## 1

#### Interp: The affirmative may only garner offense from the hypothetical defense of that the appropriation of outer space by private entities is unjust and may not garner any offense external to that.

#### Resolved indicates a policy action.

Parcher 1. [Jeff. 2/26/01. “Re: Jeff P--Is the resolution a question?” <https://web.archive.org/web/20050122044927/http://www.ndtceda.com/archives/200102/0790.html>] Justin

(1) Pardon me if I turn to a source besides Bill. American Heritage Dictionary: Resolve: 1. To make a firm decision about. 2. To decide or express by formal vote. 3. To separate something into constiutent parts See Syns at \*analyze\* (emphasis in orginal) 4. Find a solution to. See Syns at \*Solve\* (emphasis in original) 5. To dispel: resolve a doubt. - n 1. Frimness of purpose; resolution. 2. A determination or decision.

(2) The very nature of the word "resolution" makes it a question. American Heritage: A course of action determined or decided on. A formal statemnt of a deciion, as by a legislature.

(3) The resolution is obviously a question. Any other conclusion is utterly inconcievable. Why? Context. The debate community empowers a topic committee to write a topic for ALTERNATE side debating. The committee is not a random group of people coming together to "reserve" themselves about some issue. There is context - they are empowered by a community to do something. In their deliberations, the topic community attempts to craft a resolution which can be ANSWERED in either direction. They focus on issues like ground and fairness because they know the resolution will serve as the basis for debate which will be resolved by determining the policy desireablility of that resolution. That's not only what they do, but it's what we REQUIRE them to do. We don't just send the topic committtee somewhere to adopt their own group resolution. It's not the end point of a resolution adopted by a body - it's the prelimanary wording of a resolution sent to others to be answered or decided upon.

(4) Further context: the word resolved is used to emphasis the fact that it's policy debate. Resolved comes from the adoption of resolutions by legislative bodies. A resolution is either adopted or it is not. It's a question before a legislative body. Should this statement be adopted or not.

#### “Is unjust” can require positive action to rectify the injustice

Pomerleau [Wayne, PhD, Professor of Philosophy at Gonzaga] “Western Theories of Justice”, IEP, <https://iep.utm.edu/justwest/>, last date cited is 2010, RE

Nozick (a departmental colleague of Rawls at Harvard) was one of the first and remains one of the most famous critics of Rawls’s liberal theory of justice. Both are fundamentally committed to individual liberty. But as a libertarian, Nozick is opposed to compromising individual liberty in order to promote socio-economic equality and advocates a “minimal state” as the only sort that can be socially just. In Anarchy, State, and Utopia (1974), especially in its famous chapter on “Distributive Justice,” while praising Rawls’s first book as the most important “work in political and moral philosophy” since that of Mill, Nozick argues for what he calls an “entitlement conception of justice” in terms of three principles of just holdings. First, anyone who justly acquires any holding is rightly entitled to keep and use it. Second, anyone who acquires any holding by means of a just transfer of property is rightly entitled to keep and use it. It is only through some combination of these two approaches that anyone is rightly entitled to any holding. But some people acquire holdings unjustly—e.g., by theft or fraud or force—so that there are illegitimate holdings. So, third, justice can require the rectification of unjust past acquisitions. These three principles of just holdings—“the principle of acquisition of holdings, the principle of transfer of holdings, and the principle of rectification of the violations of the first two principles”—constitute the core of Nozick’s libertarian entitlement theory of justice. People should be entitled to use their own property as they see fit, so long as they are entitled to it. On this view, any pattern of distribution, such as Rawls’s difference principle, that would force people to give up any holdings to which they are entitled in order to give it to someone else (i.e., a redistribution of wealth) is unjust. Thus, for Nozick, any state, such as ours or one Rawls would favor, that is “more extensive” than a minimal state and redistributes wealth by taxing those who are relatively well off to benefit the disadvantaged necessarily “violates people’s rights” (State, pp. 149, 183, 230, 150-153, 230-231, 149).

#### Violation: cross

**Limits – aff gets to choose literally anything they want, which justifies infinite variations of affirmatives that are impossible for the neg to prep against, ensuring they’ll always be ahead and use competition standards like perms to erase neg ground. Key to fairness since we need to predict arguments to be able to make viable responses. Additionally, cutting negs to every possible aff wrecks small schools, which has a disparate impact on under-resourced and minority debaters – kills inclusion which is a prerequisite to engaging in your method and turns case.**

#### Impacts:

#### 1] Procedural fairness is a voter and outweighs—a) intrinsicness—debate is a game and equity is necessary to sustain the activity b) probability—debate can’t alter subjectivity, but it can rectify skews c) metaconstraint—all your arguments concede fairness since you assume they will be evaluated fairly

#### 2] Topical version of the aff – end the commercialization of space. Use sufficiency when evaluating the TVA because all deficits are neg ground.

#### 3] Switch Side Debate – they can read it as a K against affirmatives – proves they can still research and cut the exact same argument but it forces debaters to consider issues from multiple perspectives. Non-topical affs allow individuals to establish their own metrics for what they want to debate leading to dogmatism.

#### 4] T creates the legal education key to understand the law’s strategic reversibility paired with intellectual survival skills.

Archer 18 (Deborah N., Associate Professor of Clinical Law @ NYU School of Law, “POLITICAL LAWYERING FOR THE 21ST CENTURY,” draft, pp. 1-43) \*Edited\*

