# 1NC vs Marlborough – Global Commons

## 1NC – Off

### T – Neg Action

#### Interpretation – Unjust refers to a negative action – it means contrary.

Black’s Laws No Date "What is Unjust?" <https://thelawdictionary.org/unjust/> //Elmer

Contrary to right and justice, or to the enjoyment of his rights by another, or to the standards of conduct furnished by the laws.

#### Violation – The Aff is a positive action – it creates a new concept for Space – global commons

#### Vote neg --

#### 1] Limits – making the topic bi-directional explodes predictability – it means that Aff’s can both increase non-exist property regimes in space AND decrease appropriation by private actors – makes the topic untenable.

#### 2] Ground – wrecks Neg Generics – we can’t say appropriation good since the 1AC can create new views on Outer Space Property Rights that circumvent our Links since they can say “Public Trust” approach solves.

#### 3] TVA – just defend that space appropriation is bad.

#### Use Competing Interps – 1] Topicality is a yes/no question, you can’t be reasonably topical and 2] Reasonability invites arbitrary judge intervention and a race to the bottom of questionable argumentation.

#### No RVI’s - 1] Forces the 1NC to go all-in on Theory which kills substance education, 2] Encourages Baiting since the 1AC will purposely be abusive, and 3] Illogical – you shouldn’t win for not being abusive.

### 1NC – OFF

#### Interpretation: Topical affirmatives may only garner offense from the hypothetical implementation by governments that The appropriation of outer space by private entities is unjust

#### Resolved requires policy action

Louisiana State Legislature (<https://www.legis.la.gov/legis/Glossary.aspx>) Ngong

**Resolution**

**A legislative instrument** that generally is **used for** making declarations, **stating policies**, and making decisions where some other form is not required. A bill includes the constitutionally required enacting clause; a resolution **uses the term "resolved".** Not subject to a time limit for introduction nor to governor's veto. ( Const. Art. III, §17(B) and House Rules 8.11 , 13.1 , 6.8 , and 7.4 and Senate Rules 10.9, 13.5 and 15.1)

#### Appropriation

TIMOTHY JUSTIN TRAPP, JD Candidate @ UIUC Law, ’13, TAKING UP SPACE BY ANY OTHER MEANS: COMING TO TERMS WITH THE NONAPPROPRIATION ARTICLE OF THE OUTER SPACE TREATY UNIVERSITY OF ILLINOIS LAW REVIEW [Vol. 2013 No. 4]

The issues presented in relation to the nonappropriation article of the Outer Space Treaty should be clear.214 The ITU has, quite blatantly, created something akin to “property interests in outer space.”215 It allows nations to exclude others from their orbital slots, even when the nation is not currently using that slot.216 This is directly in line with at least one definition of outer-space appropriation.217 [\*\*Start Footnote 217\*\*Id. at 236 (“Appropriation of outer space, therefore, is ‘the exercise of exclusive control or exclusive use’ with a sense of permanence, which limits other nations’ access to it.”) (quoting Milton L. Smith, The Role of the ITU in the Development of Space Law, 17 ANNALS AIR & SPACE L. 157, 165 (1992)). \*\*End Footnote 217\*\*]The ITU even allows nations with unused slots to devise them to other entities, creating a market for the property rights set up by this regulation.218 In some aspects, this seems to effect exactly what those signatory nations of the Bogotá Declaration were trying to accomplish, albeit through different means.219

#### Topicality is key to limits and ground---redefining portions of the resolution permits endless reclarification AND creates incentives for avoidance---only aligning research with agent and mechanism solves.

#### Two impacts:

#### 1---Fairness---an unlimited, unpredictable topic disparately raises the research burden for the negative -- treat this is a sufficient win condition because fairness is the logical structure that undergirds all impacts AND controls any benefit to debate.

**Dascal and Knoll** ’**11** [Marcelo and Amnon; May 18th; former Professor of Philosophy at Tel Aviv University, B.A. in Philosophy from the University of Sao Paulo; former Professor of Philosophy at Tel Aviv University; Argumentation: Cognition and Community, "'Cognitive systemic dichotomization' in public argumentation and controversies," p. 20-25]

He opposes positions whose ‘exclusionist’ outlook rejects the normative approach to the political sphere on the grounds that “normative statements can never be subjected to a reasonable discussion” (ibid.: 2), because—he argues—the discussion of politics “is an area of vital interest to all of us and should clearly not be excluded from argumentative reasonableness” (ibid.: 3)—a view with which we are prone to agree. Nevertheless, he admits that in the present situation critical discussion is far from being systematically and successfully applied to that vital area: “In representative democracies, however, the out-comes of the political process tend to be predominantly the product of negotiations be-tween political leaders rather than the result of a universal and mutual process of deliberative disputation” (ibid.). Political debates, therefore, are ‘quasi-discussions’, i.e., “monologues calculated only to win the audience’s consent to one’s own views”, rather than ‘genuine discussions’, i.e., serious attempts to have an intellectual exchange, which is typical of critical discussions (ibid.). In order to overcome this situation, “democracy should always have promoted such a critical discussion of standpoints as a central aim. Only if this is the case can stimulating participation in political discourse enhance the quality of democracy" (ibid.). This can be achieved, however, only by following “the dialectical rules for argumentative discourse that make up a code of conduct for political discourse [and] are therefore of crucial importance to giving substance to the ideal of participatory democracy” (ibid.: 4); thereby fully acknowledging that “education in processing argumentation in a critical discussion is indispensable for a democratic society (van Eemeren 1995: 145-146).

The reasons provided for the failure of the adoption of the critical discussion model in reality ranges from a general allusion to human nature (“in real-life contexts, it has to be taken into account that human interaction is not always automatically 'naturally' and fully oriented toward the ideal of dialectical reasonableness "; van Eemeren 2010: 4) to specific political sphere argumentation handicaps (unwillingness of people “to subject their thinking to critical scrutiny”; “vested interest in particular outcome”; “inequality in power and resources; “different levels of critical skills”; and “a practical demand for an immediate settlement”; van Eemeren 2010: 4). Although these causes may have some explanatory value in some cases, in our opinion their modus operandi is not accounted for and, what is more important, they do not cover the full spectrum of challenges that the successful use of critical discussion in the public and political spheres must face, as we have seen (cf. sections 2 and 3).

No wonder that van Eemeren himself raises the question “whether maintaining the dialectical ideal of critical discussion in political and other real-life contexts is not utopian” (ibid.), to which he replies by admitting that "[t]he ideal of a critical discussion is by definition not a description of any kind of reality but sets a theoretical standard that can be used for heuristic, analytic and evaluative purpose” (ibid.). This ideal seems to be so inspiring that it remains valid as a pure theoretical ideal, “even if the argumentative discourse falls short of the dialectical ideal” (ibid.).

In the light of the substantial gap between the normative ideal and the actual practices of public and political argumentation that PD’s description and explanation provides, a number of doubts arise: Are there structural, rather than merely contingent obstacles in idealized critical discussion that prevents even its approximate use in the public sphere? Can a theory that claims to be a praxis based normative system fulfill its promise if it sets up a threshold that no one who tries to apply it to the public sphere can reach? Doesn’t the very fact that argumentation is excessively idealized in the model PD proposes cause the gap by distancing people concerned by public issues from argumentation at all? All these doubts suggest that a powerful structural phenomenon like the existence of CSDs in the public sphere is perhaps overlooked by PD and requires, for its overcoming, a radically different approach.

4.2 Discrepancies between the PD approach and reasonable argumentation in the public sphere

The discrepancies in question have to do with basic parameters relevant to every argumentative process, namely:

(A) The discussants’ goals and targets: what do they expect to achieve through the argumentation process and what is it capable of providing.

(B) The preconditions for initiating a critical discussion: what are the discussants presumed to know and accept of these preconditions.

(C) The argumentative process that is supposed to lead to the achievement of the discussants’ goals.

(D) The influence of context and agents on the argumentative process.

4.2.1 Goals

Assuming that argumentation is a voluntary endeavor, the parties are presumed to engage in it if and only if: (i) the process will serve their goals; (ii) these goals cannot be achieved by different, better means.

PD describes as follows the aim of engaging in an argumentative process:

Argumentation is basically aimed at resolving a difference of opinion about the acceptability of a standpoint by making an appeal to the other party's reasonableness. (van Eemeren 2010: 1, with reference to van Eemeren & Grootendorst 2004: 11-18)

The difference of opinion is resolved when the antagonist accepts the protagonist's viewpoint on the basis of the arguments advanced or when the protagonist abandons his viewpoint as a result of the critical responses of the antagonist. (van Eemeren 2010: 33)

Simply put, the basic assumption is that a critical discussion’s aim consists in putting forth a certain position by one of the parties for the critical examination of the other, who calls it into question. The latter undertakes to refute the former’s position, while its proponent is committed to defend it. Four stages (see below) are supposed to ensure a valid performance of the refutation and defense tasks. The essential point is that at the end of the four stages the parties clearly agree whether the proponent’s position has been refuted or not and, accordingly, change their position (either retracting it or withdrawing from his questioning). In ‘mixed’ disagreements, in which the antagonist not only questions but also puts forth an opposed position, the same process takes place sequentially, i.e., at first one side (A) attacks trying to refute the other’s (B) position, and after this stage is concluded, they switch roles and the second side (B) proceeds to attack the first (A) in the same fashion.

