hostile extraterrestrial intelligence is not necessarily a security threat to humankind; hostility in this context does not mean hostility in the Hollywood kind but hostility in the sense of active disregard of humankind’s goals and preferences. That, however, might still represent a tremendous security risk. For example, a hostile intelligence might prefer humankind not to exist because our mere existence is perceived as a slight discomfort to the extraterrestrial intelligence. Hostile extraterrestrial intelligence thus represents a form of existential risk.

#### Space colonization leads to rapid growth of incurable diseases—extinction

Wickramasinghe 10 (Chandra, Ph.D., Centre for Astrobiology, Cardiff University, UK; Journal of Cosmology, “Are Intelligent Aliens a Threat to Humanity? Diseases (Viruses, Bacteria) From Space”, May 2010, http://journalofcosmology.com/Aliens106.html)

The real risk to humanity of alien life may be in the form of viral and bacterial genomes arriving at the Earth which are sometimes pathogenic (Joseph and Wickramasinghe 2010). Fred Hoyle and the present author have argued the thesis of “Diseases from Space” over several decades (Hoyle and Wickramasinghe, 1979, 1982, 1990; Hoyle et al, 1985; Wickramasinghe et al, 2003). Despite criticisms that have often been made against this concept the basic arguments remain cogent to the present day (Joseph and Wickramasinghe 2010). With increasing evidence to support the view that life could not have arisen indigenously on the Earth, the idea that the evolution of life is modulated by genes arriving from comets has acquired a new significance. Darwinian evolution operates in an open system where new genes continue to be added from a cosmic source. Pandemics of viral and bacterial disease become an inevitable part of this thesis. One could argue that if not for such genetic additions from outside, evolution would have come to a standstill a long time ago (Hoyle and Wickramasinghe, 1982; Joseph and Wickramasinghe 2010). In this context it should be noted that the human genome has recently been found to contain more than 50 percent of its content in the form of well defined inert viral genes. It is possible to understand this data if our ancestral line of descent over a few million years had suffered a succession of near-culling events following outbreaks of viral pandemics(Joseph and Wickramasinghe 2010). On each such occasion only a small breeding group survived the members of which had assimilated the virus into their reproductive line. Hoyle and the present author have cited numerous instances from the history of medicine where outbreaks of pandemic disease could be elegantly explained in terms of space incident viruses. Even the modern scourge of influenza is likely to be driven by periodic injections of genetic components from space. Aspects of the epidemiology of influenza otherwise remains difficult to explain (Hoyle and Wickramasinghe, 1979, 1991). In conclusion, we note that the aliens we have to fear are not superintelligent creatures arriving in space ships and intending to conquer and subdue us, but sub-micron sized viral invaders that may threaten the very existence of our species.

### AT: Innovation

#### Not key to innovation---their ev cites innovations from decades ago like GPS while NASA hasn’t done anything since then and no warrant why public sector is key

#### Hayes analysis wrong –

## AT: Russia

### AT: Space war (Russia + miscalc scenario)

#### No war.

Bowen 18 [Bleddyn, Lecturer in International Relations at the University of Leicester; ELN; 20 Februrary 2018; “The Art of Space Deterrence,” <https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/>] brett

Fourth, the ubiquity of space infrastructure and the fragility of the space environment may create a degree of existential deterrence. As space is so useful to modern economies and military forces, a large-scale disruption of space infrastructure may be so intuitively escalatory to decision-makers that there may be a natural caution against a wholesale assault on a state’s entire space capabilities because the consequences of doing so approach the mentalities of total war, or nuclear responses if a society begins tearing itself apart because of the collapse of optimised energy grids and just-in-time supply chains. In addition, the problem of space debris and the political-legal hurdles to conducting debris clean-up operations mean that even a handful of explosive events in space can render a region of Earth orbit unusable for everyone. This could caution a country like China from excessive kinetic intercept missions because its own military and economy is increasingly reliant on outer space, but perhaps not a country like North Korea which does not rely on space. The usefulness, sensitivity, and fragility of space may have some existential deterrent effect. China’s catastrophic anti-satellite weapons test in 2007 is a valuable lesson for all on the potentially devastating effect of kinetic warfare in orbit

## AT: Debris

### TURN – Debris good

#### We’ll concede that they solve for debris which collapses sats but we’ll turn that

1AC Intagliata and Orwig says debris collapses sats

### Drones

#### Loss of satellites shuts down drones

Daniel Ventre 11, Engineer for CNRS and Researcher for CESDIP, Cyberwar and Information Warfare, p. 198-199

The introduction of cyberspace operations is part of a specific context; a major evolution in the operation environment and the nature of the conflicts, which make irregular wars the rule, and make regular actors the exception to the rule. But the battle against unconventional, non-state governed, irregular actors raises specific problems: there are multiple actors, unpredictable at that, who do not abide by the same rules. New orders in conflicts are imposing the implementation of an ever more important need for information, and information collection and processing. Networks now have an incredible importance. The document refers to the growing threats against American heritage: the USA is a target and the increasing amount of attacks against their networks is indeed the proof of this. There are many obstacles which need to be removed before they can achieve real superiority and freedom to act, especially as vulnerable points may originate within the very operations of the armed forces. An example of this is the vulnerability of using products (software and hardware), commercial products (off-the-shelf), and sometimes even foreign products123. This brings to mind the fact that the US Air Force uses commercial, even foreign, applications for its cyberspace operations.