Many law students are overwhelmed by injustice. When faced with the reality of systemic inequities, even the most committed students may surrender to hopelessness, despair, and inaction. This is not because they have stopped caring about injustice, but because they cannot envision a path from injustice to justice. Many do not have the tools to navigate systemic injustice or respond to interwoven legal and social ills. This article contends that although clinical legal education provides an excellent opportunity to offer students the skills, experience, perspective, and confidence to grapple with today’s complex social justice issues, it has not sufficiently responded to the changing educational needs of our students by teaching law students how to most effectively utilize litigation alongside other tools of systemic reform advocacy. How can clinical education prepare law students to navigate issues of systemic discrimination and injustice? Clinical teaching’s signature pedagogical vehicle involves students providing direct representation of individual clients in straightforward, manageable cases in which students focus on discrete legal issues, take full ownership of the case, and see it through from beginning to end.1 These cases train students to be creative problem solvers for individual clients. However, this model does not effectively prepare students to address and combat structural or chronic inequality. The individualized model also provides relatively limited opportunities for students to address the intellectual and skills-based challenges of lawyering on a larger scale.2 Complex cases allow students to explore the complicated relationship between justice, law, and politics.3 They introduce students to many of the skills needed to integrate rebellious or political lawyering into their practice, including working with others to brainstorm, design, and execute an advocacy strategy; helping to build and participate in a coalition; engaging in integrated advocacy; and analyzing the outside forces that help shape outcomes, including organizational capacity, challenges of enforcement, and potential political backlash.4 There is a longstanding and ongoing debate within the clinical legal education community about the relative merits of small, individual cases versus larger impact advocacy matters.5 The parameters of this debate, coupled with an influential body of clinical scholarship criticizing impact litigation and the lawyers who bring it,6 have led the clinical teaching community to overreact to these critiques by moving farther away from impact advocacy and strategic litigation rather than working to reconcile the legitimate concerns with the critical importance of impact advocacy as a tool for both systemic social change and legal education. Law schools also face internal and external pressures that affect their willingness to engage students in strategic litigation. The result is that important benefits of impact advocacy and strategic litigation have gotten lost or minimized. Twenty years ago, social justice advocates rallied around political lawyering as a tool for more effective advocacy on behalf of marginalized communities.7 Political lawyering employs a systemic reform lens in case selection, advocacy strategy, and lawyering process, with a focus on legal work done in service to both individual and collective goals.8 While litigation is central to political lawyering, political lawyers recognize that litigation, interdisciplinary collaboration, policy reform, and community organization must to proceed together. Litigation is just one piece of a complex advocacy puzzle. However, clinical law professors have never fully grappled with how to employ this model.9 Law professors today seeking to train the next generation of social justice advocates should expose students to the transformational potential of integrated advocacy—strategic litigation, community organizing, direct action, media strategies, and interdisciplinary collaboration proceeding together—in the fight for social change. Political lawyering can serve as a model. The NAACP strategy of building comprehensive advocacy campaigns to challenge racial and economic injustice helped to launch the political lawyering movement in the last century.10 But political lawyering in the 21st century needs to do more. It needs to re-embrace and update the concept of integrated advocacy to help lawyers leverage a broad range of tools and perspectives to generate effective approaches to issues of injustice, both nascent and chronic. Charles Hamilton Houston, the architect of the strategy to challenge the racialized policy of “separate but equal,” whose life work challenged racial injustice in novel ways, famously explained that “a lawyer’s either a social engineer or he’s a parasite on society,” defining social engineer as a “highly skilled, perceptive, sensitive lawyer who understood the Constitution of the United States and knew how to explore its uses in the solving of problems of local communities and in bettering the conditions of the underprivileged citizens.”11 Law schools should set as an ambition teaching students to push boundaries in diagnosing and tackling the most pressing problems facing society. The Article proceeds in three parts. Part I discusses political lawyering and explores its potential to serve as a framework to teach students the legal and extra-legal advocacy skills necessary to tackle the complex challenges of systemic injustice and inequity. Part I also discusses the institutional barriers that limit the ability and willingness of legal educators to exploit the pedagogical potential of a political lawyering framework, including the idea that litigation is often harmful to the cause of justice because it puts the lawyer ahead of the community being served. Part I then examines whether the choice that clinical legal education makes to teach through small, single-issue cases rather than through more complex vehicles offers students sufficient opportunities to develop the array of skills needed for integrated advocacy. Part II describes the ways that clinical legal education can reframe political lawyering as political justice lawyering, both to adapt to the current environment—complicated by the current partisan political climate—and the contemporary challenges of social justice advocacy. It also explores pedagogic strategies that clinical legal educators can employ to train effective 21st century social justice lawyers. Finally, Part III presents a case study from my own teaching to elucidate the opportunities and challenges inherent in this approach to clinical teaching. I. POLITICAL LAWYERING AS A FRAMEWORK FOR LEGAL EDUCATION “Social vision is part of the operating ethos of self-conscious law practice. The fact that most law practice is not done self-consciously is simply a function of the degree to which most law practice serves the status quo. Self-conscious practice appears to be less important, and is always less destabilizing, when it serves what is, rather than what ought to be.” - Gary Bellow12 In 1996, the Harvard Civil Rights-Civil Liberties Law Review published a symposium on “political lawyering”: a model of social justice advocacy that integrates legal advocacy and political mobilization by linking courtroom advocacy to community education, mobilization, and organizing.13 The symposium, honoring Gary Bellow, a leading political lawyer of the time and one of the architects of clinical legal education, explored the potential for political lawyering to respond to the social justice challenges of the moment.14 At the time of the symposium, progressive scholars and activists believed that America was in a period of retrenchment on civil rights and were in search of sources of hope.15 In the face of waning public support for the poor and disenfranchised, both financially and philosophically, one of the biggest dangers social justice advocates faced was despair about the possibility of progress.16 Bellow contended that the nation’s ideological reconfiguration created a potentially debilitating doubt among lawyer-activists who, faced with declining avenues for change, had “embraced a far too constricted definition of both the possible and desirable in law-oriented interventions than is, in fact, dictated by the rightward turn of national and local politics.”17 With victory harder to achieve, he insisted that lawyers who embraced and reimagined political lawyering would advance the fight for equality more effectively. The purpose of political lawyering is not to advance a particular partisan agenda: It is to represent disenfranchised communities against the forces of oppression.18 While difficult to define precisely, political lawyers take a politicized and value-oriented approach to legal work done in service to both individual and collective goals,19 embracing “politics” in the classical sense as a concern “with what it means to be human; what is the best life for a human being; and . . . the ways in which we can order our living together so that good human lives will emerge.”20 Practically, political lawyers use a systemic reform lens in decisions about case selection, advocacy strategy, and the lawyering process. Political lawyers think about the relationship between law, politics, and justice21 and use the law to animate fundamental change in society, to alter the allocation of power and opportunity, and to enable those individuals and communities with little power to claim and enjoy their rights.22 Political lawyers also take advantage of opportunities to influence the perceptions and behaviors of those in power.23 Finally, political lawyers empower individuals and communities by providing them with competent legal advocacy,24 but do not confine themselves to one mode of advocacy in their quest for structural change. Instead, political lawyers use integrated advocacy strategies, including litigation, legislative advocacy, public education, media, and social science research, assessing the efficacy and impact of each tool in service to a long-term visions of equality and solidarity.25 A. A ROLE FOR POLITICAL LAWYERING IN CLINICAL LEGAL EDUCATION In his essay, Gary Bellow described several examples of his experience as a political lawyer.26 He reflected that: Certainly, if one focuses on the strategies employed in these examples, few uniformities emerge. In some of the efforts, we sought rule changes or injunctive relief against a particular practice on behalf of an identified class. In other situations, we pursued aggregate results by filing large numbers of individual cases. Some strategies are carried out in the courts. At other times we ignored litigation entirely in favor of bureaucratic maneuvering and community and union organizing. Even when pursuing litigation, we often placed far greater emphasis on mobilizing and educating clients, or strengthening the entities and organizations that represented them, than on judicial outcomes. And always, we employed the lawsuit, whether pushed to conclusion or not, as a vehicle for gathering information, positioning adversaries, asserting bargaining leverage, and adding to the continuing process of definition and designation that occurs in any conflict.27 The parallels between the challenges social justice lawyers faced in the 1980s and 1990s and those that law students committed to social justice 28 face today are evident. As discussed earlier, law students’ own despair about the enormity of the fight for justice can compromise their ability to recognize and tackle chronic injustice. Like the earlier generation of political lawyers Bellow described, many law students today find it difficult to believe in the possibility of change let alone its likelihood. Inexperience challenging systemic legal problems exacerbates their skepticism. They recognize that the advocacy tools they have learned are insufficient to solve today’s problems, which fuels their sense of doubt. To help expand their understanding of what may be possible, law students, particularly those interested in continuing the fight for racial justice, should be taught to understand and embrace the goals, strategies, and tools of political lawyering—re-imagined for current times. Clinical professors need not adopt political lawyering wholesale as the only or primary approach to teaching lawyering skills and legal advocacy. Indeed, one of the challenges social justice advocates face is unnecessarily limiting the understanding of what it means to be a good lawyer. Rather, clinical professors should explore political lawyering as one framework they can use to help struggling law students find direction and inspiration, as well as to create a sense of connection to the work of the social justice lawyers who preceded them. As Gary Bellow wrote: Doubt and defeatism, the sense of overly pessimistic assessments of action possibilities, are recurrent experiences in oppositional politics, whomever the political actors may be. They require hard-headed assessments of what works and why; a willingness to relinquish strategies and goals born of different possibilities and particularities. . . . Doubt and defeatism produce powerful spirals that can only be broken by acts of will and leaps of faith.29 To be an effective political lawyer, an advocate must have a “profound willingness and ability to learn about and respond to the complexity of real human beings in ever-shifting legal, economic, and social worlds.”30 So, while political lawyering is certainly grounded in effective legal advocacy, it demands more than conventional legal skills. The political lawyer values deep personal involvement as a necessary component in addressing and tackling legal issues. That personal engagement can take many forms, but, at a minimum, involves countless conversations, collaborative brainstorming, comparing shared experiences, and adding empathy and commonality to enhance the legal analysis and political judgment.31 It also requires lawyers to advocate with a clear vision of what justice looks like because effective political lawyering “reache[s] not only across large numbers of people, but from the present into some altered version of the future.”32 Learning to combine savvy legal analysis with broad engagement, a deeper understanding of the complexity of the problems faced by impacted communities, and envisioning an altered and more just future can help lead to real solutions and overcome passivity and ~~paralysis~~.33 The Civil Rights Movement, with its blended advocacy strategies, pulling a variety of levers to enable immediate or systemic change, offers one example of political lawyering. Visionary leaders helped give voice to the frustrations and demands of the community, while other leaders acted as tacticians to devise, plan, and coordinate the strategy.34 There were sustained and strategic protests to draw public attention to injustices, demand change, and apply political pressure. The strategic use of litigation led gradually to the establishment of the building blocks for systemic change. Finally, civil rights lawyers worked to enshrine litigation victories in legislation.35 While the goal of political lawyering is to empower and advance the rights of disadvantaged communities, the lawyers who engage in it also reap significant benefits. One scholar effectively articulated some of these benefits utilizing religious terms, asserting that political lawyering can provide hope and direction to advocates by providing a “faith”—“a story, an account of a rational hope that provides people with an image and principles for realizing the sort of lives they ought to live.”36 Political lawyering can also provide what Christians refer to as a “gospel”—a story that explains and inspires.37 The faith and gospel of political lawyering can help lead law students who are overwhelmed by injustice to a place of deeper understanding and more effective advocacy. But law students must learn how to understand, articulate, and deploy that faith and gospel in service of others. B. INSTITUTIONAL CONSTRAINTS ON POLITICAL LAWYERING Complex social justice problems offer robust opportunities to teach students about the law and lawyering, and legal clinics serve as an important vehicle to bring that set of issues and experiences into the classroom.38 As law schools reevaluate the nature and function of legal education in light of market forces,39 they should also give attention to the role of justice in the curriculum and the potential for law school clinics to be centers for incubation of new and evolving models of lawyering. By embracing political lawyering and encouraging engagement on complex and novel social justice issues, clinical legal education can operate as a “generator of new visions for legal practice” on behalf of poor and marginalized communities.40 Of course, that choice is not without hurdles or concern. 1. Ideological, Financial, and Pedagogical Pressures When clinical and experiential learning programs have moved away from an access to justice model—with a focus on the immediate challenges facing individual clients—to a broader social justice model focused on systemic reform and community empowerment, they have often encountered criticism from inside and outside of the legal academy.41 First, critics have raised concerns that integrated advocacy in support of systemic reform may elevate the profile of faculty and law schools but detract from an appropriate focus on the educational goals of individual students.42 Others have identified the potential for violating the separation between pedagogy and partisan politics.43 And still other critics have identified a risk that faculty will impose their personal political perspectives on their students.44 As discussed in more detail below, integrated advocacy strategies can, in fact, serve as valuable clinical teaching tools that promote broader student learning and support important pedagogical goals. By contrast, exclusive reliance on individual representation offers limited opportunities to teach essential lawyering skills, including the skills critical to identifying and challenging systemic injustice.45 Every clinical program makes a political decision in deciding which cases to take or not to take, as each decision has political implications.46 Accepting cases in criminal justice, immigration, environmental justice, and international human rights, for example, involves political choices, regardless of whether the issues are addressed through individual representation or systemic reform efforts.47 Clinics will continue to represent individual clients who are the victims of poverty, discrimination, and disenfranchisement. These cases do not suddenly become inappropriate teaching tools because the lawyer aggregates those claims and utilizes complementary strategies to seek systemic, community-wide redress. Lawyers must be free to use all available means to challenge the marginalization of their clients, including strategic litigation, legislative advocacy, and other advocacy strategies designed to achieve systemic reform. If law schools intend to fulfill their promise to prepare law students to tackle urgent and pressing challenges, then they must teach students to identify and address interlocking legal and social problems. Still, while law schools have educational ambitions, they also face financial demands that might affect their educational choices. In fact, those financial realities may motivate schools to avoid disputes that expose them to financial risk and to a potential loss of good will that a clinic’s involvement in controversial cases might occasion.48 While that institutional concern certainly has merit, it is not unique to political lawyering on behalf of clients. Whenever a law school chooses to represent clients, there is the potential for someone to take issue with the school’s choice of side or client. Similarly, law schools may experience external pressures from government, private entities, donors, and alumni to prevent the use of law school resources to challenge powerful corporate or government interests.49 These critiques evoke the successful challenge to Legal Services Corporations engaging in class action litigation on behalf of their clients50 and the long history of efforts to limit the means through which clinics can represent their clients.51 History is replete with examples of external attacks on law schools’ clinical efforts. From the 1968 attack by state legislators on the clinical program at the University of Mississippi School of Law over its involvement in a school desegregation suit,52 to the early 1980s threats to limit the activities of the University of Connecticut’s criminal defense clinic after the clinic successfully challenged a provision of the state’s death penalty statute,53 to the 2017 decision of the University of North Carolina Board of Governors to defund the law school’s Center for Civil Rights’ work to challenge systemic and racialized barriers to equality, law schools have experienced public scrutiny and scorn for their client and case selection decisions. A clinical faculty member’s case selection decisions should not be without limits or guidelines. For example, limited resources and specific pedagogical objectives will necessarily dictate which cases will be considered appropriate. However, making case selection decisions on the basis of pedagogical choices differs fundamentally from decisions based on ideological pressure from outside forces. The latter raises fundamental questions of academic freedom and other professional responsibilities.54 Clinical faculty members must maintain some independence to choose cases and clients that meet that clinic’s educational and public service goals.55 2. The Anti-Litigation Bias Political lawyers have long embraced litigation’s potential to achieve “radical extensions of democracy, equality, and racial justice” in addition to structural and cultural change.56 Law reform and structural change are important aspects of political lawyering.57 Accordingly, impact litigation on behalf of marginalized people and communities has long been an important tool for political lawyers.58 Indeed, the NAACP’s fight against racial segregation and inequality in the 1940s and 1950s represents an early example of political lawyering that strategically deployed litigation as part of a comprehensive effort to resist oppression and advance equality.59 Political lawyering never embraced an exaggerated belief that litigation should be the centerpiece of the fight for equality.60 Instead, like the advocates at the heart of the NAACP’s desegregation strategy, political lawyers “recognized that litigation, interdisciplinary collaboration, and community organization had to proceed together.”61 In the late 1990s and early 2000s, political and cultural shifts affected the strategies many political lawyers employed. New federal restrictions on the use of impact litigation and legislative advocacy by legal services lawyers were a cause of significant concern.62 Where impact litigation remained a possibility, many political lawyers worried that litigation offered a dangerous path. Although federal courts, in particular, had proved supportive in the fight for racial justice in the 1960s, progressive lawyers in later years worried that a more conservative judiciary was just as likely, if not more inclined, to set back progressive movements.63 This concern proved correct, particularly in the area of racial justice. Decades of conservative appointments to the federal bench64 led to a series of legal setbacks65 that effectively limited the federal courts as a venue for the redress of illegal discrimination.66 Many advocates also believed that while progressive lawyers were toiling away in the courtroom and achieving only minor success, conservative advocacy groups had mastered the more efficacious strategy of building powerful grassroots constituencies.67 As courts increased their hostility to civil rights and racial justice, making victory and progress more difficult, political lawyers turned away from litigation and began focusing on alternative methods to fight for social change.68 While the labels have changed, the fundamental purpose of the work remained the same. Political lawyering gave way to rebellious lawyering, community lawyering, and movement lawyering.69 These models of advocacy embrace different visions of advocacy that may vary in the emphasis placed on the law’s comparative advantage relative to other strategic methodologies and tools.70 But, they all acknowledge the bond that joins client, community, and lawyer together in a common enterprise: empowering those without power and fighting for justice and equality. The de-emphasis on strategic litigation brought real benefits. It encouraged lawyers to work as members of a team, and challenged lawyers to ensure that those marginalized by injustice played a central role both as the focus of the advocacy and as participants in the advocacy, a positive turn regardless of the motivation.71 This evolution came at a cost. What began as a tactical de-emphasis on litigation evolved into a philosophical bias against litigation as a social justice advocacy tool.72 Initially, social justice lawyers turned away from impact litigation because they feared that an increasingly conservative judiciary would use these cases as an opportunity to further roll back prior gains. However, with time, the reluctance to pursue litigation became less a reaction to circumstance and more a matter of principle. Some writers