Regardless of whether the described process is indeed capable to yield a conclusive decision about the refutation of a position, and of whether the linearity of the refutation process makes sense, it is obvious that debates in the public sphere are for the most part ‘mixed’. Furthermore, in so far as these debates involve dichotomous positions (rather than just opposed ones), it is necessary that at the end of the PD process one of the parties accept the position of the other.

It is also worth noticing that, contrary to deliberative democracy approaches, which in some cases approve the attempt to reach agreement in a (public) debate as a form of justification of political systems, PD claims that it is not a consensus theory at all. Instead, it conceives itself as a theory based on Popper’s critical rationality, i.e., as having as its principal goal to provide each party with the means—i.e., refutation attempts—to test critically its position:

[T]he conception of reasonableness upheld in pragma-dialectics insights from critical rationalist epistemology and utilitarian ethics conjoin … The intersubjective acceptability we attribute to the procedure, which is eventually expected to lend conventional validity to the procedure, is primarily based on its instrumentality in doing the job it is intended to do: re-solving a difference of opinion. … This means that, philosophically speaking, the rationale for accepting the pragma-dialectical procedure is pragmatic—more precisely, utilitarian [italics in quoted text]. … However, based on Popper's falsification idea, this is a ‘negative’ and not ‘positive’, utilitarianism. … Rather than maximization of agreement, minimization of disagreement is to be aimed for. (van Eemeren 2010: 34)

The distinction between maximization of agreement and minimization of disagreement purports to stress that PD doesn’t view agreement as the suitable end of the process, but just as “an intermediate step on the way to new, and more advanced, disagreements” (van Eemeren 2010: 26n). Nevertheless, no explanation is given of how these “more advanced disagreements” are engendered as a part of the dynamics of the critical process, nor what is the role or value of such disagreements in the public sphere or elsewhere. This may be due to the fact that PD’s ‘critical discussion’ is not tuned to the generation of new positions or ideas but only to the testing of extant ones, thus echoing once again Popper, now in his focus on the justification rather than on the discovery of theories (see sections 4.2.4 and 5).

In any case, it is quite clear that the only practical result of the critical discussion à la PD of opposed positions on a public issue is to determine whether one discussant succeeded in refuting the other’s position, thus obtaining the adversary’s agreement, who will then share his/her position, at least for some time. In this respect, PD’s critical discussion is close to Habermas’s ‘reasonable argumentation’, whose aim is to reach consensus.15 In spite of the apparent difference between a critical examination of a position aiming at its refutation or at its acceptance, even van Eemeren admits, to some extent, their similarity. He points out that “the pragma-dialectical procedure deals only with ‘first order’ conditions for resolving differences of opinion on the merits by means of critical discussion” (van Eemeren 2010: 34), and stresses that there are ‘higher order’ conditions, ‘internal’ and ‘external’, that are “beyond the agent’s control”, conditions that are similar to Habermas’s “ideal speech conditions” (van Eemeren 2010: 35n). Anyhow, whether according to PD the main goal of the critical discussion process in the public alliance is to create the opportunity for refutation or for agreement (meaning that one of the discussants acknowledges that his position is wrong), the essential assumption of this process is that the participants in it in the public sphere (or elsewhere) must be aware that one of them holds a wrong position and will have to explicitly acknowledge this.

Is such a goal, especially when conceived as the ultimate aim of the proposed argumentative process, feasible and acceptable in the public sphere?

In our opinion, there are at least four reasons for arguing that it is a utopian, hence unacceptable goal, if one takes seriously what should be expected from argumentative practice and theory in the public sphere. First, because PD deserves a critique similar to the one leveled against the Popperian version of critical rationalism it espouses,16 which defends a theory of knowledge “without a knowing subject” (Popper 1972); obviously, such a-contextual position becomes even more problematic if applied to the public and political spheres, where it must operate in a context essentially involved with practical rationality. Second, due to its analogy with theories such as Habermas’s that were discussed in this section as well as in 2.2—an analogy that deserves additional criticism because, unlike Habermasianism, PD overlooks the relationship between the political and public context and argumentative practice. Third, because of PD’s total overlooking of the role of CSDs in public argumentation (cf. 4.2.2). And fourth, due to unilateral value judgments of positions in the public sphere, which lead to simplistic criteria of refutation or acceptance in a domain where complexity is the rule (cf. 2.1.1 and 4.2.3).

(ii) Let us admit, for the sake of argument, that the refutation goal as claimed by PD is central, feasible, acceptable, and useful in public argumentation. Aren’t there better ways to achieve this goal?

The refutation and defense moves stipulated by the PD critical discussion model include, on the one side, the antagonist’s critical remarks or demands and on the other, the proponent’s replies. We believe that it must be assumed that neither the critique nor the replies are previously known to the contenders, which is why they have an interest in engage in the argumentation process: presumably, the expression of both, counter-arguments and defensive-arguments, is good to both sides. In spite of its usefulness in certain situations, this kind of exchange does not amount to the full manifestation of the dialectical critical process, wherein the context and co-text of the dialectical exchange, as well as the cognitive interaction that takes place and evolves throughout the exchange, play a decisive role in the design and ‘inner’ justification of each of the participants’ moves. Argumentation strategies that take into account these resources and make full use of their potential are no doubt setting up another, broader span of goals for the argumentative process, and are more likely to achieve these goals more effectively than they certainly would achieve their PD more limited counterparts (cf. 4.2.4 and 5).

4.2.2 Preconditions

The ideal PD critical discussion can only be realized if some preconditions are satisfied. The most important ones are a) a clear-cut identification of the standpoint that provokes the disagreement, b) the decision of the parties to engage in a discussion, and c) the participants’ commitment to obey the procedural rules. As we shall see, these preconditions share a common assumption, which calls into question the feasibility of using critical discussion in the public sphere.

(A) This precondition assumes that it is possible to isolate rigorously the subject matter of a critical discussion, so as to conduct a focused discussion that makes use only of relevant arguments. This precondition is quite strict, for whenever both discussants defend contrary standpoints, their disagreement should be treated as two separate fully fledged discussions: “… if another discussion begins, it must go through the same stages again—from confrontation stage to concluding stage” (van Eemeren 2010: 10n).

(B) This precondition subordinates the decision to engage in the discussion to the evaluation that the discussants share enough common ground to pursue it adequately: “After the parties have decided that there is enough common ground to conduct a discussion …” (van Eemeren 2010: 33).

(C) This precondition stresses the ‘contractual’ character of a critical discussion, which requires explicit mutual commitments by the discussants. Its rationale is that without such commitments the aim of the critical discussion, i.e., the resolution of the difference of opinions, will not be achieved, which makes engaging in the discussion pointless: “There is no point in venturing to resolve a difference … if there is no mutual commitment to a common starting point, which may include procedural commitments as well as substantive agreement” (van Eemeren and Grootendorst 2004: 60).

These ‘first order’ preconditions, as they are labeled in PD (cf. van Eemeren 2010: 33), are the conditions that candidates to participate in a critical discussion must fulfill if they intend to do so and can afford it personally (a ‘second order’ condition) and politically (a ‘third order’ condition).17 In addition, the first order conditions demand from the prospective discussants a clear, distinct, and detailed picture of the scope of the discussion that they are about to engage in. This means not mixing up the various differences of opinion that the discussion may involve, and being able to separate them properly as the subject matter for independent discussions; a further requirement is the anticipated identification of the pieces of the ‘substantive agreement’ forming the starting point in order to ensure that they are sufficient for conducting the discussion up to a satisfactory closure.

#### 2---Clash---forfeiting government action sanctions retreat from controversy and forces the negative to concede solvency before winning a link -- clash is the necessary condition for distinguishing debate from discussion, but negation exists on a sliding scale -- that jumpstarts the process of critical thinking, reflexivity, and argument refinement.

#### 3---Movement Lawyering Skills – contingent, focused debates around locus points of difference are key to develop activists skills for political justice.

Archer 18, Deborah N. "Political Lawyering for the 21st Century." Denv. L. Rev. 96 (2018): 399. (Associate Professor of Clinical Law at NYU School of Law)//Elmer