Information space extends to space124, particularly via communication and observation satellites125. Satellites are the keystone to the cyberspace and communication systems, but also the security system: monitoring (Echelon network is the symbol), observation, communication. These are at the heart of the C4ISR systems, without which a concept such as network-centric warfare could not exist. There would be no drones without satellites. It is even a question of extending the Internet to extra-atmospheric space. Projects in this vein (Interplanetary Networks) were being formed in the 1990s, but ran into several technical difficulties (delays in important transmissions due to high distances and costs) [GEL 06]. NASA dedicates a few pages on its website to this project126. The development of communication systems based on the infrastructures in extra-atmospheric space will also raise questions for legal, geopolitical and geostrategic domains: questions of seizing this space, questions of regulation of human activity in this space, of sovereignty, new territoriality and independence.

#### Drone prolif is inevitable and causes global nuclear war

Dr. Michael C. Horowitz 19, Professor of Political Science at University of Pennsylvania, NDT Champion from Emory University, PhD in Government from Harvard University, Adjunct Senior Fellow at the Center for a New American Security, “When Speed Kills: Autonomous Weapon Systems, Deterrence, and Stability”, 5/2/2019, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3348356

Thus, the reason to deploy autonomous systems would have to be their reliability and effectiveness rather than signaling. And giving up human control to algorithms in a crisis that could end with global nuclear war would require an extremely high level of perceived reliability and effectiveness. Few things are more important to militaries in crisis situations than informational awareness and control over decisions, and there might be fear that autonomous systems are prone to accidents.

This counterfactual illustrates that the development and deployment of lethal autonomous weapon systems by national militaries, if it occurs, is unlikely to have simple, easy, and linear consequences. Instead, human factors, including the psychological desire for control and organizational politics, will strongly shape how militaries think about developing and using LAWS. This will not just influence the potential for arms races in peacetime, but deterrence and wartime stability due to the organizational processes militaries implement for the deployment and use of autonomous systems on the battlefield.

This paper draws on research in strategic studies and examples from military history to assess how LAWS could influence the development and deployment of military systems, including arms races, crisis stability, and wartime stability, especially the risk of escalation. It also discusses the potential for arms control. It focuses on these questions through the lens of key characteristics of LAWS, especially the potential for increased operational speed and, simultaneously, less human control over battlefield choices. One of the primary attractions of autonomous systems, even compared to remotely piloted systems, is the potential to operate at machine speed. Another potential benefit is the possibility of machine-like accuracy in following programming, but that comes with a potential downside: the loss of control and the accompanying risk of accidents, adversarial spoofing, and miscalculation. Even if LAWS malfunction at the same rate as humans in a given scenario, the ability of operators to control the impact of those malfunctions may be lower, which could make LAWS less predictable on the battlefield. The paper then examines how these issues interact with the large uncertainty parameter associated with AI-based military capabilities at present, both in terms of the range of the possible and the opacity of their programming.

The results highlight several critical issues surrounding the development and deployment of LAWS.1 First, the desire to fight at machine speed with autonomous systems, while making a military more effective in a conflict, could increase crisis instability. As countries fear losing conflicts faster, it will generate escalation pressure, including an increased incentive for first strikes. Second, in addition to the actual risk of accidents and miscalculation from LAWS, the fear of accidents and losing control of autonomous systems could limit the willingness of militaries to deploy them, particularly since many militaries are conservative when it comes to emerging technologies and have high standards for system reliability. Third, the dual-use, or even general purpose, character of the basic science underlying many autonomous systems will make the technology hard to control, giving many countries and actors access to basic algorithms, though whether this is described as diffusion, proliferation, or an arms race will depend on political dynamics as much as anything.

Finally, multiple uncertainty parameters concerning lethal autonomous weapon systems could exacerbate security dilemmas. Uncertainty over the range of the possible concerning the programming of lethal autonomous weapon systems will increase fear of those systems in the near term, making restraint less likely for competitive reasons. Moreover, the inherent differences between remotely piloted systems and LAWS at the platform level come from software, not hardware. There is arguably an inherent opacity to lethal autonomous weapon systems. If an arms race over lethal autonomous weapon systems occurs, it will likely be because of worse-case assumptions about capability development by potential adversaries.