argued that litigation is a tool through which lawyers usurp the authority of already marginalized clients by setting their priorities for them.73 And, they claimed that litigation disempowers communities because of the unbalanced power dynamics between social justice lawyers and marginalized clients.74 An example is the dialogue around rebellious lawyering, one of the most prominent models for social change advocacy. Gerald López conceptualized rebellious lawyering as an advocacy model that would empower poor clients through grassroots, community-based advocacy that was facilitated by lawyers.75 Rebellious lawyering emphasizes concepts of community organization, mobilization, and “deprofessionalization.”76 It calls on lawyers to reflect on critical elements of the attorney-client relationship that may further oppress members of marginalized communities.77 Through rebellious lawyering, Professor López advances the belief that although lawyers should help solve problems facing the poor, lawyers are not the preeminent problem solvers in that relationship and should defer to clients and communities.78 Gerald López prefers that lawyers focus on “teaching self-help and lay lawyering” to empower communities to help themselves.79 Professor López espoused his positive vision of rebellious lawyering as an alternative to what he calls regnant lawyering.80 Professor López asserts that regnant lawyers are convinced that they need to be the primary and active leaders in their representation of poor people. Regnant lawyers find community education and empowerment to be of only marginal importance.81 The result is that the regnant lawyer dominates the attorney-client relationship, giving little voice to the needs or concerns of the client. Finally, Professor López also believes that regnant lawyers have little practical understanding of legal, political, and social structures.82 Rebellious lawyering raised important questions about the role litigation should play in social justice movements. Gerald Lopez was certainly skeptical that “legal technicians” could make a meaningful contribution83 and questioned whether lawyers turned to litigation because it was best for the client or because the lawyer wanted to play “hero.”84 All political lawyers should ask themselves these questions when considering impact litigation as part of integrated advocacy on behalf of marginalized communities.85 But, over time, commentators began to equate regnant lawyering with impact litigation.86 Some social justice advocates argued that impact litigation perpetuated racism because white lawyers used it as a tool to impose their views on communities of color.87 Others advanced images of litigators as outsiders who used poor communities as guinea pigs in their social justice experiments, warning that “practicing law in the community is not a tourist adventure and, therefore, we must eschew the routine of the autonomous, interloping advocate who dreams up cases in the home office and then tests them on the community.”88 Litigation, and systemic reform litigation in particular, became synonymous with regnant lawyering: an “enemy” of social justice and not a tool fit for people committed to fighting for enduring social change. Derrick Bell advanced one of the most prominent and influential critiques of litigation.89 Although he acknowledged the success of the first decade of school desegregation litigation, Professor Bell questioned the lack of lawyer accountability to marginalized communities. According to Professor Bell, NAACP lawyers continued to employ an advocacy strategy that focused on structural school desegregation, even while many members of the Black community preferred a strategy that would have focused on building quality, though segregated, neighborhood schools.90 He cautioned that social justice advocates failed to acknowledge growing conflicts between what they believed were the long-range goals for their clients and the client’s evolving interests and needs.91 In the end, many members of the impacted community were left feeling marginalized. Professor Bell also suggested that “civil rights lawyers, like their more candid poverty law colleagues, are making decisions, setting priorities, and undertaking responsibilities that should be determined by their clients and shaped by the community.”92 Certainly, many lawyers who use litigation as a tool for social change are regnant and paternalistic, but these qualities are not inherent in litigators working with marginalized communities.93 Social justice advocates should have a healthy skepticism about the ability of the law, standing alone, to achieve lasting social change.94 They should always engage in advocacy that moves the client from the margins to the center.95 But, advocates should also resist pressure to narrow the definition of what it means to be a great lawyer. The discussion of social justice advocacy far too often collapses the framework not only of political lawyering, but all advocacy on behalf of poor and marginalized individuals and communities, into one that largely rejects the important role that strategic litigation has played and can continue to play in the fight for social justice. The ubiquity of the anti-litigation narrative encourages progressive law students—and many clinical law professors—to dismiss litigation and its potential for challenging bias and discrimination. Many progressive law students are afraid to become the professionals they envisioned they would be.96 They do not want to become the discrimination tourist derided in the literature. In response to the critique of social justice litigation, there is a growing body of scholarship supporting the conclusion that litigation is a key strategy for protecting and expanding the rights of marginalized communities.97 This body of scholarship acknowledges that litigation has played a critical role in the struggle for justice and equality, and that it continues to be “an imperfect but indispensable strategy of social change.”98 Finally, these scholars examine social justice litigation in the context of the tradeoffs of different forms of activism, evaluating its potential in relation to available alternatives and revealing a new understanding of the link between law and social justice reform.99 The demonization of strategic litigation that persists in many progressive lawyering circles not only contributes to student ~~paralysis~~, it gives them a false sense of what it means to engage in systemic reform litigation on behalf of clients and the community. Many prominent critiques of impact litigation neither provide an accurate depiction of the potential of that litigation, nor educate students on how to apply principles of political lawyering to that litigation. Indeed, while Derrick Bell prominently critiqued the role of strategic litigation in social justice movements, he also believed that litigation can be an important means of calling attention to perceived injustice; more important, . . . litigation presents opportunities for improving the weak economic and political position which renders the black community vulnerable to the specific injustices the litigation is intended to correct. Litigation can and should serve lawyer and client, as a community-organizing tool, an educational forum, a means of obtaining data, a method of exercising political leverage, and a rallying point for public support.100 Law students should be taught that lawyers who engage in systemic reform litigation, just like any other lawyer, can and should work with and on behalf of those victimized by discrimination. Indeed, despite the one- dimensional picture often painted for law students, not all progressive lawyers believe that “self-help” should be the focus of lawyering on behalf of poor or marginalized communities.101 Moreover, despite the image of the “interloping advocate who dreams up cases in the home office and then tests them on the community,” not all progressive lawyers believe that it is inappropriate for lawyers to independently analyze social justice issues and develop ideas about ways to use the law to bring society closer to justice. Indeed, “it is artificially constricting to conceive of lawyers as exclusively or primarily problem-solvers. [Lawyers] are not only social mechanics who wait in [their] shops for people to come to [them] with problems to be fixed. [Lawyers] should sometimes create problems. [Lawyers] should sometimes deliver problems by translating people’s anger and hurt and insistence on justice into political as well as legal action.”102 Many great advocacy ideas bubble up from the community, but equally valid ideas can come from advocates who have been working with and for those communities (or are members of the community themselves). Progressive advocates must be prepared to provide legal assistance to clients even when those clients do not wish to be active participants in the advocacy. That is embracing the core meaning of client-centered lawyering. Rather than being taught to avoid litigation at all costs, progressive law students need to learn how they can partner with victims of discrimination and be accountable to those victims in the context of litigation. They need to learn the skills of collaborative leadership in law.103 Advocates should also be careful about advancing a one-size-fits-all model of advocacy,104 lumping everything together under the “social justice advocacy” moniker or work on behalf of the “poor and disadvantaged” and assuming that one advocacy approach will work to solve all problems. Sometimes using “social justice” to refer to all of the work being done on behalf of poor and marginalized communities is the right thing to do—it unifies all of those who are fighting injustice on varying fronts. But, it can be harmful when discussing what advocacy tools will be most effective. Given the many forms that discrimination takes and the many communities subject to discrimination, law professors should caution students to be suspicious about broad generalizations about what clients always need or do not need, and what lawyers always should or should not do. There is no universal theory about how to represent disadvantaged or marginalized people. What works in the fight for economic justice may not be the best strategy to achieving racial justice.105 And what may be appropriate to help one victim of racial discrimination may not work for another. There is room for all types of advocates and advocacy.106 All advocates can be a part of the circle of human concern.107 3. The Preferred Model: Individual Representation Representing individual clients in small, manageable cases where students retain primary control has long been the preferred vehicle for teaching students to effectively address their clients’ legal problems.108 But many clinical programs focused on representing individual clients are not providing opportunities for students to learn how to utilize the law effectively to challenge systemic discrimination. In addition to teaching foundational lawyering skills like client interviewing, counseling, and fact investigation, clinics should also provide opportunities to teach complex and multi- dimensional lawyering skills.109 As this Section demonstrates, the clinical community’s disproportionate focus on micro-lawyering skills may be hampering the ability of students to focus on the political and social functions of the law and the structural dimensions of the problems facing client communities.110 The founding goals of clinical legal education were to provide law students the opportunity to learn the skills necessary to practice law and provide quality legal services to the poor.111 These origins closely shaped the development of clinical pedagogy and its current emphasis on individual representation.112 Small cases allow law students to have the primary relationship with the client, manage the case from beginning to end, and analyze relatively straightforward legal issues—all core principles of clinical pedagogy.113 The reliance on small cases also provides students with the invaluable opportunity to reflect deeply on the choices advocates make in creating and maintaining lawyer-client relationships.114 In the early years of the clinical legal education movement, most clinical law professors came from legal services organizations and brought with them a preference for the individual client representation that dominated legal services practice.115 Clinical professors embody their learning objectives in their case selection116 and must prioritize some lawyering skills over others because there are limits to what can be learned in a single clinical course.117 In focusing on small cases, early clinicians understandably prioritized the skills they knew to be critical to their own work on behalf of poor individuals. Today, clinical professors come to teaching from a broader array of professional backgrounds, and unsurprisingly want to bring their experiences into the classroom. They should be encouraged to make clinic design choices and set educational goals for their students based on the skills and knowledge they know to be necessary for success in their own practice areas. To many, the approaches clinical professors adopted at the beginning of the clinical legal education movement are not the answers to the questions and challenges our students face today. An exclusive reliance on small cases, though they are extremely valuable teaching tools, fails many students because small cases offer limited opportunities to teach a broad array of lawyering skills, including the skills critical to challenging systemic injustice.118 Of course, small cases have value—for the client and student both. But, in the new normal, they are often not enough to carry the weight of change. “Social justice work is rarely easy, clean, or pretty.”119 It can be downright messy and clinics should not shield students from its messiness. Working on larger, more complex cases exposes students to more of the skills necessary to fight for structural change.120 They can learn to exercise intellectual autonomy and to integrate conceptual thinking in their advocacy.121 They teach students how to achieve client objectives while also advancing broader social justice goals. Finally, in complex cases where litigation is a viable option, students are exposed to fundamental questions such as what claims to assert, where to file, who to represent, and who to sue. Students cannot be practice ready without some exposure to these skills. Some clinical legal educators have questioned the traditional model of clinical education, arguing instead for engaging in work with a broader social justice impact.122 One basis for this argument, for example, is that “case- centered clinics are primarily accountable to students and law school administrators, rather than clients, and fail to serve political collectives.”123 In this conception, clinics prioritize student interests over community interests by accepting only those cases over which students will have full responsibility and reject more complex cases where the students’ limited skills would make that impossible. This is done even when the communities’ interests—and thus the cause of social justice—would be better served by the more complex cases.124 While this critique is framed in terms of benefits to students versus losses to social justice, there is indeed a loss to students as well. Clinical legal educators who are teaching the next generation of social and racial justice advocates should help students understand the current legal framework for equality, and develop the ability to utilize that framework creatively on behalf of their clients. But, students also have to learn to transcend and reimagine current institutional frames, to conceptualize avenues for relief, create new narratives, and pull together the building blocks of a new legal framework to establish rights that did not exist before. Indeed, many of the challenges facing America today require reimagining justice from the ground up. Future social justice advocates must have social vision—“vision-making work is fundamental to the activist strategies political lawyering inevitably embodies.”125 Charles Hamilton Houston not only taught his law students to conceive that separate can never be equal, he taught them how to develop a legal theory in support of that idea and then to develop an integrated advocacy strategy, including complex litigation, to give that theory legal effect. “The process of linking strategy to political vision always requires adaptation and a detailed understanding of particular contexts for its effectiveness.”126 Moreover, as students move from theory to legal reality, they have to understand the skills required to genuinely engage the community. Indeed, “it is no simple matter to reconcile commitment to both clients and a larger social vision or to navigate the boundary between the insider and outsider communities in which political lawyers work.”127 There are, of course, trade-offs involved in engaging clinical students in impact advocacy, both for the student and the teacher.128 Many clinical faculty have expressed concerns that systemic reform work and complex vocacy matters require too high a cost to core pedagogical goals.129 There is a sense that “big cases” may achieve important social justice goals, but use student tuition to finance political goals without attendant benefits to the students’ education.130 According to this line of critique, if the fundamental goal of clinical legal education is the education of students, clinical education needs to continue to focus on small cases that allow for complete student ownership, with a student seeing the case through from beginning to end.131 Many clinicians believe that complete student ownership from beginning to end is critical to an effective clinical experience, and that this level of student ownership is not possible in big cases.132 The problem with this argument is that giving clinic students sole control of a case from beginning to end is not the only way to maximize student learning. Close collaboration with clinical educators, fellow students, clients, and other collaborators offers rich opportunities for student learning. Working with those collaborators to evaluate a complex problem, consider whether a litigation strategy is appropriate, and implementing that strategy, is precisely the kind of experience students will need to master in political lawyering practice. If clinical programs want to ensure that social justice students develop the skills and values necessary to be responsible and effective lawyers before they graduate, students should have the opportunity to be exposed to advocacy models beyond individual client representation. Otherwise, clinics are missing an opportunity to teach students to embrace and engage in social justice work broadly. II. REFRAMING POLITICAL LAWYERING FOR THE 21ST CENTURY Modern social problems present new challenges for political lawyers. As such, political lawyers must evaluate the tools an earlier generation of political lawyers used to determine how to employ them in light of changed conditions. Social justice advocates have destabilized the dominant understanding of lawyering.133 Modern political lawyering must continue that process of destabilization, exploring alternatives to the way lawyers marshal social and economic capital, make strategic decisions, and transgress current structures and constraints.134 Political lawyering advocates should also question attempts to constrict the understanding of what lawyering tools can be employed in service to communities and in furtherance of justice. A. Expanding the Advocacy Perspective At the core of Derrick Bell’s critique of the latter stages of the campaign to desegregate public education is the divergence he saw between the interests of NAACP lawyers and those of certain segments of the Black community that evolved after the launch of the school desegregation campaign.135 In many ways, this divergence was the result of a failure to communicate. To effectively engage in the integrated advocacy central to political lawyering, those engaged in individual representation, strategic litigation, legislative advocacy, community organizing, public education, direct action, and other forms of advocacy must remain in constant conversation. They must also use their work to facilitate a constant dialogue between the community, courts, government agencies, and legislatures at the local, state, and national levels. As part of this ongoing conversation, political justice lawyers must endeavor to expand the perspectives of the public, judges, politicians, and government administrators beyond dated conceptions of justice. Powerful narratives can break through opposition and resistance, shaping the way society views equality and justice. In Goldberg v. Kelly,136 advocates disrupted the stock story of greedy welfare recipients trying to take advantage of a fair and responsive bureaucracy by telling “human stories” that introduced the Court “to the day-to-day realities of the lives of poor people—struggling to provide a bare minimum of basic necessities for themselves and their children, while confronting an inefficient, unpredictable, and often hostile welfare bureaucracy.”137 Today’s political justice lawyers must focus on changing legal rules, but also inspiring political action, educating the public, publicizing injustice, and shaping public debate. Developing the ability to craft legal and factual narratives that are not only respectful and true to the client’s or communities’ experiences and demands for justice, but that can also persuade and influence others in a variety of contexts, is a critically important skill.138 Political justice lawyering must also account for the changing economic dynamics within otherwise marginalized communities. Growing income inequality within communities of color mirrors the growing wealth gap within American society as a whole.139 Not only may the experience of race or gender discrimination, for example, differ for people of varying wealth, the advocacy strategies needed to engage those communities may be different as well, depending on the structural barriers to engagement created or exacerbated by economic inequality. Political justice lawyers must wrestle with the complicated economic dynamics within communities of color, remain mindful that widening economic inequality can impact collectivity, and authentically engage with the full breadth of those communities if their advocacy is to be effective. Modern political justice lawyering must also include strategies to support and harness the “disruptive power”140 of widespread youth-led movements, collective action, and protest. Many justice movements seek to harness disruption or provoke unrest to redistribute power or force reforms.141 While disruption through protest has been essential in bringing light and voice to modern social justice issues such as police brutality (through, for example, the Black Lives Matter movement) and economic inequality (through, for example, Occupy Wall Street), protests standing alone may not be enough to lead to structural reform or transformational change. Without a viable replacement to fill the void left by a disrupted system, a clear demand for meaningful change, and a plan for implementing that change, the disruptive power may never translate to justice. Finally, modern political justice lawyers must be able to integrate both positive and negative conceptions of equality into their advocacy. Many modern social justice problems are difficult or impossible to fully resolve through court orders.142 Moreover, courts have shown a growing reluctance to issue sweeping injunctive relief that leaves school systems or police departments under the management of courts or court-appointed special masters.143 While utilizing courts to prohibit or limit actions that infringe on individual rights, advocates should be able to articulate a positive vision of what stakeholders can or should do to better promote, protect, and respect those rights. In the context of police reform, for example, victory may take the form of a judicial finding that a police officer used excessive force or an award of money damages. However, even the broadest injunctive relief may struggle to translate into systemic reform—a positive conception of just and effective policing. B. Expanding the Lawyer’s Toolbox In order to effect systemic change, lawyers need to understand what levers are available to achieve that change, and when, where, and how to pull each lever. Political justice lawyers must be skilled at integrated advocacy, using individual and strategic litigation to establish and protect rights, traditional and social media engagement to shape and promote the narrative, community organizing to mobilize effected communities and their allies, and interdisciplinary collaborations to bring the work of other disciplines to bear on creating policies and practices to replace illegal and repressive practices. An effective political justice lawyer has many tools in her toolbox, and knows when and how to use each one. In addition to these tools, political lawyers must learn to break systemic problems into their smaller components; identify advocacy alternatives and evaluate the costs and benefits of each approach; and resolve instances in which an attorney’s own social justice values and vision collide. 1. Breaking Apart Systemic Issues 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