Political justice lawyers must be able to break apart a systemic problem **into manageable components**. The **complexity** of social problems, can **cause law students, and even experienced political lawyers, to become overwhelmed**. In describing his work challenging United States military and economic interventions abroad, civil rights advocate and law professor Jules Lobel wrote of this process: “Our foreign-policy litigation became a sort of Sisyphean quest as we maneuvered through a hazy maze cluttered with gates. Each gate we unlocked led to yet another that blocked our path, with the elusive goal of judicial relief always shrouded in the twilight mist of the never-ending maze.”144 Pulling apart a larger, systemic problem into its smaller components can help elucidate options for advocacy. An instructive example is the use of excessive force by police officers against people of color. Every week seems to bring a new video featuring graphic police violence against Black men and women. Law students are frequently outraged by these incidents. But the sheer frequency of these videos and lack of repercussions for perpetrators overwhelm those students just as often. What can be done about a problem so big and so pervasive? To move toward justice, advocates must be able to break apart the forces that came together to lead to that moment: intentional discrimination, implicit bias, ineffective training, racial segregation, lack of economic opportunity, the over-policing of minority communities, and the failure to invest in non-criminal justice interventions that adequately respond to homelessness, mental illness, and drug addiction. None of these component problems are easily addressed, but breaking them apart is more manageable—and more realistic—than acting as though there is a single lever that will solve the problem. After identifying the component problems, advocates can select one and repeat the process of breaking down that problem until they get to a point of entry for their advocacy. 2. Identifying Advocacy Alternatives As discussed earlier, political justice lawyering embraces litigation, community organizing, interdisciplinary collaboration, legislative reform, public education, direct action, and other forms of advocacy to achieve social change. After parsing the underlying issues, lawyers need to identify what a lawyer can and should do on behalf of impacted communities and individuals, and this includes determining the most effective advocacy approach. Advocates must also strategize about what can be achieved in the short term versus the long term. The fight for justice is a marathon, not a sprint. Many law students experience frustration with advocacy because they expect immediate justice now. They have read the opinion in Brown v. Board of Education, but forget that the decision was the result of a decades-long advocacy strategy.145 Indeed, the decision itself was no magic wand, as the country continues to work to give full effect to the decision 70 years hence. Advocates cannot only fight for change they will see in their lifetime, they must also fight for the future.146 Change did not happen over night in Brown and lasting change cannot happen over night today. Small victories can be building blocks for systemic reform, and advocates must learn to see the benefit of short-term responsiveness as a component of long-term advocacy. Many lawyers subscribe to the American culture of success, with its uncompromising focus on immediate accomplishments and victories.147 However, those interested in social justice must adjust their expectations. Many pivotal civil rights victories were made possible by the seemingly hopeless cases that were brought, and lost, before them.148 In the fight for justice, “success inheres in the creation of a tradition, of a commitment to struggle, of a narrative of resistance that can inspire others similarly to resist.”149 Again, Professor Lobel’s words are instructive: “the current commitment of civil rights groups, women’s groups, and gay and lesbian groups to a legal discourse to legal activism to protect their rights stems in part from the willingness of activists in political and social movements in the nineteenth century to fight for rights, even when they realized the courts would be unsympathetic.”150 Professor Lobel also wrote about Helmuth James Von Moltke, who served as legal advisor to the German Armed Services until he was executed in 1945 by Nazis: “In battle after losing legal battle to protect the rights of Poles, to save Jews, and to oppose German troops’ war crimes, he made it clear that he struggled not just to win in the moment but to build a future.”151 3. Creating a Hierarchy of Values Advocates challenging complex social justice problems can find it difficult to identify the correct solution when one of their social justice values is in conflict with another. A simple example: a social justice lawyer’s demands for swift justice for the victim of police brutality may conflict with the lawyer’s belief in the officer’s fundamental right to due process and a fair trial. While social justice lawyers regularly face these dilemmas, law students are not often forced to struggle through them to resolution in real world scenarios—to make difficult decisions and manage the fallout from the choices they make in resolving the conflict. Engaging in complex cases can force students to work through conflicts, helping them to articulate and sharpen their beliefs and goals, forcing them to clearly define what justice means broadly and in the specific context presented. Lawyers advocating in the tradition of political lawyering anticipate the inevitable conflict between rights, and must seek to resolve these conflicts through a “hierarchy of values.”152 Moreover, in creating the hierarchy, the perspectives of those directly impacted and marginalized should be elevated “because it is in listening to and standing with the victims of injustice that the need for critical thinking and action become clear.”153 One articulation of a hierarchy of values asserts “people must be valued more than property. Human rights must be valued more than property rights. Minimum standards of living must be valued more than the privileged liberty of accumulated political, social and economic power. Finally, the goal of increasing the political, social, and economic power of those who are left out of the current arrangements must be valued more than the preservation of the existing order that created and maintains unjust privilege.”154 C. Rethinking the Role of the Clinical Law Professor: Moving From Expert to Colleague Law students can learn a new dimension of lawyering by watching their clinical law professor work through innovative social justice challenges alongside them, as colleagues. This is an opportunity not often presented in work on small cases where the clinical professor is so deeply steeped in the doctrine and process, the case is largely routine to her and she can predict what is to come and adjust supervision strategies accordingly.155 However, when engaged in political lawyering on complex and novel legal issues, both the student and the teacher may be on new ground that transforms the nature of the student-teacher relationship. A colleague often speaks about acknowledging the persona professors take on when they teach and how that persona embodies who they want to be in the classroom—essentially, whenever law professors teach they establish a character. The persona that a clinical professor adopts can have a profound effect on the students, because the character is the means by which the teacher subtly models for the student—without necessarily ever saying so— the professional the teacher holds herself to be and the student may yet become. In working on complex matters where the advocacy strategy is unclear, the clinical professor makes himself vulnerable by inviting students to witness his struggles as they work together to develop the most effective strategy. By making clear that he does not have all of the answers, partnering with his students to discover the answers, and sharing his own missteps along the way, a clinical law professor can reclaim opportunities to model how an experienced attorney acquires new knowledge and takes on new challenges that may be lost in smaller case representation.156 Clinical law faculty who wholeheartedly subscribe to the belief that professors fail to optimize student learning if students do not have primary control of a matter from beginning to end may view a decision to work in true partnership with students on a matter as a failure of clinical legal education. Indeed, this partnership model will inevitably impact student autonomy and ownership of the case.157 But, there is a unique value to a professor working with her student as a colleague and partner to navigate subject matter new to both student and professor.158 In this relationship, the professor can model how to exercise judgment and how to learn from practice: to independently learn new areas of law; to consult with outside colleagues, experts in the field, and community members without divulging confidential information; and to advise a client in the midst of ones own learning process.159 III. A Pedagogical Course Correction “If it offends your sense of justice, there’s a cause of action.” - Florence Roisman, Professor, Indiana University School of Law160 In response to the shifts in my students’ perspectives on racism and systemic discrimination, their reluctance to tackle systemic problems, their conditioned belief that strategic litigation should be a tool of last resort, and my own discomfort with reliance on small cases in my clinical teaching, I took a step back in my own practice. How could I better teach my students to be champions for justice even when they are overwhelmed by society’s injustice; to challenge the complex and systemic discrimination strangling minority communities, and to approach their work in the tradition of political lawyering. I reflected not only on my teaching, but also on my experiences as a civil rights litigator, to focus on what has helped me to continue doing the work despite the frustrations and difficulties. I realized I was spending too much time teaching my students foundational lawyering skills, and too little time focused on the broader array of skills I knew to be critical in the fight for racial justice. We regularly discussed systemic racism during my clinic seminars in order to place the students’ work on behalf of their clients within a larger context. But by relying on carefully curated small cases I was inadvertently desensitizing my students to a lawyer’s responsibility to challenge these systemic problems, and sending the message that the law operates independently from this background and context. I have an obligation to move beyond teaching my students to be “good soldiers for the status quo” to ensuring that the next generation is truly prepared to fight for justice.161 And, if my teaching methods are encouraging the reproduction of the status quo it is my obligation to develop new interventions.162 Jane Aiken’s work on “justice readiness” is instructive on this point. To graduate lawyers who better understand their role in advancing justice, Jane Aiken believes clinics should move beyond providing opportunities for students to have a social justice experience to promoting a desire and ability to do justice.163 She suggests creating disorienting moments by selecting cases where students have no outside authority on which to rely, requiring that they draw from their own knowledge base and values to develop a legal theory.164 Disorienting moments give students: experiences that surprise them because they did not expect to experience what they experienced. This can be as simple as learning that the maximum monthly welfare benefit for a family of four is about $350. Or they can read a [ ] Supreme Court case that upheld Charles Carlisle’s conviction because a wyer missed a deadline by one day even though the district court found there was insufficient evidence to prove his guilt. These facts are often disorienting. They require the student to step back and examine why they thought that the benefit amount would be so much more, or that innocence would always result in release. That is an amazing teaching moment. It is at this moment that we can ask students to examine their own privilege, how it has made them assume that the world operated differently, allowing them to be oblivious to the indignities and injustices that occur every day.165 Giving students an opportunity to “face the fact that they cannot rely on ‘the way things are’ and meet the needs of their clients” is a powerful approach to teaching and engaging students.166 But, complex problems call for larger and more sustained disorienting moments. Working with students on impact advocacy in the model of political lawyering provides a range of opportunities to immerse students in disorienting moments. A. Immersing Students in “Disorienting Moments”: Race, Poverty, and Pregnancy Today, I try to immerse my students in disorienting moments to make them justice ready and move them in the direction of political lawyering. My clinic docket has always included a small number of impact litigation matters. However, in the past these cases were carefully screened to ensure that they involved discrete legal issues and client groups. In addition, our representation always began after our outside co-counsel had already conducted an initial factual investigation, identified the core legal issues, and developed an overall advocacy strategy, freeing my students from these responsibilities. Now, my clinic takes on impact matters at earlier stages where the strategies are less clear and the legal questions are multifaceted and ill- defined. This mirrors the experiences of practicing social justice lawyers, who faced with an injustice, must discover the facts, identify the legal claims, develop strategy, cultivate allies, and ultimately determine what can be done—with the knowledge that “nothing” is not an option. This approach provides students with the space to wrestle with larger, systemic issues in a structured and supportive educational environment, taking on cases that seem difficult to resolve and working to bring some justice to that situation. They are also gaining experience in many of the fundamentals of political lawyering advocacy. Recently, my students began work on a new case. Several public and private hospitals in low-income New York City neighborhoods are drug testing pregnant women or new mothers without their knowledge or informed consent. This practice reflects a disturbing convergence between racial and economic disparities, and can have a profound impact on the lives of the poor women of color being tested at precisely the time when they are most in need of support. We began our work when a community organization reached out to the clinic and spoke to us about complaints that hospitals around New York City were regularly testing pregnant women—almost exclusively women of color—for drug use during prenatal check ups, during the chaos and stress of labor and delivery, or during post-delivery. The hospitals report positive test results to the City’s Administration for Children’s Services (“ACS”), which is responsible for protecting children from abuse and neglect, for further action.167 Most of the positive tests are for marijuana use. After a report is made, ACS commences an investigation to determine whether child abuse or neglect has taken place, and these investigations trigger inquiries into every aspect of a family’s life. They can lead to the institution of child neglect proceedings, and potentially to the temporary or permanent removal of children from the household. Even where that extreme result is avoided, an ACS investigation can open the door to the City’s continued, and potentially unwelcome, involvement in the lives of these families. These policies reflect deeply inequitable practices. Investigating a family after a positive drug test is not necessarily a bad thing. After all, ACS offers a number of supportive services that can help stabilize and strengthen vulnerable families. And of course, where children’s safety is at risk, removal may sometimes be the appropriate result. However, hospitals do not conduct regular drug tests of mothers in all New York City communities. Private hospitals in wealthy areas rarely test pregnant women or new mothers for drug misuse. In contrast, at hospitals serving poor women, drug testing is routine. Race and class should not determine whether such testing, and the consequences that result, take place. Investigating the New York City drug-testing program immersed the students in disorienting moments at every stage of their work. During our conversations, the students regularly expressed surprise and discomfort with the hospitals’ practices. They were disturbed that public hospitals— institutions on which poor women and women of color rely for something as essential as health care—would use these women’s pregnancy as a point of entry to control their lives.168 They struggled to explain how the simple act of seeking medical care from a hospital serving predominantly poor communities could deprive patients of the respect, privacy, and legal protections enjoyed by pregnant women in other parts of the City. And, they were shocked by the way institutions conditioned poor women to unquestioningly submit to authority.169 Many of the women did not know that they were drug tested until the hospital told them about the positive result and referred them to ACS. Still, these women were not surprised: that kind of disregard, marginalization, and lack of consent were a regular aspect of their lives as poor women of color. These women were more concerned about not upsetting ACS than they were about the drug testing. That so many of these women could be resigned to such a gross violation of their rights was entirely foreign to most of my students. B. Advocacy in the Face of Systemic Injustice Although the students are still in the early stages of their work, they have already engaged in many aspects of political justice lawyering. They approached their advocacy focused on the essence of political lawyering— enabling poor, pregnant women of color who enjoy little power or respect to claim and enjoy their rights, and altering the allocation of power from government agencies and institutions back into the hands of these women. They questioned whose interests these policies and practices were designed to serve, and have grounded their work in a vision of an alternative societal construct in which their clients and the community are respected and supported. The clinic students were given an opportunity to learn about social, legal, and administrative systems as they simultaneously explored opportunities to change those systems. The students worked to identify the short and long term goals of the impacted women as well the goals of the larger community, and to think strategically about the means best suited to accomplish these goals. And, importantly, while collaborating with partners from the community and legal advocacy organizations, the students always tried to keep these women centered in their advocacy. In breaking down the problem of drug testing poor women of color, the students worked through an issue that lives at the intersection of reproductive freedom, family law, racial justice, economic inequality, access to health care, and the war on drugs. In their factual investigation, which included interviews of impacted women, advocates, and hospital personnel, and the review of records obtained through Freedom of Information Law requests, the students began to break down this complex problem. They explored the disparate treatment of poor women and women of color by health care providers and government entities, implicit and explicit bias in healthcare, the disproportionate referral of women of color to ACS, the challenges of providing medical services to underserved communities, the meaning of informed consent, the diminished rights of people who rely on public services, and the criminalization of poverty. The students found that list almost as overwhelming as the initial problem itself, but identifying the components allowed the students to dig deeper and focus on possible avenues of challenge and advocacy. It was also critically important to make the invisible forces visible, even if the law currently does not provide a remedy. Working on this case also gave the students and me the opportunity to work through more nuanced applications of some of the lawyering concepts that were introduced in their smaller cases, including client-centered lawyering when working on behalf of the community; large-scale fact investigation; transferring their “social justice knowledge” to different contexts; crafting legal and factual narratives that are not only true to the communities’ experience, but can persuade and influence others; and how to develop an integrated advocacy plan. The students frequently asked whether we should even pursue the matter, questioning whether this work was client- centered when it was no longer the most pressing concern for many of the women we met. These doubts opened the door to many rich discussions: can we achieve meaningful social change if we only address immediate crises; can we progress on larger social justice issues without challenging their root causes; how do we recognize and address assumptions advocates may have about what is best for a client; and how can we keep past, present, and future victims centered in our advocacy? The work on the case also forced the clinic students to work through their own understanding of a hierarchy of values. They struggled with their desire to support these community hospitals and the public servants who work there under difficult circumstances on the one hand, and their desire to protect women, potentially through litigation, from discriminatory practices. They also struggled to reconcile their belief that hospitals should take all reasonable steps to protect the health and safety of children, as well as their emotional reaction to pregnant mothers putting their unborn children in harms way by using illegal drugs against the privacy rights of poor and marginalized women. They were forced to pause and think deeply about what justice would look like for those mothers, children, and communities. CONCLUSION America continues to grapple with systemic injustice. Political justice lawyering offers powerful strategies to advance the cause of justice—through integrated advocacy comprising the full array of tools available to social justice advocates, including strategic systemic reform litigation. It is the job of legal education to prepare law students to become effective lawyers. For those aspiring to social justice that should include training students to utilize the tools of political justice lawyers. Clinical legal offers a tremendous opportunity to teach the next generation of racial and social justice advocates how to advance equality in the face of structural inequality, if only it will embrace the full array of available tools to do so. In doing so, clinical legal education will not only prepare lawyers to enact social change, they can inspire lawyers overwhelmed by the challenges of change. In order to provide transformative learning experiences, clinical education must supplement traditional pedagogical tools and should consider political lawyering’s potential to empower law students and communities.