What is Autonomy or Artificial Intelligence?

Artificial intelligence is the use of computing power, in the form of algorithms, to conduct tasks that previously required human intelligence.2 Artificial intelligence in this context is best thought of as an umbrella technology or enabler, like the combustion engine or electricity. Military applications of artificial intelligence are potentially broad – from image recognition for surveillance to more efficient logistics to battle management.3 These include both non-kinetic applications, including in the cyber realm, as well as kinetic applications.4 One potential application of artificial intelligence is through armed autonomous systems that could be deployed on the battlefield, or what are most popularly called lethal autonomous weapon systems or lethal autonomous weapon systems. This differs from remotely-piloted systems where a human, though at a distance, still operates a given vehicle or system.

What is a lethal autonomous weapon system? While simple to describe on first glance, and easy to understand in the extreme – an armed humanoid robot with extremely broad programming making decisions about engaging in warfare – drawing the line between a lethal autonomous weapon system and other weapon systems is complex. In Directive 3000.09, published in 2012, the US Department of Defense defines an autonomous weapon as “A weapon system that, once activated, can select and engage targets without further intervention by a human operator.”5 What it means to select and engage a target is not entirely clear, however. For example, homing munitions, which have existed since World War II, select and engage targets, according to a common sense understanding of the terms.6

Exactly what functions are autonomous also matters. A system could have automatic piloting, for example, that flies or drives a platform to a target, but still have complete human control over the use of the weapon. That would be a system with a high level of automation, though not a lethal autonomous weapon system according to most perspectives. Heather Roff measures the level of autonomy in a weapon system based on three subcomponents: self-mobility, self-direction, and self-determination. This helps distinguish systems where there might be autonomy concerning the best way a missile should get to a target, but the target itself is designated by a person fromsystems where an algorithm might be making higher-level engagement decisions.7 There are already some applications of limited machine autonomy in military systems, with the most prominent example being the automatic mode present on many Close-In Weapon Systems (CIWS), such as the Phalanx, used to defend ships and incoming missiles from attack.8

This article will not resolve the definitional debate surrounding lethal autonomous weapon systems, which is still ongoing in meetings of the Group of Governmental Experts focused on lethal autonomous weapon systems in the United Nations Convention on Certain Conventional Weapons. Provisionally, this article adopts the Scharre and Horowitz definition that a lethal autonomous weapon system is “[A] weapon system that, once activated, is intended to select and engage targets where a human has not decided those specific targets are to be engaged.”9 However, moving beyond the close cases (e.g. particular types of missile guidance systems) and considering those weapon systems that clearly use machine intelligence to search for, select, and/or engage targets can help clarify what is at stake in this debate in the first place.10 After all, if most militaries most of the time would not have any need for lethal autonomous weapon systems, or those systems have significant disadvantages relative to remotely-piloted military robotics or soldiers on the battlefield, the stakes are lower. In contrast, if the integration of machine intelligence with military systems could give countries or violent non-state actors a significant advantage in how they employ force, it becomes even more crucial to engage the topic.

It is important to note that this article does not address concerns about existential risk related to artificial general intelligence – the fear that a superintelligence could decide to destroy the human race, either because it decides humans are malign or because humans program it to achieve a goal it can only accomplish by destroying humans.11 The existential risk issue associated with artificial intelligence is not necessarily closely coupled to military applications of artificial intelligence. If a super-intelligent machine learning system has the ability to take over human society in the interest of a goal – any goal – whether autonomous systems at much smaller orders of magnitude already exist in military systems will likely be unimportant. The super-intelligent system would simply create what it needed.

Why Invest in Autonomous Systems?

Militaries are already increasing their investments in remotely-piloted robotic systems. From UAVs such as the MQ-9 Reaper (United States) to uninhabited surface vehicles (USVs) such as the Guardium (Israel) to uninhabited ground vehicles (UGV) such as Platform-M (Russia), militaries around the world are investing in remotely piloted platforms, some of which can carry weapons. In these systems, human control over the use of force is not fundamentally different from the use of force with inhabited systems. In some cases, such as the MQ-9 Reaper, the sensor system a drone pilot uses to launch a weapon might even be the same sensor system a pilot in the cockpit of an inhabited fighter uses. Using remotely piloted systems gives militaries the ability to reduce the risk to their own soldiers while still projecting power in similar ways to how they used force previously.12 The first places militaries are likely to use kinetic lethal autonomous weapon systems include relatively “clear” environments such as air-to-air combat or naval combat, especially in geographic arenas where civilians are extremely unlikely to be present.13