#### No impact turns or RVIs ~1~ Perfcon – if T’s bad and you vote for them on that arg, you’re voting on T. ~2~ Substance – if T’s bad then we should try debating on substance – impact turns force me to go for T since I need to defend my position.

#### Theory is competing interps – a) reasonability is arbitrary and so is any brightline they set, b) norming – competing interps causes a race to the top where we find the best possible norm for debate instead of setting a brightline and testing how abusive we can be without violating.

#### Drop the debater on T – a) indicts the aff advocacy so drop the argument would be dropping the aff anyways, b) deter future abuse and set good norms.

## 2

#### We endorse the entirety of the affirmative without their affirmation that the appropriation of outer space by private entities through asteroid mining is unjust.

#### Asteroid mining is privatized and feasible – it solves resource conflict and environmental catastrophe

Kevin MacWhorter 16, J.D. Candidate, William & Mary Law School, "Sustainable Mining: Incentivizing Asteroid Mining in the Name of Environmentalism", William & Mary Environmental Law and Policy Review, Vol 40, Issue 2, Article 11, <https://scholarship.law.wm.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1653&context=wmelpr>

A. Rare Element Mining on Earth In the next sixty years, scientists predict that certain elements crucial to modern industry such as platinum, zinc, copper, phosphorous, lead, gold, and indium could be exhausted on Earth. 12 Many of these have no synthetic alternative, unlike chemical elements such as oil or diamonds.13 Liquid-crystal display (LCD) televisions, cellphones, and laptops are among the various consumer technologies that use precious metals.14Further, green technologies including wind turbines, solar panels, and catalytic converters require these rare elements. 15 As demand rises for both types of technologies, and as reserves of rare metals fall, prices skyrocket.16 Demand for nonrenewable resources creates conflict, and consumerism in rich countries results in harsh labor treatment for poorer countries.17 In general, the mining industry is extremely destructive to Earth’s environment.18 In fact, depending on the method employed, mining can destroy entire ecosystems by polluting water sources and contributing to deforestation.19 It is by its nature an unsustainable practice, because it involves the extraction of a finite and non-renewable resource.20 Moreover, by extracting tiny amounts of metals from relatively large quantities of ore, the mining industry contributes the largest portion of solid wastes in the world.21 The Environmental Protection Agency (EPA) describes the industry as the source of more toxic and hazardous waste than any other industrial sector [in the United States], costing billions of dollars to address the public health and environmental threats to communities. 22 Poor regulations and oxymoronic corporate definitions of sustainability, however, make it unclear as to just how much waste the industry actually produces.23 Platinum provides an excellent case study of the issue, because it is an extremely rare and expensive metal—an ore expected to exist in vast quantities in asteroids.24 Further, production of platinum has increased sharply in the past sixty years in order to keep up with growing demand for use in new technologies.25 In fact, despite their high costs, platinum group metals are so useful that [one] of [four] industrial goods on Earth require them in production. 26 Scholars do not expect demand to slow any time soon.27 Among other technologies, industries use platinum in products such as catalytic converters, jewelry production, various catalysts for chemical processing, and hydrogen fuel cells.28 While there is no consensus on how far the Earth’s reserves of platinum will take humanity, many scientists agree that platinum ore reserves will deplete in a relatively short amount of time.29 With the rate of mining at an all-time high,30 it is increasingly clear that historical patterns of mineral resources and development cannot simply be assumed to continue unaltered into the future. 31 The platinum mining industry, however, has a strong incentive to increase its rate of extraction as profits grow with the rate of demand. Without any alternative, this destructive practice will continue into the future.32 So-called platinum-group metal (PGM) ores are mined through underground or open cut techniques.33 Due to these practices, all but a very small fraction of the mined platinum ore is disposed of as solid waste.34 The environmental consequences of platinum production are thus quite significant, but like the mining industry in general, the amount of waste is typically under-reported.35 While this is due to high production levels at the moment, those levels will only increase given the estimated future demand of platinum.36 In spite of the negative consequences, mining continues unabated because it is economically important to many areas.37 The future environmental costs provide a major challenge in creating a sustainable system. Relegating at least some mining companies to near-Earth asteroids would reduce the negative effects of future mining levels on Earth. The economic benefits of mining need not be sacrificed for the sake of the environment.38 B. Privatization of the Space Industry For most of the Space Age, the role of private companies has been as that of government contractors.39 During the past fifteen years, however, space flight has become increasingly the realm of private industry.40 Space tourism is on the rise,41 and private companies have been launching their own satellites into orbit for decades.42 In May 2012, SpaceX docked with the International Space Station the first private company to do so. 43 While the National Aeronautics and Space Administrations (NASA) federal outlay has increased since 1958, NASAs budget as a percentage of US spending has decreased dramatically.44The private space industry has seen dramatic growth as a result.45 Since NASA retired its shuttle fleet in 2011, the agency has turned to private actors to design and build spacecraft.46 That year, NASA awarded four private space companies SpaceX, Blue Origin LLC, Boeing Co., and Sierra Nevada Corp. contracts worth a combined total of $269.3 million to transport cargo and crew to and from the International Space Station.47 More companies, such as Orbital Sciences, have followed suit.48 Space mining in particular has been a focus of private investment.49 The promise of abundant rare Earth resources creates the possibility of vast wealth for intrepid investors.50 For example, Google founders Larry Page and Eric Schmidt have invested heavily in private space flight.51 Google is offering the Lunar X Prize: $30 million in prizes to any team who is able to safely land a robot on the surface of the Moon, have that robot travel 500 meters [1,640 feet] over the lunar surface, and send video, images, and data back to the Earth before 2016. 52 The purpose behind the contest should be apparent: investors think private space flight and mining could be extremely lucrative.53 Rare metals, such as platinum, could become far more accessible.54 In 2012, Page, Schmidt, director James Cameron, and other distinguished entrepreneurs announced they were investing considerable financial resources in Planetary Resources, a company developing the technology to mine an asteroid.55The companys goalis to land a mining vessel on a near-Earth asteroid, mine its valuable minerals, and bring the natural resources of space within humanitys economic sphere. 56 To that end, many companies are focused on the idea of asteroid mining.57 Privatization, however, has brought many legal and economic considerations to the forefront. One of the most significant obstacles for the private space industry has been the price tag of traveling into space. Complicating matters, the current law governing claims of property in space is ambiguous.58 Companies therefore cannot be sure whether their property claims will be enforced after they extract minerals in space and bring them back to Earth.59 When investing large sums of money such a consideration is absolutely critical.60 Although there has been investment in the area, sending an actual mission to an asteroid will require less ambiguous property provisions in international space law. C. Asteroid Mining 101 As the Planetary Resources website exclaims, [T]he more we learn about asteroids, the more enticing they become! 61 Certain types of asteroids including X-type and S-type asteroids contain both precious and base metals in quantities sufficient to make any entrepreneur salivate.62 Metals on which many current technologies rely such as iron, gold, and platinum can be found in most asteroids. 63 Current estimates count around two million asteroids in the solar system that are a kilometer or more in diameter.64 Astrophysicists estimate that each could contain 30 million tons of nickel, 1.5 million tons of cobalt, and 7,500 tons of platinum, among other minerals.65 To put that in economic terms, the value of each asteroid could be somewhere in the trillions [of dollars] or higher. 66 Indeed, because of their zero gravity fields and availability of metals, asteroids have been considered as candidates for resource extraction since the beginning of the space age.67 The technology needed to extract resources from asteroids, however, is a very recent phenomenon.68 With the European Space Agency successfully landing the Philae Lander on Comet 67P, it is much more plausible to land a mining operation on an asteroid.69 Although companies likely are not able to send mining ventures to asteroids immediately, as the preceding section suggested, asteroid mining is a possibility in the near future.70 First of all, two companies are developing the technology needed to mine asteroids.71Planetary Resources is creating cheaper prospecting spacecraft small enough to hitch a ride into space with larger, primary payloads. 72 Another company, Deep Space Industries (DSI), is developing a four-stage system for mining in space: Prospecting, Processing, Harvesting, and Manufacturing.73 It has already invented one spacecraft to be used for the Prospecting stage: a tiny probe, called FireFly, designed to scout asteroids and study their size, shape, spin and composition . . . . 74 For the Processing phase, DSI is creating technology required to transform regolith to raw materials for manufacture.75 The company is currently developing another spacecraft, called a Harvestor, for the third stage to collect and transport resources.76Finally, the company is creating technology to manufacture finished products in space.77 The United States space policy is also embracing the idea of asteroid mining. In April 2010, President Obama promised to send astronauts to explore an asteroid by 2025.78 In 2014, NASA requested, much to the surprise of asteroid scientists, a budget that includes $105 million to begin work on a mission that would send a robotic spacecraft to capture an asteroid as early as 2019 and haul it back so that astronauts could rendezvous with it by 2022. 79 Further, NASA has awarded contracts to Planetary Resources and Deep Space Industries to prepare for and ultimately execute missions to land on and mine asteroids for valuable resources. 80 NASA is also designing a spacecraft, the primary goal of which is to land on an asteroid and take samples.81 It is scheduled for launch in September 2016.82 As all this recent development suggests, the technology to mine asteroids is not far off. In fact, the requisite technology exists it just needs to be adapted for use in an extraterrestrial environment.83 As Chris Lewicki, president of Planetary Resources, said: [T]he single biggest challenge that Planetary Resources will have to overcome is convincing people that asteroid mining will happen sooner than they think. 84 Asteroid mining will gain in popularity as resources deplete, forcing humans to dig deeper and deeper in the Earths crust for minerals. 85 A recent article summarized some of Lewickis reasoning succinctly: [T]he energy required to extract minerals from an asteroid is considerably less than to extract from the Earth, or even the moon . . . , because in space there is no atmosphere to oxidise or salt to corrode, no weather, no gravity or friction to oppose transportation, dissipate energy and waste heat and unlimited heat from the sun and coldness in space for refrigeration, creating the perfect vacuum . . . .86

#### Outweighs the aff.

Phil Torres 16. Affiliate scholar at the Institute for Ethics and Emerging Technologies. “Biodiversity loss: An existential risk comparable to climate change.” *Bulletin of the Atomic Scientists* 4/11/2016. http://thebulletin.org/biodiversity-loss-existential-risk-comparable-climate-change9329