### DA – Heg

#### Space tech advancements and control have produced a qualitative military advantage. US space privatization maintains a shaky but tenable US lead.

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Advancements in space technology are quickly leading to an inevitable conflict over control in space, which includes control over the Moon through lunar bases and potentially control over the colonization of Mars. The PRC has added the capability to "physically attack satellites using antisatellite [ASAT] interceptors, miniature space mines, and ground-based lasers" into its military space program.1 These capabilities fall under the guise of the Outer Space Treaty’s permission to destroy militarized satellites.2 These technologies could easily be used offensively to create a decision advantage in combat. Some analysts believe that the deliberate collision of PRC satellites with older satellites shows that the PRC has experimented with "parasitic satellites" designed to lie dormant in the vicinity of a target until activated, potentially for hacking purposes.3 The PRC even "reportedly launched a hypersonic 'prototype space fighter' " in 2010. It continues to be locked in an intense space race with the rest of the space-savvy international community—particularly Russia, the United States, and India—with a short-term goal of controlling the Moon with a lunar base and a longer-term goal of populating Mars under the rule of the PRC.4

The development of maneuverable space planes and lunar bases is not unique to the PRC. The National Aeronautical and Space Administration (NASA) developed the X-37 and X-37B space planes, and the Russian Federation is developing a maneuverable space plane using nuclear technology for power.5 All of these nations (as well as several others, including India and Japan) intend to establish lunar bases within the next 20 years.6 Despite the array of international treaties and agreements promoting peaceful global development of space resources in the name of science and humanity, it is unlikely that space will remain weapon free and likely that it will become the next frontier of global combat. Space weapons in development may use robotics, nanotechnology, and directed energy such as microwaves and lasers.7 With the establishment of a lunar base, a nation with advanced laser technology, advanced cyber weaponry, maneuverable space planes, satellite targeting capabilities, nano-science stealth technology, artificial intelligence, and self-guiding nanotechnology bullets would undoubtedly have the capacity to rule the Earth as it sees fit. All of these technologies already exist or are in development phases, and they are the future of intelligence and warfare.8

The US government and NASA, unlike the PRC and the RF, have been encouraging the commercialization of space cargo transportation to meet future American needs for access to the International Space Station (ISS) and to improve the research and development of spaceborne technologies and other developments.9 Private sector involvement has also opened the market for alternative rocket propulsion technologies that can achieve government and commercial goals for space at lower costs and faster than possible under the existing bureaucracy of NASA. Enhanced private sector involvement in space travel utilizes the free-market system to foster radical developments and investment for both government and private sector programs, incentivizing broader participation, which benefits both. Commercializing aspects of standard space operations, such as the recent partnership with SpaceX, will also pave the way for space tourism. This will free up resources for NASA and the newly minted US Space Force to pursue broader goals, such as manned deep space travel, a lunar base, and manned missions to Mars.

Part 2: Lunar Power

Rare earth metals and other minerals are quickly becoming scarce in the United States to the point where the international space race to claim the Moon and Mars has become a top priority, not just for control over them but for the resources available for exploitation. Uranium has even entered the economic radar as a good idea for boosting the American economy instead of remaining too dangerous to mine due to the associated health risks and environmental hazards. This resource is in abundance on the Moon.10 Estimates suggest there may be up to five million tons of Helium-3 (3He) contained within the lunar regolith.11 This has the potential to meet all of [hu]mankind's power needs for thousands of years when used with fusion power.12 On top of the resources potentially available, the Moon provides a unique launching position for future missions to Mars with a faster, more direct, and more efficient path to the Red Planet.13 Control over the Moon is an inherent factor in the future of the human race.