Such considerations warrant decoupling biodiversity loss from climate change, because the former has been consistently subsumed by the latter as a mere effect. Biodiversity loss is a distinct environmental crisis with its own unique syndrome of causes, consequences, and solutions—such as restoring habitats, creating protected areas (“biodiversity parks”), and practicing sustainable agriculture. The sixth extinction. The repercussions of biodiversity loss are potentially as severe as those anticipated from climate change, or even a nuclear conflict. For example, according to a 2015 study published in Science Advances, the best available evidence reveals “an exceptionally rapid loss of biodiversity over the last few centuries, indicating that a sixth mass extinction is already under way.” This conclusion holds, even on the most optimistic assumptions about the background rate of species losses and the current rate of vertebrate extinctions. The group classified as “vertebrates” includes mammals, birds, reptiles, fish, and all other creatures with a backbone. The article argues that, using its conservative figures, the average loss of vertebrate species was 100 times higher in the past century relative to the background rate of extinction. (Other scientists have suggested that the current extinction rate could be as much as 10,000 times higher than normal.) As the authors write, “The evidence is incontrovertible that recent extinction rates are unprecedented in human history and highly unusual in Earth’s history.” Perhaps the term “Big Six” should enter the popular lexicon—to add the current extinction to the previous “Big Five,” the last of which wiped out the dinosaurs 66 million years ago. But the concept of biodiversity encompasses more than just the total number of species on the planet. It also refers to the size of different populations of species. With respect to this phenomenon, multiple studies have confirmed that wild populations around the world are dwindling and disappearing at an alarming rate. For example, the 2010 Global Biodiversity Outlook report found that the population of wild vertebrates living in the tropics dropped by 59 percent between 1970 and 2006. The report also found that the population of farmland birds in Europe has dropped by 50 percent since 1980; bird populations in the grasslands of North America declined by almost 40 percent between 1968 and 2003; and the population of birds in North American arid lands has fallen by almost 30 percent since the 1960s. Similarly, 42 percent of all amphibian species (a type of vertebrate that is sometimes called an “ecological indicator”) are undergoing population declines, and 23 percent of all plant species “are estimated to be threatened with extinction.” Other studies have found that some 20 percent of all reptile species, 48 percent of the world’s primates, and 50 percent of freshwater turtles are threatened. Underwater, about 10 percent of all coral reefs are now dead, and another 60 percent are in danger of dying. Consistent with these data, the 2014 Living Planet Report shows that the global population of wild vertebrates dropped by 52 percent in only four decades—from 1970 to 2010. While biologists often avoid projecting historical trends into the future because of the complexity of ecological systems, it’s tempting to extrapolate this figure to, say, the year 2050, which is four decades from 2010. As it happens, a 2006 study published in Science does precisely this: It projects past trends of marine biodiversity loss into the 21st century, concluding that, unless significant changes are made to patterns of human activity, there will be virtually no more wild-caught seafood by 2048. Catastrophic consequences for civilization. The consequences of this rapid pruning of the evolutionary tree of life extend beyond the obvious. There could be surprising effects of biodiversity loss that scientists are unable to fully anticipate in advance. For example, prior research has shown that localized ecosystems can undergo abrupt and irreversible shifts when they reach a tipping point. According to a 2012 paper published in Nature, there are reasons for thinking that we may be approaching a tipping point of this sort in the global ecosystem, beyond which the consequences could be catastrophic for civilization. As the authors write, a planetary-scale transition could precipitate “substantial losses of ecosystem services required to sustain the human population.” An ecosystem service is any ecological process that benefits humanity, such as food production and crop pollination. If the global ecosystem were to cross a tipping point and substantial ecosystem services were lost, the results could be “widespread social unrest, economic instability, and loss of human life.” According to Missouri Botanical Garden ecologist Adam Smith, one of the paper’s co-authors, this could occur in a matter of decades—far more quickly than most of the expected consequences of climate change, yet equally destructive. Biodiversity loss is a “threat multiplier” that, by pushing societies to the brink of collapse, will exacerbate existing conflicts and introduce entirely new struggles between state and non-state actors. Indeed, it could even fuel the rise of terrorism. (After all, climate change has been linked to the emergence of ISIS in Syria, and multiple high-ranking US officials, such as former US Defense Secretary Chuck Hagel and CIA director John Brennan, have affirmed that climate change and terrorism are connected.) The reality is that we are entering the sixth mass extinction in the 3.8-billion-year history of life on Earth, and the impact of this event could be felt by civilization “in as little as three human lifetimes,” as the aforementioned 2012 Nature paper notes. Furthermore, the widespread decline of biological populations could plausibly initiate a dramatic transformation of the global ecosystem on an even faster timescale: perhaps a single human lifetime. The unavoidable conclusion is that biodiversity loss constitutes an existential threat in its own right. As such, it ought to be considered alongside climate change and nuclear weapons as one of the most significant contemporary risks to human prosperity and survival.

#### Resource wars go nuclear.

Klare 13 – Michael T., professor emeritus of peace and world-security studies at Hampshire College and senior visiting fellow at the Arms Control Association in Washington, DC, " How Resource Scarcity and Climate Change Could Produce a Global Explosion", *The Nation*, 4/22/2013, <https://www.thenation.com/article/how-resource-scarcity-and-climate-change-could-produce-global-explosion/> JHW

Resource Shortages and Resource Wars Start with one simple given: the prospect of future scarcities of vital natural resources, including energy, water, land, food and critical minerals. This in itself would guarantee social unrest, geopolitical friction and war. It is important to note that absolute scarcity doesn’t have to be on the horizon in any given resource category for this scenario to kick in. A lack of adequate supplies to meet the needs of a growing, ever more urbanized and industrialized global population is enough. Given the wave of extinctions that scientists are recording, some resources—particular species of fish, animals and trees, for example—will become less abundant in the decades to come, and may even disappear altogether. But key materials for modern civilization like oil, uranium and copper will simply prove harder and more costly to acquire, leading to supply bottlenecks and periodic shortages. Oil—the single most important commodity in the international economy—provides an apt example. Although global oil supplies may actually grow in the coming decades, many experts doubt that they can be expanded sufficiently to meet the needs of a rising global middle class that is, for instance, expected to buy millions of new cars in the near future. In its 2011 World Energy Outlook, the International Energy Agency claimed that an anticipated global oil demand of 104 million barrels per day in 2035 will be satisfied. This, the report suggested, would be thanks in large part to additional supplies of “unconventional oil” (Canadian tar sands, shale oil and so on), as well as 55 million barrels of new oil from fields “yet to be found” and “yet to be developed.” However, many analysts scoff at this optimistic assessment, arguing that rising production costs (for energy that will be ever more difficult and costly to extract), environmental opposition, warfare, corruption and other impediments will make it extremely difficult to achieve increases of this magnitude. In other words, even if production manages for a time to top the 2010 level of 87 million barrels per day, the goal of 104 million barrels will never be reached and the world’s major consumers will face virtual, if not absolute, scarcity. Water provides another potent example. On an annual basis, the supply of drinking water provided by natural precipitation remains more or less constant: about 40,000 cubic kilometers. But much of this precipitation lands on Greenland, Antarctica, Siberia and inner Amazonia where there are very few people, so the supply available to major concentrations of humanity is often surprisingly limited. In many regions with high population levels, water supplies are already relatively sparse. This is especially true of North Africa, Central Asia and the Middle East, where the demand for water continues to grow as a result of rising populations, urbanization and the emergence of new water-intensive industries. The result, even when the supply remains constant, is an environment of increasing scarcity. Wherever you look, the picture is roughly the same: supplies of critical resources may be rising or falling, but rarely do they appear to be outpacing demand, producing a sense of widespread and systemic scarcity. However generated, a perception of scarcity—or imminent scarcity—regularly leads to anxiety, resentment, hostility and contentiousness. This pattern is very well understood, and has been evident throughout human history. In his book Constant Battles, for example, Steven LeBlanc, director of collections for Harvard’s Peabody Museum of Archaeology and Ethnology, notes that many ancient civilizations experienced higher levels of warfare when faced with resource shortages brought about by population growth, crop failures or persistent drought. Jared Diamond, author of the bestseller Collapse, has detected a similar pattern in Mayan civilization and the Anasazi culture of New Mexico’s Chaco Canyon. More recently, concern over adequate food for the home population was a significant factor in Japan’s invasion of Manchuria in 1931 and Germany’s invasions of Poland in 1939 and the Soviet Union in 1941, according to Lizzie Collingham, author of The Taste of War. Although the global supply of most basic commodities has grown enormously since the end of World War II, analysts see the persistence of resource-related conflict in areas where materials remain scarce or there is anxiety about the future reliability of supplies. Many experts believe, for example, that the fighting in Darfur and other war-ravaged areas of North Africa has been driven, at least in part, by competition among desert tribes for access to scarce water supplies, exacerbated in some cases by rising population levels. “In Darfur,” says a 2009 report from the UN Environment Programme on the role of natural resources in the conflict, “recurrent drought, increasing demographic pressures, and political marginalization are among the forces that have pushed the region into a spiral of lawlessness and violence that has led to 300,000 deaths and the displacement of more than two million people since 2003.” Anxiety over future supplies is often also a factor in conflicts that break out over access to oil or control of contested undersea reserves of oil and natural gas. In 1979, for instance, when the Islamic revolution in Iran overthrew the Shah and the Soviets invaded Afghanistan, Washington began to fear that someday it might be denied access to Persian Gulf oil. At that point, President Jimmy Carter promptly announced what came to be called the Carter Doctrine. In his 1980 State of the Union Address, Carter affirmed that any move to impede the flow of oil from the Gulf would be viewed as a threat to America’s “vital interests” and would be repelled by “any means necessary, including military force.” In 1990, this principle was invoked by President George H.W. Bush to justify intervention in the first Persian Gulf War, just as his son would use it, in part, to justify the 2003 invasion of Iraq. Today, it remains the basis for US plans to employ force to stop the Iranians from closing the Strait of Hormuz, the strategic waterway connecting the Persian Gulf to the Indian Ocean through which about 35 percent of the world’s seaborne oil commerce passes. Recently, a set of resource conflicts have been rising toward the boiling point between China and its neighbors in Southeast Asia when it comes to control of offshore oil and gas reserves in the South China Sea. Although the resulting naval clashes have yet to result in a loss of life, a strong possibility of military escalation exists. A similar situation has also arisen in the East China Sea, where China and Japan are jousting for control over similarly valuable undersea reserves. Meanwhile, in the South Atlantic Ocean, Argentina and Britain are once again squabbling over the Falkland Islands (called Las Malvinas by the Argentinians) because oil has been discovered in surrounding waters. By all accounts, resource-driven potential conflicts like these will only multiply in the years ahead as demand rises, supplies dwindle and more of what remains will be found in disputed areas. In a 2012 study titled Resources Futures, the respected British think-tank Chatham House expressed particular concern about possible resource wars over water, especially in areas like the Nile and Jordan River basins where several groups or countries must share the same river for the majority of their water supplies and few possess the wherewithal to develop alternatives. “Against this backdrop of tight supplies and competition, issues related to water rights, prices, and pollution are becoming contentious,” the report noted. “In areas with limited capacity to govern shared resources, balance competing demands, and mobilize new investments, tensions over water may erupt into more open confrontations.” Heading for a Resource-Shock World Tensions like these would be destined to grow by themselves because in so many areas supplies of key resources will not be able to keep up with demand. As it happens, though, they are not “by themselves.” On this planet, a second major force has entered the equation in a significant way. With the growing reality of climate change, everything becomes a lot more terrifying. Normally, when we consider the impact of climate change, we think primarily about the environment—the melting Arctic ice cap or Greenland ice shield, rising global sea levels, intensifying storms, expanding desert and endangered or disappearing species like the polar bear. But a growing number of experts are coming to realize that the most potent effects of climate change will be experienced by humans directly through the impairment or wholesale destruction of habitats upon which we rely for food production, industrial activities or simply to live. Essentially, climate change will wreak its havoc on us by constraining our access to the basics of life: vital resources that include food, water, land and energy. This will be devastating to human life, even as it significantly increases the danger of resource conflicts of all sorts erupting. We already know enough about the future effects of climate change to predict the following with reasonable confidence: \* Rising sea levels will in the next half-century erase many coastal areas, destroying large cities, critical infrastructure (including roads, railroads, ports, airports, pipelines, refineries and power plants) and prime agricultural land. \* Diminished rainfall and prolonged droughts will turn once-verdant croplands into dust bowls, reducing food output and turning millions into “climate refugees.” \* More severe storms and intense heat waves will kill crops, trigger forest fires, cause floods and destroy critical infrastructure. No one can predict how much food, land, water and energy will be lost as a result of this onslaught (and other climate-change effects that are harder to predict or even possibly imagine), but the cumulative effect will undoubtedly be staggering. In Resources Futures, Chatham House offers a particularly dire warning when it comes to the threat of diminished precipitation to rain-fed agriculture. “By 2020,” the report says, “yields from rain-fed agriculture could be reduced by up to 50%” in some areas. The highest rates of loss are expected to be in Africa, where reliance on rain-fed farming is greatest, but agriculture in China, India, Pakistan and Central Asia is also likely to be severely affected. Heat waves, droughts and other effects of climate change will also reduce the flow of many vital rivers, diminishing water supplies for irrigation, hydro-electricity power facilities and nuclear reactors (which need massive amounts of water for cooling purposes). The melting of glaciers, especially in the Andes in Latin America and the Himalayas in South Asia, will also rob communities and cities of crucial water supplies. An expected increase in the frequency of hurricanes and typhoons will pose a growing threat to offshore oil rigs, coastal refineries, transmission lines and other components of the global energy system. The melting of the Arctic ice cap will open that region to oil and gas exploration, but an increase in iceberg activity will make all efforts to exploit that region’s energy supplies perilous and exceedingly costly. Longer growing seasons in the north, especially Siberia and Canada’s northern provinces, might compensate to some degree for the desiccation of croplands in more southerly latitudes. However, moving the global agricultural system (and the world’s farmers) northward from abandoned farmlands in the United States, Mexico, Brazil, India, China, Argentina and Australia would be a daunting prospect. It is safe to assume that climate change, especially when combined with growing supply shortages, will result in a significant reduction in the planet’s vital resources, augmenting the kinds of pressures that have historically led to conflict, even under better circumstances. In this way, according to the Chatham House report, climate change is best understood as a “threat multiplier…a key factor exacerbating existing resource vulnerability” in states already prone to such disorders. Like other experts on the subject, Chatham House’s analysts claim, for example, that climate change will reduce crop output in many areas, sending global food prices soaring and triggering unrest among those already pushed to the limit under existing conditions. “Increased frequency and severity of extreme weather events, such as droughts, heat waves and floods, will also result in much larger and frequent local harvest shocks around the world….These shocks will affect global food prices whenever key centers of agricultural production area are hit—further amplifying global food price volatility.” This, in turn, will increase the likelihood of civil unrest. When, for instance, a brutal heat wave decimated Russia’s wheat crop during the summer of 2010, the global price of wheat (and so of that staple of life, bread) began an inexorable upward climb, reaching particularly high levels in North Africa and the Middle East. With local governments unwilling or unable to help desperate populations, anger over impossible-to-afford food merged with resentment toward autocratic regimes to trigger the massive popular outburst we know as the Arab Spring. Many such explosions are likely in the future, Chatham House suggests, if current trends continue as climate change and resource scarcity meld into a single reality in our world. A single provocative question from that group should haunt us all: “Are we on the cusp of a new world order dominated by struggles over access to affordable resources?” For the US intelligence community, which appears to have been influenced by the report, the response was blunt. In March, for the first time, Director of National Intelligence James R. Clapper listed “competition and scarcity involving natural resources” as a national security threat on a par with global terrorism, cyberwar and nuclear proliferation. “Many countries important to the United States are vulnerable to natural resource shocks that degrade economic development, frustrate attempts to democratize, raise the risk of regime-threatening instability, and aggravate regional tensions,” he wrote in his prepared statement for the Senate Select Committee on Intelligence. “Extreme weather events (floods, droughts, heat waves) will increasingly disrupt food and energy markets, exacerbating state weakness, forcing human migrations, and triggering riots, civil disobedience, and vandalism.” There was a new phrase embedded in his comments: “resource shocks.” It catches something of the world we’re barreling toward, and the language is striking for an intelligence community that, like the government it serves, has largely played down or ignored the dangers of climate change. For the first time, senior government analysts may be coming to appreciate what energy experts, resource analysts and scientists have long been warning about: the unbridled consumption of the world’s natural resources, combined with the advent of extreme climate change, could produce a global explosion of human chaos and conflict. We are now heading directly into a resource-shock world.

## Case

### 1NC – Presumption

#### Presumption flips neg against K affs – they have the burden of proof since they aren’t defending the rez. That’s key to ensure the neg has a shot at engagement.

#### Vote neg on presumption:

#### 1] Systems--the 1AC says institutions create social realities that replicate violence but in-round discourse does nothing to alter conditions. All you do is encourage teams to write better framework blocks.

#### 2] Spillover--they are missing an internal link as to why they need the ballot or why the reading of the aff forwards change. Empirically denied – judges vote on these affs all the time and nothing happens.

#### 3] Competition--debate is the wrong forum for change and competition moots any ethical value of the aff. Winning rounds just makes it seem like you want to win and a loss is internalized as a technical mistake.

### TL

#### 1. You should hold new 2AR spin with extreme skepticism – the 1AC is a flat-out double turn – part 1 is about Luce Irigaray who is a Lacanian psychoanalyst whose theory of language and linguistics endorses sexual difference – part 2 is Haraway and Puar – who are Deleuzians who think psychoanalysis is wrong – they think instead of embracing sexual difference gender is in total flux and destabilized – we should play with gender and explode the binary through cyborgian affects. The 1AR will try to persuade you they don’t have to defend their authors – we think they should defend the words in the 1AC which explicitly make these arguments – anything else makes being neg impossible and is a voter for clash and education.

#### 2. Their defense the cyborg reflects a universalizing Western mythologization of neutrality and identity that props up colonization

Schueller 05 [Malini Johar. "Analogy and (white) feminist theory: Thinking race and the color of the cyborg body." Signs: Journal of Women in Culture and Society 31.1 (2005): 63-92.]

I point to the similarities between Haraway’s cyborg theory and theories of several other poststructuralists in order to suggest that there is nothing inherently subversive for feminism about such theorizing unless the theory can be shown to have specific, material, and located ramifications (a fact Haraway seems to have partially recognized in Modest\_Witness [1997a], which I will briefly discuss at the end of this essay). Indeed, as Susan Bordo suggests, **the epistemological jouissance suggested by the image of the cyborg denies locatedness and fantasizes itself as a postmodern “dream of everywhere”** (1990, 136, 144–45).10 Here it is important to distinguish between locatedness and a simple celebration of the local as endless possibility. I am not advocating what Manuel Castells (1997) describes as a defensive and retrenched localism (manifested most disturbingly in the “not in my backyard” ideal) in the face of globalization as a basis for feminist identity but rather a relationship to materiality and sociopolitical specificity as a basis for theorizing, much in the manner of Castells’s own analyses (1997, 61–62). In arguing for a relationship to locatedness, I am taking a stance about critical responsibility in a postcolonial world. As third-world environmentalists such as Vandana Shiva (1997) and subaltern studies historians have demonstrated, **policies and political concepts of postcolonial nations cannot be understood through universal** (read: Western) **concepts alone, even though local concepts need to be related to the global.** Witness Shiva’s call for international legal ecological policies based on an understanding of indigenous knowledges and Partha Chatterjee’s (1986) critique of the Western idea of nation as inapplicable to postcolonial countries. In the United States, **critical race theorists have argued for what legal theorist Richard Delgado** (1995) **terms the call to context, which challenges the traditional juridical preference for universalism over particularism and abstract principles over perspectivism.** This is particularly important, Delgado points out, in normative discourse such as civil rights (1995, xv). **Feminists and gender theorists might simply repeat the universalizing knowledge claims of colonialism by celebrating an ahistorical and acontextual blurring of boundaries**. For instance, might the blurring of racial boundaries be an obfuscation of the systemic racial oppression and racial hierarchies that continue to affect women’s lives? I will return to this point shortly, but for the moment I want to suggest that **neocolonial and imperial knowledge claims can be contested only through theories derived from located knowledge.** Indeed, my own arguments for context-specific theory derive in part from Haraway’s own paradigm of situated knowledge. Positing an alternative to a value-free relativism that she declares to be the “perfect mirror twin of totalization” (1988, 584), Haraway suggests an alternative that is “partial, locatable, critical knowledg[e] sustaining the possibility of webs of connections called solidarity in politics and shared conversations in epistemology” (584). “Our problem is how to have simultaneously an account of radical historical contingency for all knowledge claims and knowing subjects, a critical practice for recognizing our own ‘semiotic technologies’ for making meanings, and a nononsense commitment to faithful accounts of a ‘real’ world, one that can be partially shared” (579). It is in the spirit of Haraway’s own call for partial and locatable knowledge that I propose to examine the relationship between Haraway’s concept of the cyborg and the women of color who figure so prominently in the essay. Such an analysis will also reveal the problematic nature of the concept of woman of color as used by Haraway. I have already mentioned the overly celebratory nature of Haraway’s cyborg myth as a means of resisting the domination of a thoroughly technologized information culture and as a description of that culture. Haraway writes, “By the late twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism: in short, we are cyborg. The cyborg is our ontology; it gives us our politics. . . . This chapter is an argument for pleasure in the confusion of boundaries and for responsibility in their construction” (1991, 150). **The cyborg enables a productive blurring of the binaries such as male/female, self/other, and culture/nature that have sustained Western cultural hierarchies**. Just as the cyborg provides the means whereby to resist repressive dichotomies through unnatural fusions and illegitimate couplings, Haraway suggests that the political constituency of women of color provides a means of constructing a political solidarity out of coalition and affinity rather than out of essential identity. **Unlike identities based on sameness or unity, this postmodern identity is premised on “otherness, difference, and specificity”** (Haraway 1991, 155). Chela Sandoval’s (1984) model of oppositional consciousness, which suggests a mode of articulation seized by those denied stable identities of race or gender, demonstrates to Haraway the subversive potential of the coalition of women of color (1991, 174). Thus **women of color becomes for Haraway a cyborg identity**, “a potent subjectivity **synthesized from fusions of outsider identities**” (1991, 174). By the end of the essay, the analogous relationship of women of color to the illegitimate and hybrid fusion of the cyborg is clear. Haraway moves to delineate aspects of the cyborg myth by looking at “two overlapping groups of texts . . . constructions of women of color and monstrous selves in feminist science fiction” (1991, 174). What follows are illustrations of subversive political identities formulated by women of color such as Audre Lorde and Cherrı´e Moraga and feminist science fiction writers such as Joanna Russ, Samuel R. Delaney, James Tiptree Jr., Octavia Butler, and Vonda McIntyre. Following a partial trajectory of Haraway’s complex essay still leaves us with a few nagging questions: Why are women of color needed in order to formulate a cyborg myth centrally based on the monstrous fusion of human and machine? Who are the women of color referred to in the essay? Let us attempt to answer the second question first. Clearly the term women of color (it usually appears in quotation marks in the essay) alludes to radical African American, Latina, Native American, and Asian American feminists who constituted themselves as a group apart from white U.S. feminists. Sandoval’s (1984) formulation of oppositional consciousness, which Haraway cites, was preceded by the formation of Kitchen Table/ Women of Color Press and the publication of the influential anthology This Bridge Called My Back: Writings by Radical Women of Color, edited by Moraga and by Gloria Anzaldu´a in 1981. Subsequently, the term women of color gained widespread critical and pedagogical usage. Let us now see how Haraway explains the first question raised above. Haraway sees the writings of women of color as postmodern resistance writing or cyborg writing. Like all colonized groups, women of color seize the power to write in order to resignify hegemonic Western myths: “The poetry and stories of US women of color are repeatedly about writing, about access to the power to signify; but this time that power must be neither phallic nor innocent. . . . Cyborg writing is about the power to survive, not on the basis of original innocence, but on the basis of seizing the tools to mark the world that marked them as other. . . . Figuratively and literally, language politics pervade the struggles of women of color” (Haraway 1991, 175). Haraway’s claims for the writings of women of color are similar to the arguments of scholars who see minority writing or postcolonial writing as resistance writing alone. However, **such an argument not only reifies the very binaries of center and margin, colonizer and colonized, that Haraway as poststructuralist wishes to blur but also homogenizes, through a colonial imperative, the margin itself, a tactic strongly critiqued** by feminists like Chandra Talpade Mohanty (1991, 51). Let us revisit, for a moment, the two groups of texts Haraway compares: constructions of women of color and monstrous selves in feminist science fiction. One includes a variety of texts (presumably including autobiographies, novels, poetry, and drama) by a racially marked group, while the other deals with grotesque bodies in a specific genre. One would be hardpressed to find similar generalizations about white U.S. women’s writings, but women of color become fair game here, as did all third-world texts in Fredric Jameson’s much contested claim about these texts being national allegories (1986). Here I would argue in similar fashion to Aijaz Ahmed ([1987] 1992) that many texts by women of color are not about access to the power to signify or about subverting either the central origin myths of Western culture or myths of original innocence. Texts like Jade Snow Wong’s Fifth Chinese Daughter ([1950] 1989), Le Ly Hayslip’s When Heaven and Earth Changed Places (1989), and Bharati Mukherjee’s Jasmine (1989), for instance, affirm to an extent the binaries of Western rationality, modernity, and progress and Eastern irrationality, prejudice, and backwardness. Furthermore, the very assumption that texts by U.S. women of color are centrally about subverting Western myths suggests that minority texts are significant only insofar as they relate to the center. Many texts by U.S. women of color—Toni Morrison’s Beloved (1987) and Fae Myenne Ng’s Bone (1993) are powerful examples—are not fundamentally about subverting Western myths. And simply to suggest that writings about women of color are “repeatedly about writing” is simply to reiterate the discursive postmodern truism that all fiction is metafiction. Moreover, the very distinction between women of color and feminist science fiction writers begs the obvious question: Is Butler (who is included in the category of feminist science fiction) not a woman of color?

#### 3. The identitarian 1+1=? mathematics of the cyborg leaves identity unchanged and limits the possibility for radical change.

Currier 03 [Dianne. "Feminist technological futures: Deleuze and body/technology assemblages." Feminist Theory 4.3 (2003): 321-338.]