Uranium has long been a part of the nuclear fission enterprise on Earth but comes with high costs, including radioactive waste and extreme health and environmental hazards due to the radiation produced in the fission process. Terrestrial reserves of other energy-producing resources, like oil and natural gas, have also been projected to be exhausted within 50–100 years under current and projected mining and usage rates.14 Alternatively, the element tritium (T), which has a half-life of 12.32 years, naturally decays into 3He,15 which can be used to create a new kind of power—fusion power. Fusion power can be generated by combining deuterium (D) with either more D, T, or 3He, using the following calculations shown in order of their ignition temperatures: D + T = 4He [Helium-4] + n [neutrons] + 17.6 MeV [Million electron Volts] D + D = T + H [Hydrogen] + 4.0 MeV (50%) = 3He + n + 3.3 MeV (50%) D + 3He = 4He + H + 18.4 MeV16 Fusion power can also be created by combining 3He with more 3He, creating Helium-4 (4He).17 The combination of 3He and 3He is the most energy efficient, producing the greatest net energy,18 but also requires the highest ignition temperature to achieve fusion.19 Unfortunately, 3He exists only in minute amounts on Earth.20 The nation that establishes a mining and transportation industry capable of bringing lunar 3He to Earth, and develops a fusion plant network that transforms 3He into power, could control a substantial portion of the planet’s energy industry for decades. Some scientific estimates discount both the estimates of the potential amount of extractable 3He in the lunar regolith and the potential to achieve industrial fusion reactors on Earth capable of processing it. Exemplifying this scientific stance are the calculations of Ian Crawford, who believes both prospects are greatly exaggerated and that there are only approximately 220,507 tons of 3He available in logical extraction areas, such as the titanium-rich lunar basalt flats.21 Despite his dissent, Crawford admits even lunar resources that seem impractical and economically inefficient to transport resources to Earth may provide substantial economic benefits for space-based uses, such as solar power systems and spacecraft fusion engines, for example,22 which would not require transport back to Earth. Earth's finite resources make lunar and space resource exploitation an inevitability. The most pertinent factor governing future human resource exploitation in space is the question of which nation will achieve a successful and effective industrial supply chain first. The most probable three nations to achieve this are the US, the PRC, and the RF, and the three areas that need to be navigated to succeed are facility establishment, production/refinement, and transportation. Establishing lunar facilities is the easiest of these goals, especially when lunar resources that can be used for building are taken into account, which decreases the amount of materials needed to be brought to the Moon and the time needed for construction. In 2008, a NASA experiment found that lunar regolith has potential construction properties. When scientists heated the regolith and used sulfur as a binding agent, they made "waterless concrete," which can be molded and is nearly as strong as concrete when it hardens.23 This process requires minimal effort and relies primarily on direct heat application and the ability to shape the regolith. Consequently, the entire process can be automated by robots with the appropriate tools on the lunar surface, such as the ones NASA began developing specifically for this purpose in 2009.24 The simplicity of the operational requirements means that these three nations already have the technical capability to begin construction using lunar soil after arriving on the Moon. They will also all be capable of bringing any other materials that would be necessary to construct facilities or bases on the lunar surface. Unlike the US, and contrary to existing international law, the PRC's stance on the Moon is that it is territory,25 despite the prohibition on "national appropriation" of celestial bodies outlined in Article II of the Outer Space Treaty.26 The PRC has also proposed mining 3He for future fusion power opportunities.27 The RF, while not openly pursuing a territorial ambition for the Moon, is certainly exploring and advancing prospects of economic development, including 3He extraction and tourism.28 Facility development and resource exploitation areas on the Moon are limited. This will exacerbate the race for prime locations and desirable resources, particularly at the poles, where water ice is believed to exist in large quantities (which can be used to sustain lunar human habitation), and in the titanium- and 3He-rich basalt flats of Mare Tranquillitatis and Oceanus Procellarum.29 Once established, facility operations can begin to extract and refine resources either for use on the lunar surface or for transportation to Earth. Transportation of materials from the Moon to Earth is a substantial financial and logistical undertaking. It will not be easy to show a profit after the considerable expenses associated with it. Nevertheless, extraction and transportation of 3He and other resources to Earth, specifically for fusion power production, have been expressed as long-term goals of the PRC and the RF within decades. Interestingly, the US has not stated this as a goal but has already shifted its space transportation industry sufficiently toward the private sector. The private sector will have the most viable opportunity to build the first industrial space transportation system, specifically because of advantages in the American free-market system.30 By encouraging private sector participation in the space industry and commercializing space transportation, the US has made production of space technologies competitive with proposals in the National Space Policy.31 A competitive industry makes substantial investments in research, development, and production of space transports; engine components for space travel; and tools for use in zero gravity. America cannot afford to fall behind in the race for lunar facility establishment and resource exploitation. This is for reasons of economic and national security and the future security of human expansion into space as the Moon offers the most efficient launching position for missions to Earth's red neighbor, Mars. Part 3: Mars Domination Mars is widely accepted by the scientific community to be the most plausible planet for the first human habitation on a celestial body and, consequently, the most likely location for the first space colony and eventually a second planet for humankind. Thus, Mars is a desirable goal for nations involved in space exploration for many reasons. The territory on Mars, for example, will most likely become marketable for economic value to civilians in the long term. The Outer Space Treaty prevents ownership of territory on celestial bodies but makes no mention of ownership or sale for profit of structures built on, or items brought to, celestial bodies, just as there is no explicit language in the treaty preventing profit-based resource exploitation on celestial bodies by either governments, organizations, or private nationals.32 Additionally, the inevitability of Mars becoming a second planet inhabited by humanity must be considered, along with all of the implications of living spaces and ownership of property that will eventually follow. Denying this inevitability and claiming it as outlawed by international law due to the prohibition on appropriating territory on a celestial body would essentially equate owning property on Earth as also outlawed by international law. After all, Earth is also a celestial body. Language in the treaty encourages expansion into space and essentially says that if persons, governments, or organizations build something on a celestial body, they own that building33 and can do what they want with it, including selling it. They cannot, however, claim to own the planet's ground outside the building—yet. Resources on Mars, while still not mapped out as substantially as lunar resources have been, will likewise create new markets for economic prosperity and national wealth, including more 3He deposits from solar winds like those found in lunar regolith along with substantially high concentrations of iron.34 In addition to buildings constructed on celestial bodies, spacecraft and facilities constructed in space and on celestial bodies are also considered to be the territory of the owning nation, which means that the UN Charter applies to facilities and spacecraft in space and on celestial bodies. UN Charter Article 2(4), in particular, protects space explorers and potential future residents on Mars by prohibiting the "use of force against the territorial integrity" of another nation party to the treaty,35 which all space-faring nations are. Article 51 further dictates that if attacked, "the inherent right of . . . self-defense" shall not be impaired.36 Article V of the Outer Space Treaty prescribes that, in space, all humans are bound to "render all possible assistance to" each other as "envoys of Mankind."37 Essentially, a peaceful international course is possible—even mandated—for human expansion into space. Unfortunately, the PRC and the RF regard space and celestial bodies as territorial goals,38 leading to the assumption that attempts will be made to control and defend such territories as necessary to achieve space superiority, control over space resources, and managerial power over the future colonization of Mars. Control over Mars, in addition to affecting resource exploitation, transportation, and scientific advancements, also has implications for the direction of humanity in space. Establishment of a human colony, or human colonies, on Mars will eventually lead to territorial spaces, development of the land and air (potentially involving terraforming the planet for atmospheric enhancement), and security issues. While an established colony on the Red Planet is still likely decades away, trends within the PRC and RF governments suggest that any established colony on Mars under their jurisdiction would be authoritarian, weaponized, and secret. Given the nature of weather on Mars, fortified structures are easily justified, and the lack of a conventional weapons ban on celestial bodies makes weaponization of such a colony both legal and desirable, mainly because of the third inherently desired factor—secrecy. The inevitability of PRC and RF presence on Mars also suggests that any US developments will also include fortifications and weaponization. While the Outer Space Treaty mandates cooperation between nations on celestial bodies, the extreme distance between Earth and Mars means that a compliance verification system with effective monitoring and enforcement will be complicated, if not impossible, for the foreseeable future. For these reasons, a nation that effectively controls near-Earth space and establishes a security presence on the Moon will effectively be in a position to control Mars. Part 4: Space Control Celestial bodies are not the only potential fields of conflict in space, and in the short term, space itself has become a much more immediately relevant focus for spacefaring nations and the world. This is particularly the case in the vicinity of Earth, including orbital paths for communication technologies, weapon platforms, and sensors. Technological improvements and the proliferation of nation-state and private sector interest and capacity to enter space are causing the acceleration of an inevitability—usable orbital space around Earth is diminishing.39 Satellites and other spaceborne assets orbiting Earth are quickly filling up all of the most useful places to perform their assigned functions within Earth's various orbits, and space debris is complicating matters even further. Increasing numbers of space objects are causing difficulty in establishing safe orbital paths for newly launched spacecraft while increasing the risk to launches destined for deep space.40 Adding to these complications are international developments of ASAT weapons, many of which add to the more than 500,000 pieces of space debris traveling as fast as 17,500 mph41 already orbiting Earth.42 ASATs in use and under development include essentially two broad areas: kinetic energy (KE), such as missiles and rail guns, which impact targets in space; and directed energy (DE), which includes lasers, particle beams, and cyber weapons.43 The Outer Space Treaty, while prohibiting nuclear weapons from being used in any way in space including being stationed in space, "has no specific provision prohibiting the use of conventional weapons, [including lasers], in outer space,"44 which inherently authorizes them. The Outer Space Treaty also contains no prohibition of such weapons being stationed on space-based platforms, including on celestial bodies, or of them being used to target objects on Earth, in space, or on celestial bodies.45 In other words, these weapons are legal in every way, regardless of the potential damage they can cause to international stability and humanity. There are, however, multiple ongoing debates over the nature, definitions, and classifications of several kinds of ASATs currently in operation or in developmental phases. Nearly every KE ASAT results in a large amount of space debris, which causes an abundance of future and immediate problems for space activities, including endangerment of the basic military and commercial functions of satellites for the Global Positioning System (GPS), communications, and recreation. Space debris is therefore a highly undesirable side effect for any nation to risk and potentially dangerous to the integrity of a nation's armed forces. David Koplow addresses this issue in a substantially relevant and logical way in his article “An Inference about Interference: A Surprising Application of Existing International Law to Inhibit Anti-Satellite Weapons.” His stated thesis is as follows: “The [National Technical Means] NTM-protection provisions of arms control treaties already prohibit the testing and use of destructive, debris-creating ASATs, because it is foreseeable that the resulting cloud of space junk will, sooner or later, impermissibly interfere with the operation of another state's NTM satellite, such as by colliding with it or causing it to maneuver away from its preferred orbital parameters into a safer, but less useful, location.”46 By "interfering" with these NTM verifications mandated by multiple treaties, Koplow suggests that intentional actions creating space debris are already outlawed by international law, and that the development of debris creating KE ASATs should cease and be banned immediately.47 Laser weapons, particle beams, and weapons containing depleted uranium are also under debate due to their radioactivity as well as nuclear processes used for some of their operations. Some posit that nuclear activities or materials within a weapon system should constitute classifying them as nuclear weapons, thereby outlawing them in space per the Outer Space Treaty's nuclear weapons ban.48 Advocates for these weapons declare that the weapons are not nuclear. Of the three primary types debated, laser weapons use a nuclear or chemical reaction process to fire a radioactive beam, particle beams rapidly fire atomic charged particles at a target, and hypervelocity rod bundle weapons and railguns use depleted uranium as ammunition.49 Finally, the potential exists for the use of a nuclear explosion in space designed to generate an electromagnetic pulse (EMP) attack on an Earth target, which the RF "has worked on developing" in the form of an “EMP ASAT.”50 With the RF’s recent developments in ASATs and its stated intent “to station weapons in space,”51 the complete weaponization of space by the RF and other nations—including the US and the PRC—is inevitable. The RF and PRC are aggressively pursuing ASAT weapon advancements and preparing for space combat operations, including the RF recently fielding a "ground-based laser weapon" even as it publicly advocated for space not to be weaponized.52 Part 5: The Future of Space Space exploration converges on two of Sun Tzu's concepts of the strategic battlespace: “open ground” and the “ground of intersecting highways.” The former consists of areas where all sides have "liberty of movement" and the latter of areas where "contiguous states" converge.53 On open ground, Sun Tzu advises not "to block the enemy’s way," and on intersecting grounds he suggests to "join hands with your allies.54 Space is essentially a combination of these types of ground, where all nations are contiguously connected, and yet it consists of a legally recognized area of free movement for all persons and nations. Interestingly, Sun Tzu’s The Art of War, written over 2,000 years ago, advocates indirectly for peaceful human expansion into space, where allied nations proceed forth together while intentionally avoiding negative engagements with potential adversaries. This ancient concept of human cooperation and peaceful coexistence is also consistent with the Department of Defense's (DOD) and intelligence community's (IC) National Security Space Policy55 and the National Space Policy of the United States of America.56 Executive Order (EO) 13914, signed on 6 April 2020, clarifies the position of the US government that while international cooperation in space exploration is essentially mandatory, America "does not view [space] as a global commons,"57 reiterating that the Outer Space Treaty does in fact protect the individual interests of nations in space, including the right to self-defense. The policy further clarifies the intent of the United States to harvest materials from celestial bodies and strengthens the implied relationships with both the international community and the private sector concerning space exploration and related developments.58 By combining these principles, this renewed position on space developments further complements Sun Tzu’s ideas of the strategic battlespace in relation to the space domain moving into the future, regarding space as an area that can be used and exploited by everyone, but acknowledging that claims, defense, and security are also going to be essential factors in the way mankind moves forward in the space domain. In addressing the impact of space exploration, and the subsequent superiority gained by the PRC, the RF, or the US in the process, it is important to recognize the three principle issues of the strategic space environment outlined in these national policies: congestion, contestation, and competitiveness. The US IC is mandated by section 1.1 of EO 12333 to "provide . . . the necessary information on which to base decisions concerning the development and conduct of foreign, defense, and economic policies, and the protection of United States national interests from foreign security threats,"59 which now include threats from space and threats toward US space assets. Congestion, contestation, and competitiveness in space now directly impact the IC's ability to effectively pursue its mandate under EO 12333 and must be addressed collectively to ensure the future national security of the United States on Earth and in space. Enhancing the space industrial base’s ability to innovate and participate in the expansion of humankind into space fosters a unique opportunity to share with, and benefit from, research and development initiatives related to activities in space. Combining private sector and government resources together has the potential to greatly accelerate advancements across a wide range of space assets—including spacecraft developments, zero gravity research, energy production, and weapon applications—all of which will help minimize the risks of congestion, contestation, and competitiveness. Congestion in space refers to objects, including active devices and dangerous debris, filling up the usable orbital paths used for government and commercial purposes, primarily satellites. It also applies to finite amounts of bandwidth and frequencies used for transmissions that are currently being exhausted by demand threatening to exceed supply.60 Congestion will also inherently refer to space traffic once an industry exists that requires transportation between the Earth and the Moon, as well as to physical locations for lunar and Martian resource exploitation facilities and extraction points and places to build and operate on celestial bodies, including the Moon and Mars. This will eventually include a significant focus on the colonization of Mars since large portions of the planet are unsuitable for human habitation due to terrain, radiation, meteoroids, and weather. Short-term intelligence and counterintelligence impacts from the congestion of near-Earth space consist of primarily radio interference, protecting satellites from becoming compromised, effective deployment and concealment of collection platforms, and ensuring the integrity of protected information in transit.

Sharing space in accordance with Sun Tzu’s ancient wisdom does not mean ceding it, and while space debris is the primary factor in congestion, contestation is becoming an issue due to potential adversarial ASATs. Contestation is an anticipated inevitability and one that will grow exponentially as more nations enter space and with further developments and potential use of ASATs, either in war, by accident, or for other reasons. Murphy’s Law applies, even in space. Currently, competitiveness is driving both the potential for contestation as well as the congestion in near-Earth space. Commercial and multi-governmental competition is increasing for space-related research and development, deployment of assets, and physical space for occupation by those assets. Intelligence agencies in many nations, including allies and adversaries of the US, are now advancing the deployment, use, and decision advantages of spaceborne intelligence assets, including space-based surveillance and weapons platforms. Reasserting US superiority over the space environment is vital to the continuation of American leadership on Earth and the effectiveness of IC assurance of national security through space superiority. American leadership in space exploration is the only way to ensure that humanity's expansion into the stars is undertaken with the ideologies of liberty and free-market economics leading the way.

America’s leadership in ingenuity and technological developments, combined with free-market capitalism, has transformed the face of the world for more than two centuries. Its leadership has created the environment necessary to explore game-changing space technologies. These technologies will revolutionize the entire space industry. For example, the Variable Specific Impulse Magnetoplasma Rocket (VASIMR) is an experimental electromagnetic thruster for spacecraft propulsion that will dramatically reduce travel time to Mars and other destinations.61 Commercial spacecraft like the Dream Chaser Cargo System will result in a private sector space travel industry, incentivizing space tourism and, potentially, a space cargo transportation industry. 62 In February 2020, the US Department of Energy announced a $50 million investment in fusion research and development projects across the country.63 One of these is the Plasma Science and Fusion Center at the Massachusetts Institute of Technology with the goal of keeping the United States at the forefront of fusion energy development.64 Another is the Fusion Technology Institute at the University of Wisconsin, which is focusing on advancing research in the field of helium-based fusion power production technologies on Earth.65 This technology will address finite terrestrial energy resources and production of 3He-based electricity from lunar regolith.

These are just a few examples of the future of space technology research and development, and such technologies were all made possible because of the structure of the American free-market system. The biggest challenge for the IC will be to balance President Dwight Eisenhower’s vision with Sun Tzu’s battlefield strategies. Eisenhower understood in 1958 that “through [space] exploration, man hopes to broaden his horizons, add to his knowledge, [and] improve his way of living on earth.”66 Sun Tzu knew that “all warfare is based on deception,” “the highest form of generalship is to balk the enemy's plans,” and the greatest fighters “put themselves beyond the possibility of defeat” to achieve victory.67 American leaders participating in seizing and maintaining US space superiority shoulder this responsibility and must forge a new path forward that enhances human life on Earth, denies the possibility of victory to US adversaries, and ensures the integrity and security of American assets in the space domain as the world moves forward together into the future.