While **the figure of the cyborg**, and the manifesto in general, have done much to propel feminist scholarship into a creative engagement with questions of technology and subjectivity, I would argue that it ultimately **fails to make the break with the logic of identity** which Haraway rightly identifies as crucial. This is apparent in one aspect of the cyborg’s ætiology – the intersection of bodies and technologies. **The seamless intermingling of bodies and technologies**, enabled by the common coding of each as information, **is central** to the figure of the cyborg. For Haraway, it is the cyborg, as the product of these intersections, that defies classification as organic or nonorganic, human or machine. However, as Kirby (1997) suggests, what remains problematic is that **in order to fabricate the hybrid and intermingled cyborg one must first begin with the discrete component entities which are precisely those elaborated within the logic of identity.** That is, in the construction of a cyborg, technologies are added to impact upon, and at some point intersect with a discrete, non-technological ‘body’. **While a limitless range of mutations and variations might emerge** from such meetings, I would, however, argue that **to proceed on the basis of an engagement between bodies and technologies which is primarily prosthetic**, as Kirby points out, **effectively reinscribes the cyborg into the binary logic of identity** which Haraway hopes to circumvent. Within Haraway’s work **in the formulation of the cyborg a body pre-exists as a singular entity, to which a range of technological artifacts and/or processes are appended, which then reformulate that body and its associated identity beyond the bounds of conventional categories of Human or Man.** **Tools are applied to bodies** – ‘communications technologies and biotechnologies are the crucial tools recrafting our bodies’ (Haraway, 1991: 164) – **in a formula that posits them as initially discrete categories**. Thus, **in so far as the hybrid cyborg is forged in the intermeshing of technology with a body, in a process of addition, it leaves largely intact those two categories** – (human) body and technology – **that preceded the conjunction.** **Haraway’s ‘disassembled and reassembled’ recipe for cyborg graftings is utterly dependent on the calculus of one plus one, the logic wherein pre-existent identities are then conjoined and melded. The cyborg’s chimerical complications are therefore never so promiscuous that its parts cannot be separated even if only retrospectively.** (Kirby, 1997: 147) This original demarcation of the components of the hybrid functionally reinstates the human, grounded in an non-technological organic body as a stable site that cannot be retrospectively conjured away by a subsequent seamless interface of shared coding. In proposing the cyborg as hybrid, Haraway reiterates precisely the categorical demarcation of human and machine she is attempting to dissolve. And the logic through which those categories are articulated in a relation of binary opposition to each other remains. **Thus the cyborg is framed as different from the preceding forms of Human bodies and nonhuman technologies which give rise to it. Its difference is accounted for as variation or mutation, that is in a relation to a central figure, the Human, in a reiteration of the logic of identity.** That the logic of identity is problematic for feminist theory on a range of fronts has been convincingly and comprehensively argued elsewhere.1 I would argue that these difficulties are especially acute for feminists such as Haraway who are interested in re-conceptualizing technology as a facilitating agent for new and transformed futures. Not only does the logic of identity erase difference, including sexual difference, but to the extent that it is a deterministic framework it forecloses any possibility of radical and unexpected change. As Grosz (2000) has argued, the ability to think the new requires an open-ended, non-deterministic conceptual horizon within which the unpredictable and unexpected, the novel may appear and in which the future is not already predicted and determined in a relation to the past/present. Such a horizon must not be bound by determination, in which all emergent formations are explained in relation to existing ones, but must instead accommodate the ‘disconcerting idea of unpredictable transformation, upheavals in directions and arenas which cannot be known in advance and whose results are inherently uncertain’ (Grosz, 2000: 215). To think radical transformation, then, requires a conceptual horizon that will allow for the emergence of novelty, innovation or radical change – the new.2 Clearly a logic such as that of identity, where difference is always already situated in relation to the same, circumscribes the appearance of the new and radically different. **As long as bodies and technologies are thought through only the determinist framework of identity, their combination cannot give rise to radically transformed new configurations**. In the last instance, any mutant formation remains articulated within the dominant framework and its difference understood only in relation to the forms – human and technological – that preceded it. Transformation is short-circuited in a formulation in which emerging configurations are explicable only in terms of difference from preceding forms and, thus, articulated in relation to the same. Given the many disclaimers to the contrary, it is ironic that the cyborg is perhaps the most recent of Cartesian recuperations. Haraway’s insistence that ‘the cyborg skips the step of original unity’ forgets that it is against the unity of ‘the before’, the purity of identity prior to its corruption, that the cyborg’s’ unique and complex hybridity is defined. (Kirby, 1997: 147)

### Cap Good

#### Extinction outweighs:

#### A] Comes before value-to-life.

Tännsjö 11 (Torbjörn, the Kristian Claëson Professor of Practical Philosophy at Stockholm University, “Shalt Thou Sometimes Murder? On the Ethics of Killing,” <http://people.su.se/~jolso/HS-texter/shaltthou.pdf>) //BS 1-27-2018

\*\*Bracketed to avoid triggers

I suppose it is correct to say that, if Schopenhauer is right, if life is never worth living, then according to utilitarianism we should all [die] commit suicide and put an end to humanity. But this does not mean that, each of us should commit suicide. I commented on this in chapter two when I presented the idea that utilitarianism should be applied, not only to individual actions, but to collective actions as well.¶ It is a well-known fact that people rarely commit suicide. Some even claim that no one who is mentally sound commits suicide. Could that be taken as evidence for the claim that people live lives worth living? That would be rash. Many people are not utilitarians. They may avoid suicide because they believe that it is morally wrong to kill oneself. It is also a possibility that, even if people lead lives not worth living, they believe they do. And even if some may believe that their lives, up to now, have not been worth living, their future lives will be better. They may be mistaken about this. They may hold false expectations about the future.¶ From the point of view of evolutionary biology, it is natural to assume that people should rarely commit suicide. If we set old age to one side, it has poor survival value (of one’s genes) to kill oneself. So it should be expected that it is difficult for ordinary people to kill themselves. But then theories about cognitive dissonance, known from psychology, should warn us that we may come to believe that we live better lives than we do.¶ My strong belief is that most of us live lives worth living. However, I do believe that our lives are close to the point where they stop being worth living. But then it is at least not very far-fetched to think that they may be worth not living, after all. My assessment may be too optimistic.¶ Let us just for the sake of the argument assume that our lives are not worth living, and let us accept that, if this is so, we should all kill ourselves. As I noted above, this does not answer the question what we should do, each one of us. My conjecture is that we should not [die] commit suicide. The explanation is simple. If I [die] kill myself, many people will suffer. Here is a rough explanation of how this will happen: ¶ ... suicide “survivors” confront a complex array of feelings. Various forms of guilt are quite common, such as that arising from (a) the belief that one contributed to the suicidal person's anguish, or (b) the failure to recognize that anguish, or (c) the inability to prevent the suicidal act itself. Suicide also leads to rage, loneliness, and awareness of vulnerability in those left behind. Indeed, the sense that suicide is an essentially selfish act dominates many popular perceptions of suicide. ¶ The fact that all our lives lack meaning, if they do, does not mean that others will follow my example. They will go on with their lives and their false expectations — at least for a while devastated because of my suicide. But then I have an obligation, for their sake, to go on with my life. It is highly likely that, by committing suicide, I create more suffering (in their lives) than I avoid (in my life).

#### B] Extinction outweighs

MacAskill 14 [William, Oxford Philosopher and youngest tenured philosopher in the world, Normative Uncertainty, 2014]

The human race might go extinct from a number of causes: asteroids, supervolcanoes, runaway climate change, pandemics, nuclear war, and the development and use of dangerous new technologies such as synthetic biology, all pose risks (even if very small) to the continued survival of the human race.184 And different moral views give opposing answers to question of whether this would be a good or a bad thing. It might seem obvious that human extinction would be a very bad thing, both because of the loss of potential future lives, and because of the loss of the scientific and artistic progress that we would make in the future. But the issue is at least unclear. The continuation of the human race would be a mixed bag: inevitably, it would involve both upsides and downsides. And if one regards it as much more important to avoid bad things happening than to promote good things happening then one could plausibly regard human extinction as a good thing.For example, one might regard the prevention of bads as being in general more important that the promotion of goods, as defended historically by G. E. Moore,185 and more recently by Thomas Hurka.186 One could weight the prevention of suffering as being much more important that the promotion of happiness. Or one could weight the prevention of objective bads, such as war and genocide, as being much more important than the promotion of objective goods, such as scientific and artistic progress. If the human race continues its future will inevitably involve suffering as well as happiness, and objective bads as well as objective goods. So, if one weights the bads sufficiently heavily against the goods, or if one is sufficiently pessimistic about humanity’s ability to achieve good outcomes, then one will regard human extinction as a good thing.187 However, even if we believe in a moral view according to which human extinction would be a good thing, we still have strong reason to prevent near-term human extinction. To see this, we must note three points. First, we should note that the extinction of the human race is an extremely high stakes moral issue. Humanity could be around for a very long time: if humans survive as long as the median mammal species, we will last another two million years. On this estimate, the number of humans in existence in the The future, given that we don’t go extinct any time soon, would be 2×10^14. So if it is good to bring new people into existence, then it’s very good to prevent human extinction. Second, human extinction is by its nature an irreversible scenario. If we continue to exist, then we always have the option of letting ourselves go extinct in the future (or, perhaps more realistically, of considerably reducing population size). But if we go extinct, then we can’t magically bring ourselves back into existence at a later date. Third, we should expect ourselves to progress, morally, over the next few centuries, as we have progressed in the past. So we should expect that in a few centuries’ time we will have better evidence about how to evaluate human extinction than we currently have. Given these three factors, it would be better to prevent the near-term extinction of the human race, even if we thought that the extinction of the human race would actually be a very good thing. To make this concrete, I’ll give the following simple but illustrative model. Suppose that we have 0.8 credence that it is a bad thing to produce new people, and 0.2 certain that it’s a good thing to produce new people; and the degree to which it is good to produce new people, if it is good, is the same as the degree to which it is bad to produce new people, if it is bad. That is, I’m supposing, for simplicity, that we know that one new life has one unit of value; we just don’t know whether that unit is positive or negative. And let’s use our estimate of 2×10^14 people who would exist in the future, if we avoid near-term human extinction. Given our stipulated credences, the expected benefit of letting the human race go extinct now would be (.8-.2)×(2×10^14) = 1.2×(10^14). Suppose that, if we let the human race continue and did research for 300 years, we would know for certain whether or not additional people are of positive or negative value. If so, then with the credences above we should think it 80% likely that we will find out that it is a bad thing to produce new people, and 20% likely that we will find out that it’s a good thing to produce new people. So there’s an 80% chance of a loss of 3×(10^10) (because of the delay of letting the human race go extinct), the expected value of which is 2.4×(10^10). But there’s also a 20% chance of a gain of 2×(10^14), the expected value of which is 4×(10^13). That is, in expected value terms, the cost of waiting for a few hundred years is vanishingly small compared with the benefit of keeping one’s options open while one gains new information.