#### The plan creates a restriction that encourages companies to move their operations to states with lower standards

Albert 14 [(Caley Albert, J.D. Loyola Marymount University) “Liability in International Law and the Ramifications on Commercial Space Launches and Space Tourism,” Loyola of Los Angeles International and Comparative Law Review, 11/1/14, <https://digitalcommons.lmu.edu/cgi/viewcontent.cgi?article=1708&context=ilr>] TDI

A parallel can be drawn here between the commercial space industry and the maritime law concept of the Flag of Convenience. The term has evolved over time, but in this day and age, it is commonly used to mean the owner of a vessel does not want to create an obligation with a country with stricter standards for registry; hence, the owner will register strictly for economic reasons with a country that has a more convenient registry.133 By flying a Flag of Convenience, ship owners are able to avoid taxation on earnings of ships registered under these flags, and in some cases, they can also receive relief from stricter crew standards and corresponding operating costs.134 A Flag of Convenience is flown by a vessel that is registered in one state, which the vessel has little if any connection to, when in reality the vessel is owned and operated from another state.135 This way the vessel avoids any unfavorable economic requirements from its true home state.136 In this sense, “flag shopping” is similar to “launch forum shopping,” similar in that Flags of Convenience are utilized for economic reasons, such as to avoid high taxes and compliance with certain restrictive international conventions, commercial space companies will forum shop when choosing which country to launch from. As of today, there has yet to be a catastrophic commercial launch incident, so for now commercial space companies do not have an incentive to forum shop, but if there is, the indemnification policies described above may lead companies to seek out countries that provide more coverage so they pay less in the event something goes wrong. This comparison to Flags of Convenience brings up two separate yet equally important issues. First, launch companies may try to follow the Flags of Convenience model and soon catch on to the wisdom of their maritime predecessors by “registering” in countries with more favorable conditions. Of course, in this case the concern is not with registration so much as launching. If launch companies follow the Flags of Convenience model, they will seek out the most convenient state for launch, most likely the state that provides the most liability coverage and has the least safety precautions. Launching from states with low safety standards increases the potential for catastrophic launch events. This, in turn, will place states that are potentially incapable of paying for damages from launch disasters in a position they would not normally assume if these commercial companies had not been drawn to their shores with the promise of more favorable regulations. Second, launch customers may also seek out companies located in states with lower cost liability regimes (lower insurance policy limits) since those companies will presumably charge less to launch their payloads. In this scenario, instead of the launch companies seeking out states with lower liability caps and softer regulations, the launch customers themselves will seek companies located in states with lowcost liability regimes. Here, the effect will be the same as above. Under the Liability Convention, the launching state will be liable for any damage caused by a vehicle launched from within its borders; hence, if customers start engaging in “launch forum shopping,” states will be incentivized to put in place low-cost liability regimes, which in turn will increase the states’ potential payout in the event of a catastrophic launch incident. Looking at the indemnification program the United States has in place in comparison to other countries, it is possible to see how either launch companies or launch customers could engage in “launch forum shopping” when a catastrophic launch incident ever occur. It is also important to keep in mind that various factors go into where a company or customer decides to launch from. A state’s indemnification program is just one factor in this decision. With this in mind, it is clear that if a launch incident did occur in the United States, the commercial launch company would be liable for much more than it would in another country. For instance, why would a commercial space company launch in the United States, where it would be liable up to $500 million and the additional costs that the government would not cover? The argument can be made that a catastrophic space incident has yet to occur, and even if it did, it is unlikely to cost above the $2.7 billion covered by the United States government. Other states like Russia or France, which has the two-tier liability system, would simply cover all claims above the initial insurance, which is much lower than the $500 million mark required by the United States. In that case, the commercial company would never have to pay more than the initial liability insurance. If there ever is a catastrophic commercial space incident in the future, it is easy to see why commercial companies or launch customers might be drawn to “launch forum shop” outside the United States.

#### Maintaining US space dominance requires a homegrown commercial space industry – private companies offshoring gives China the advantage they need

**Cahan and Sadat 1/6** [(Bruce Cahan, J.D) (Dr. Mir Sadat, ) "US Space Policies for the New Space Age: Competing on the Final Economic Frontier," based on Proceedings from State of the Space Industrial Base 2020 Sponsored by United States Space Force, Defense Innovation Unit, United States Air Force Research Laboratory, 1/6/21, https://www.politico.com/f/?id=00000177-9349-d713-a777-d7cfce4b0000] TDI

Today, China’s commercial space sector is in its infancy but is set to grow with continued national and provincial support, which have been rapidly increasing over the past three years.64 Since 2004, the United States and China accounted for 74% of the $135.2 billion venture capital (VC) invested in commercial space. 65 The early 2020s are pivotal, as it would be far cheaper for China and Chinese commercial space firms to acquire space technologies from the United States or allied nation companies seeking revenues or facing cashflow constraints, than to build the companies and their teams and technologies from scratch in China. The tight coupling of Chinese military goals and an economy organized to achieve those goals magnifies the economic threats and market disruptions that the United States must immediately address, in order for DoD and national security operations to rely on US commercial space capabilities.

3. ISSUES AND CHALLENGES

Peaceful Uses of Space and Space Exploration Space has been primarily a shared, not a warfighting, domain.67 With each passing second of Planck time,68 space enables a modern way of life, provides instantaneous global imagery, assures telecommunications, and captures humanity’s imagination for civil space exploration. As a result, space is a burgeoning marketplace and territory for commercial ventures and investors. Strengthening the US commercial space industrial base is vital to and beyond US national security. Civil space activities are a source of US “soft power” in global commerce, cooperation, and investment. 69 The civil space sector, led by NASA, is fundamental to America’s national security. 70 NASA is on an ambitious critical path to return to the Moon by 2024,71 along with developing the capabilities and infrastructure for a sustained lunar presence. NASA’s lunar plans provide a lunar staging area for missions to Mars and beyond. They offer a strategic and economic presence for the United States on the Moon. Congress, the White House, DoD, and NASA must recognize that economic and strategic dominance in service of national security requires catalyzing and accelerating growth of a vibrant, private US industrial and cultural expansion into the Solar System. Human visitation and eventual settlement beyond the Earth require sustaining visionary leaders, aided by, and aiding, US national security. A recurring theme in US policy is “maintaining and advancing United States dominance and strategic leadership in space” because US global competitors and adversaries are competent and capable of outpacing American space capabilities. 72 The stakes are high: At this historic moment, there is a real race for dominance over cislunar access and resources.   
Regulations Should Foster US Commercial Space as a National Asset   
Leveraging the reimagination and disruption of terrestrial industries, the US commercial space industry is pushing the frontiers of the United States and global space economics and capabilities. A pre-COVID19 assessment by the US Chamber of Commerce projected that the US space market will increase from approximately $385 billion in 2020, to at least $1.5 trillion by 2040. 73 This projection represents a seven percent (7%) annual compound average growth rate (CAGR), driven largely by expanded business opportunities in Low Earth Orbit (LEO). Total addressable market (TAM) for US commercial space companies could be far larger were they to have federal and financial support for initiating cislunar space operations and opportunities. Recent advancements in commercial space technologies and business models have driven down costs and unlocked new areas of economic growth and space capabilities that outpace and de-risk acquiring capabilities through traditional US government economic development, research and development (R&D), procurement and regulatory policies and processes. US regulations must ensure that US companies lead in commercial space. In specific, technological advances that lower access costs and expand space mission capabilities, content, continuity, and redundancies must be fully supported by or incorporated into US government programs, budgets, requirements, and acquisition processes. Until commercial space offerings are fully incorporated, and federal acquisition policies and personnel commit to innovation, US government fiscal buying power, intelligence and program support will lag and remain inadequate in comparison to US private sector companies and the nation’s global competitors and adversaries in space.

Addressing COVID-19’s Impact on US Commercial Space The COVID-19 pandemic damaged and still challenges the US space industrial base. US domestic investors’ funding of space R&D remains inconsistent across the lifecycle of New Space companies and the spectrum of technologies necessary to grow the space economy. To date, public R&D, government procurements and visionary space entrepreneurs have played a major role in establishing and funding the New Space industrial base. In the last five years, $11 billion of private capital has been invested.74 Traditional private investors may become reluctant to fund space technologies due to perceptions of higher risk over longer time horizons before receiving profitable returns on their capital. Institutional and long-horizon investors who manage patient capital have an appetite for illiquid, but higher yielding, terrestrial alternative asset investments such as commodities, private equity limited partnerships and real estate.75 The COVID-19 pandemic has created economic uncertainties making the New Space’s funding model unreliable. COVID-19 significantly impacted venture capital (VC)-backed companies: the pace of VC space investments fell 85% between April - June, as compared to January – March, in 2020. 76 Pre-COVID-19, the New Space industrial base confronted multiple challenges in raising later stages of venture capital such as (1) the lag between having an early-stage startup with an idea and commercializing a viable revenue-generating product, (2) the lack of market liquidity for founder and private equity space investments to attract and retain talented teams, and (3) the lack of a market to re-sell contracts for space goods and services when customers buy more capacity than needed. Even prior to the COVID-19 pandemic, federal financing of US R&D was at a historically minor level, as compared to businesses and universities.77 US government support for basic research has steadily declined as a percent of GDP. The federal government will experience near- to medium-term budget constraints.78 The vibrant venture community in the United States has taken up a portion of this slack by increasing R&D investment in later-stage and applied research. However, founding teams and VC financing rely on government to fund earlier R&D for basic science and engineering. Therefore, government must resume the sustainable and impactful past levels of support for basic research, an essential role in the space economy’s public-private partnership that ensures US leadership in space.

Space as Existential Terrain for National Security  
  
In this Digital Era, space integrates and drives all elements of US national security. The Cold War may be over, but since the early 2010s, a renewed era of great power competition has emerged across terrestrial land, air, sea, and cyber domains. This competition extends into space, where a great game ensues.79 Space is no longer an uncontested or sanctuary domain. Competent and capable global competitors and peer adversaries are challenging US military, commercial, and civil space interests. The United States, along with its allies and partners, has had to accept and anticipate that space may be a warfighting domain, as suggested primarily by Russian and Chinese counter-space capabilities, military operations, and declarative statements. On December 20, 2019, the bipartisan National Defense Authorization Act (NDAA) for Fiscal Year 202080 authorized the creation of the US Space Force, under the Department of the Air Force, to secure US national interests in an increasingly contested domain.81 Back in October 1775, the Continental Congress established the US Navy to ensure that commercial and government fleets could freely navigate the Atlantic coastline - today, that includes the South China Sea. Likewise, the USSF’s mission is to ensure unfettered access to and the freedom to operate in space. The 2017 National Security Strategy considers space to be a “priority domain.”82 Freedom of navigation is a sovereign right that nations have fought to achieve and defend. 83 The USSF’s main role is to organize, train and equip, as well as to protecting US space interests and supporting terrestrial and joint warfighters (e.g., US Space Command). Thus, USSF must secure US national interests in space, whether military, commercial, scientific, civil, or enhancing US competitiveness for cislunar leadership.

**Space dominance solves nuclear war. Hegemony de-escalates all conflict scenarios – specifically miscalc.**

**Yoo 18** [(Emanuel S. Heller Professor of Law at the University of California, Berkeley, and a visiting scholar at AEI since 2003. He served as a deputy assistant attorney general in the Office of the Legal Counsel of the U.S. Department of Justice from 2001 to 2003, where he worked on constitutional and national security matters, as General Counsel of the U.S. Senate Committee on the Judiciary from 1995-96, and as a law clerk to Justice Clarence Thomas of the U.S. Supreme Court (John, Winning the Space Race, October 15th, <http://www.aei.org/publication/winning-the-space-race/>)] \*edited for offensive language

President Donald Trump’s National Security Strategy set a new course by focusing on rebuilding the domestic economy as central to national security and aiming at “rival powers, Russia and China, that seek to challenge American influence, values, and wealth.” Critics observed that the White House seemed to reverse past presidents’ emphasis on advancing democracy and liberal values and elevating American sovereignty over international cooperation.1

Less noticed but perhaps equally revisionist, the Trump administration reversed its predecessor’s course on outer space. Even as American military and civilian networks increased their dependence on satellites, the Obama White House had deferred to European efforts to develop a space “Code of Conduct.” The Trump administration instead relies on unilateralism: “any harmful interference with or an attack upon critical components of our space architecture that directly affects this vital US interest will be met with a deliberate response at a time, place, manner, and domain of our choosing.” On June 18, 2018, President Trump announced a new branch of the military: the United States Space Force.

Control of space already underlies the United States’ predominance in nuclear and conventional warfare. Intercontinental and submarine launched ballistic missiles, the heart of the US nuclear

deterrent, pass through space to reach their targets. Reconnaissance satellites monitor rival nations for missile launches, strategic deployments, and major troop movements. Communications satellites provide the high-speed data transfer that stitches the US Armed Forces together, from generals issuing commands to pilots controlling drones. With economic rivals such as China and India, and rogue states like Iran and North Korea developing space programs that pursue similar missions, the importance of space technology to US interests and international peace will only increase.

Space not only enhances military operations, but also exposes new vulnerabilities. Anti-satellite missiles can make an opponent’s space-based communication networks easier to disable than purely ground-based systems. Losing reconnaissance satellites could blind gut the US’s strategic monitoring and disabling the GPS system would degrade its operational and tactical abilities. Space invites asymmetric warfare because anti-satellite attacks could even the technological odds against western powers that have become dependent on information-enhanced operations. As the nation most dependent on space-based networks, **the United States may have the most to lose.**

Strategists divide competition in this emerging arena into four categories. First is space support, which refers to the launching and management of satellites in orbit. The second is force enhancement, which seeks to improve the effectiveness of terrestrial military operations. The importance of these basic missions is well-established. Indeed, the very first satellites performed a critical surveillance role in the strategic competition between the United States and the Soviet Union. Spy satellites replaced dangerous aerial reconnaissance flights in providing intelligence on rival nuclear missile arsenals. Later space-based systems provided the superpowers with early warnings of ballistic missile launches. These programs bolstered stability and aided progress in nuclear arms reduction talks. Satellites created “national technical means” of verification: the capability to detect compliance with arms control treaties without the need to intrude on territorial sovereignty. They reduced the chances of human miscalculation by increasing the information available to decision makers about the intentions of other nations.

The US has made the most progress in the second mission, force enhancement, by using space to boost conventional military abilities. GPS enables the exact deployment of units, the synchronization of combat maneuvers, clearer identification of friend and foe, and precision targeting. In its recent wars, the US has used satellite information to find the enemy, even to the level of individual leaders, deploy on-station air or ground forces, and fire precision-guided munitions to destroy targets with decreased risk of collateral damage. American military leaders have argued that continued integration of space and conventional strike capabilities will allow the US to handle the twenty-first century threats—**terrorism, rogue nations, asymmetric warfare, and regional challengers**—more effectively with less resources.

The third and fourth space missions focus on space itself. Space control involves freely using space to one’s benefit while denying access to opponents. Conceptually akin to air superiority, space control begins with defense: hardening command, control, communications and reconnaissance facilities to prevent enemy interference. It includes shielding satellite components, giving them the ability to avoid collisions, disguising their location, and arming satellites to destroy attackers.2

Such forms of active defense can blend into the fourth mission: space force. Space force envisions weapons systems based in orbit that can strike targets on the ground, in the air, or in space. In an important respect, **space control and force application demand a greater exercise of power than air or naval superiority**. While air and naval superiority can be achieved through rapid deployment of assets for the duration of a conflict, dominance in space requires a broader geographic scope and longer-term duration—a constellation of space weapons would circle the globe for years.3It is in this realm that new weapons technologies are emerging, prompting questions of whether space-faring nations like the United States should treat space as another area for great power competition. “The reality of confrontation in space politics pervades the reality of the ideal of true cooperation and political unity in space, which has never been genuine, and in the near term seems unlikely,” argues Everett Dolman.4 The US certainly has taken such concerns to heart. In the decade ending in 2008, for example, the US increased its space budget from $33.7 billion to $43 billion in constant dollars. The entirety of this spending increase went to the Defense Department.

These weapons systems take several forms. Already operational, the US national missile defense system relies upon satellites to track ballistic missile launches and help guide ground-launched kill vehicles. Space-based lasers, like those in development by the US today, remain the only viable method to destroy ballistic missiles in their initial boost phase, when they are easiest to destroy.

American reliance on space-based intelligence and communication for its startling conventional military advantages has made its satellites a **target of potential rivals**. In 2007, for example, China tested a ground-launched missile to destroy a weather satellite in low earth orbit—the same region inhabited by commercial satellites. “For countries that can never win a war with the United States by using the methods of tanks and planes, attacking an American space system may be an irresistible and most tempting choice,” Chinese analyst Wang Hucheng has written, in a much-noticed comment.5

Though the 2007 ASAT (Anti-satellite weapon) test sparked international controversy, China had only followed the footsteps of the superpowers. The United States had carried out a primitive anti-satellite weapon test as early as 1959. During the Eisenhower, Kennedy, and Johnson administrations, the US continued to test anti-ballistic missile systems in an anti-satellite role. The Soviet Union followed suit. The superpowers temporarily dropped these programs with the signing of the Anti-Ballistic Missile Treaty of 1972, only to restart them in the 1990s. As rivals and rogue nations begin to mimic American development of force enhancement and space control abilities, the US will naturally develop anti-satellite weapons to restore its advantage and deter attacks. Such anti-satellite weapons may become even more common due to the vulnerability of satellites and the spread of ballistic missile technology.

Critics question whether the benefits of space weapons are worth the possibility of strategic instability. They argue that only arms control agreements and international institutions can head off a disastrous military race in space. But space will become an arena for pre-emptive deterrence. Every environment—land, air, water, and now space—has become an arena for combat. The US could deter destabilizing space threats from rivals by advancing its defensive capabilities. Some realist strategists argue not just in favor of protecting US space assets, but seeking US space supremacy. Because great power competition has already spread to space, the United States should capitalize on its early lead to control the ultimate high ground, that of outer space.

Criticisms of space weapons overlook the place of force in international politics. Advances in space technology can have greater humanitarian outcomes that outweigh concerns with space weapons themselves. Rather than increase the likelihood of war, space-based systems reduce the probability of destructive conflicts and limit both combatant and civilian casualties. Reconnaissance satellites reduce the chances that war will break out due to misunderstanding of a rival’s deployments or misperception of another nation’s intentions. Space-based communications support the location of targets for smart weapons on the battlefield, which lower harm to combatants and civilians. Space-based weapons may bring unparalleled speed and precision to the strategic use of force that could reduce the need for more harmful, less discriminate conventional weapons that spread greater destruction across a broader area. New weapons might bring war to a timely conclusion or even help nations **avoid armed conflict in the first place**. We do not argue that one nation’s overwhelming superiority in arms will prevent war from breaking out, though deterrence can have this effect. At the very least, space weapons, like other advanced military technologies, could help nations settle their disputes without resort to wider armed conflict, and hence bolster, rather than undermine, international security.