#### It’s sustainable – data proves we’re entering the golden age

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The past 30 years have seen immense progress **in improving the quality of life for much of humanity**. Extreme poverty — the number of people living on less than $1.90 per day — has fallen by nearly two-thirds, from 1.9 **billion to** around 650 **million**. Life expectancy has risen in most of the world, along with literacy and access to education, while infant mortality has fallen. Despite perceptions to the contrary, **the average person born today is likely to have access to more opportunities and have a better quality of life than at any other point in human history**. Much of this increase in human wellbeing has been propelled by rapid economic growth driven largely by state-led industrial policy, particularly in poor-to-middle income countries. However, this growth has come at a cost: between 1990 and 2019, global emissions of CO2 **increased by 56%.** Historically, economic growth has been closely linked to increased energy consumption — and increased CO2 emissions in particular — leading some to argue that a more prosperous world is one that necessarily has more impacts on our natural environment and climate. There is a lively academic debate about our ability to “absolutely decouple” emissions and growth — that is, the extent to which the adoption of clean energy technology can allow emissions to decline while economic growth continues. Over the past 15 years, however, **something has begun to change.** Rather than a 21st century dominated by coal that energy modelers foresaw, **global coal use peaked in 2013 and is now in structural decline**. We have succeeded in making clean energy cheap, with solar power and battery storage costs falling 10-fold since 2009. The world produced more electricity from clean energy — solar, wind, hydro, and nuclear — than from coal over the past two years. And, according to some major oil companies, **peak oil is upon us** — not because we have run out of cheap oil to produce, but because demand is falling and companies expect further decline as consumers increasingly shift to electric vehicles. The world has long been experiencing a relative **decoupling** between economic growth and CO2 emissions, with the emissions per unit of GDP **falling for the past 60 years**. This is the case even in countries like **India and China** that have been undergoing rapid economic growth. But relative decoupling alone is inadequate in a world where global CO2 emissions need to peak and decline in the next decade to give us any chance at limiting warming to well below 2℃, in line with Paris Agreement targets. Thankfully, there is increasing evidence that the world is on track **to absolutely decouple CO2 emissions and economic growth** — with global CO2 emissions potentially having peaked in 2019 **and unlikely to increase substantially in the coming decade**. While an emissions peak is just the first and easiest step towards eventually reaching the net-zero emissions required to stop the world from continuing to warm, it demonstrates that linkages between emissions and economic activity are not an immutable law, but rather simply a result of our current means of energy production. In recent years we have seen more and more examples of absolute decoupling — economic growth accompanied by falling CO2 emissions. Since 2005, 32 countries with a population of at least one million people **have absolutely decoupled** emissions from economic growth, both for terrestrial emissions (those within national borders) and consumption emissions (emissions embodied in the goods consumed in a country). This includes the United States, Japan, Mexico, Germany, United Kingdom, France, Spain, Poland, Romania, Netherlands, Belgium, Portugal, Sweden, Hungary, Belarus, Austria, Bulgaria, El Salvador, Singapore, Denmark, Finland, Slovakia, Norway, Ireland, New Zealand, Croatia, Jamaica, Lithuania, Slovenia, Latvia, Estonia, and Cyprus. Figure 1, below, shows the declines in territorial emissions (blue) and increases in GDP (red). To qualify as having experienced absolute decoupling, we require countries included in this analysis to pass four separate filters: a population of at least one million (to focus the analysis on more representative cases), declining territorial emissions over the 2005-2019 period (based on a linear regression), declining consumption emissions, and increasing real GDP (on a purchasing power parity basis, using constant 2017 international $USD). We chose not to include 2020 in this analysis because it is not particularly representative of longer-term trends, and consumption and territorial emissions estimates are not yet available for many countries. There is a wide range of rates of economic growth between 2005-2019 among countries experiencing absolute decoupling. Somewhat counterintuitively, there is no significant relationship between the rate of economic growth and the magnitude of emissions reductions within the group. **While it is unlikely that there is not at least some linkage between the two factors, there are plenty of examples of countries (e.g., Singapore, Romania, and Ireland) experiencing both extremely rapid economic growth and large reductions in CO2 emissions.** One of the primary criticisms of some prior analyses of absolute decoupling is that they ignore **leakage**. Specifically, the offshoring of manufacturing from high-income countries over the past three decades to countries like China has led to “illusory” drops in emissions, where the emissions associated with high-income country consumption are simply shipped overseas and no longer show up in territorial emissions accounting. There is some truth in this critique, as there was a large increase in emissions embodied in imports from developing countries between 1990 and 2005. After 2005, however, structural changes in China and a growing domestic market led to a reversal of these trends; the amount of emissions “exported” from developed countries to developing countries **has actually declined over the past 15 years.** This means that, for many countries, both territorial emissions and consumption emissions (which include any emissions “exported” to other countries) **have jointly declined**. In fact, on average, consumption emissions have been declining slightly faster than territorial emissions since 2005 in the 32 countries we identify as experiencing absolute decoupling. Figure 2, below, shows the change in consumption emissions (teal) and GDP (red) between 2005 and 2019. There is a pretty wide variation in the extent to which these countries have reduced their territorial and consumption emissions since 2005. Some countries — such as the UK, Denmark, Finland, and Singapore – have seen territorial emissions fall faster than consumption emissions, while the US, Japan, Germany, and Spain (among others) have seen consumption emissions fall faster. Figure 3 shows reductions in consumption and territorial emissions for each country, with the size of the dot representing the size of the population in 2019. **Absolute decoupling is possible.** There is no physical law requiring economic growth — and broader increases in human wellbeing — to necessarily be linked to CO2 emissions. All of the **services that we rely on today that emit fossil fuels** — electricity, transportation, heating, food — can in principle **be replaced by near-zero carbon alternatives**, though these are more mature in some sectors (electricity, transportation, buildings) than in others (industrial processes, agriculture).

#### Tech dematerialization secures sustainability.

**McAfee 19**, \*Andrew Paul McAfee, a principal research scientist at MIT, is cofounder and codirector of the MIT Initiative on the Digital Economy at the MIT Sloan School of Management; (2019, “More from Less: The Surprising Story of How We Learned to Prosper Using Fewer Resources and What Happens Next”, https://b-ok.cc/book/5327561/8acdbe)

There is **no shortage** of examples of dematerialization. I chose the ones in this chapter because they illustrate a set of fundamental principles at the intersection of business, economics, innovation, and our impact on our planet. They are:

We do want more all the time, but **not more resources**. Alfred Marshall was right, but William Jevons was wrong. Our wants and desires keep growing, evidently without end, and therefore so do our economies. But our use of the earth’s resources **does not**. We do want more beverage options, but we don’t want to keep using more aluminum in drink cans. We want to communicate and compute and listen to music, but we don’t want an arsenal of gadgets; we’re happy with a single smartphone. As our population increases, we want more food, but we don’t have any desire to consume more fertilizer or use more land for crops.

Jevons was correct at the time he wrote that total British demand for coal was increasing even though steam engines were becoming much more efficient. He was right, in other words, that the price elasticity of demand for coal-supplied power was greater than one in the 1860s. But he was wrong to conclude that this would be permanent. Elasticities of demand can change over time for several reasons, the most fundamental of which is **technological change**. Coal provides a clear example of this. When fracking made natural gas much cheaper, total **demand** for coal in the United States **went down** even though its price decreased.

With the help of **innovation** and **new technologies**, economic growth in America and other rich countries—growth in all of the wants and needs that we spend money on—has become **decoupled** from resource **consumption**. This is a recent development and a **profound** one.

Materials cost money that companies locked in competition would rather **not spend**. The root of Jevons’s mistake is simple and **boring**: resources cost **money**. He realized this, of course. What he didn’t sufficiently realize was how strong the **incentive** is for a company in a contested market to **reduce** its spending on **resources** (or anything else) and so eke out a bit more profit. After all, a penny saved is a penny earned.

Monopolists can just pass costs on to their customers, but companies with a lot of competitors can’t. So American farmers who battle with each other (and increasingly with tough rivals in other countries) are eager to cut their spending on land, water, and fertilizer. Beer and soda companies want to minimize their aluminum purchases. Producers of magnets and high-tech gear run away from REE as soon as prices start to spike. In the United States, the 1980 Staggers Act removed government subsidies for freight-hauling railroads, forcing them into **competition** and **cost cutting** and making them all the more eager to not have expensive railcars sit idle. Again and again, we see that **competition** spurs **dematerialization**.

There are multiple paths to dematerialization. As profit-hungry companies seek to use fewer resources, they can go down four main paths. First, they can simply find ways to use **less** of a **given material**. This is what happened as beverage companies and the companies that supply them with cans teamed up to use less aluminum. It’s also the story with American farmers, who keep getting bigger harvests while using less land, water, and fertilizer. Magnet makers found ways to use fewer rare earth metals when it looked as if China might cut off their supply.

Second, it often becomes possible to **substitute** one resource for **another**. Total US coal consumption started to decrease after 2007 because fracking made natural gas more attractive to electricity generators. If nuclear power becomes more popular in the United States (a topic we’ll take up in chapter 15), we could use both less coal and less gas and generate our electricity from a small amount of material indeed. A kilogram of uranium-235 fuel contains approximately 2–3 million times as much energy as the same mass of coal or oil. According to one estimate, the total amount of energy that humans consume each year could be supplied by just seven thousand tons of uranium fuel.

Third, companies can use **fewer molecules** overall by making better use of the materials they **already own**. Improving CNW’s railcar utilization from 5 percent to 10 percent would mean that the company could cut its stock of these thirty-ton behemoths in half. Companies that own expensive physical assets tend to be fanatics about getting as much use as possible out of them, for clear and compelling financial reasons. For example, the world’s commercial airlines have improved their load factors—essentially the percentage of seats occupied on flights—from 56 percent in 1971 to more than 81 percent in 2018.

Finally, some materials get replaced by **nothing** at all. When a telephone, camcorder, and tape recorder are separate devices, three total microphones are needed. When they all collapse into a smartphone, only one microphone is necessary. That smartphone also uses no audiotapes, videotapes, compact discs, or camera film. The iPhone and its descendants are among the world champions of dematerialization. They use vastly less metal, plastic, glass, and silicon than did the devices they have replaced and don’t need media such as paper, discs, tape, or film.

If we use more renewable energy, we’ll be replacing coal, gas, oil, and uranium with **photons** from the **sun** (solar power) and the **movement** of **air** (wind power) and water (hydroelectric power) on the earth. All three of these types of power are also among dematerialization’s **champions**, since they use up essentially **no resources** once they’re up and running.

I call these four paths to dematerialization slim, swap, optimize, and evaporate. They’re not mutually exclusive. Companies can and do pursue all four at the same time, and all four are going on all the time in ways both obvious and subtle.

Innovation is **hard** to **foresee**. Neither the fracking revolution nor the world-changing impact of the iPhone’s introduction were well understood in advance. Both continued to be underestimated even after they occurred. The iPhone was introduced in June of 2007, with no shortage of fanfare from Apple and Steve Jobs. Yet several months later the cover of Forbes was still asking if anyone could catch Nokia.

Innovation is not **steady** and **predictable** like the orbit of the Moon or the accumulation of interest on a certificate of deposit. It’s instead inherently jumpy, uneven, and **random**. It’s also **combinatorial**, as Erik Brynjolfsson and I discussed in our book The Second Machine Age. Most new technologies and other innovations, we argued, are combinations or recombinations of preexisting elements.

The iPhone was “just” a cellular telephone plus a bunch of sensors plus a touch screen plus an operating system and population of programs, or apps. All these elements had been around for a while before 2007. It took the vision of Steve Jobs to see what they could become when combined. Fracking was the combination of multiple abilities: to “see” where hydrocarbons were to be found in rock formations deep underground; to pump down pressurized liquid to fracture the rock; to pump up the oil and gas once they were released by the fracturing; and so on. Again, none of these was new. Their effective combination was what changed the world’s energy situation.

Erik and I described the set of innovations and technologies available at any time as **building blocks** that ingenious people could combine and recombine into useful new configurations. These new configurations then serve as more blocks that later innovators can use. Combinatorial innovation is exciting because it’s unpredictable. It’s not easy to foresee when or where powerful new combinations are going to appear, or who’s going to come up with them. But as the number of both building blocks and innovators increases, we should have **confidence** that more breakthroughs such as fracking and smartphones are ahead. Innovation is highly decentralized and largely uncoordinated, occurring as the result of **interactions** among **complex** and **interlocking** social, technological, and economic systems. So it’s going to keep surprising us.

As the Second Machine Age progresses, dematerialization **accelerates**. Erik and I coined the phrase Second Machine Age to draw a contrast with the Industrial Era, which as we’ve seen transformed the planet by allowing us to overcome the limitations of muscle power. Our current time of great progress with all things related to **computing** is allowing us to **overcome** the **limitations** of our mental power and is **transformative** in a different way: it’s allowing us to **reverse** the Industrial Era’s bad habit of taking **more** and **more** from the earth every year.

Computer-aided design tools help engineers at packaging companies design generations of aluminum cans that keep getting lighter. Fracking took off in part because oil and gas exploration companies learned how to build **accurate** computer **models** of the rock formations that lay deep underground—models that predicted where hydrocarbons were to be found.

Smartphones took the place of many separate pieces of gear. Because they serve as GPS devices, they’ve also led us to print out many fewer maps and so contributed to our current trend of using less paper. It’s easy to look at generations of computer paper, from 1960s punch cards to the eleven-by-seventeen-inch fanfold paper of the 1980s, and conclude that the Second Machine Age has caused us to chop down ever more trees. The year of peak paper consumption in the United States, however, was 1990. As our devices have become more capable and interconnected, always on and always with us, we’ve sharply turned away from paper. Humanity as a whole probably hit peak paper in 2013.

As these examples indicate, computers and their kin help us with all four paths to **dematerialization**. Hardware, software, and networks let us slim, swap, optimize, and evaporate. I contend that they’re the **best tools** we’ve **ever invented** for letting us tread more **lightly** on our planet.

All of these principles are about the **combination** of technological **progress** and **capitalism**, which are the first of the two pairs of forces causing **dematerialization**.

#### People use low-cost fuels instead of renewables.

George MONBIOT 9. Fellowship and Professorships, Oxford. “Is There Any Point in Fighting to Stave Off Industrial Apocalypse.” *Guardian*. August 17. <http://www.guardian.co.uk/commentisfree/cif-green/2009/aug/17/environment-climate-change>.

The problem we face is not that we have too little fossil fuel but too much. As oil declines, economies will switch to tar sands, shale gas and coal; as accessible coal declines they’ll switch to ultra-deep reserves (using underground gasification to exploit them) and methane clathrates. The same probably applies to almost all minerals: we will find them, but exploiting them will mean trashing an ever greater proportion of the world’s surface. We have enough non-renewable resources of all kinds to complete our wreckage of renewable resources: forests, soil, fish, fresh water, benign weather. Collapse will come one day, but not before we have pulled everything else down with us.¶ And even if there were an immediate economic cataclysm, it’s not clear that the result would be a decline in our capacity for destruction. In east Africa, for example, I’ve seen how, when supplies of paraffin or kerosene are disrupted, people don’t give up cooking; they cut down more trees. History shows us that wherever large-scale collapse has occurred, psychopaths take over. This is hardly conducive to the rational use of natural assets.

#### Capitalism solves war – its anti-imperialist.

Mousseau 19, Michael. "The end of war: How a robust marketplace and liberal hegemony are leading to perpetual world peace." International Security 44.1 (2019): 160-196. Props to DML for finding. (Professor in the School of Politics, Security, and International Affairs at the University of Central Florida)//Elmer

Is war becoming obsolete? There is wide agreement among scholars that war has been in sharp decline since the defeat of the Axis powers in 1945, even as there is little agreement as to its cause.1 Realists reject the idea that this trend will continue, citing states' concerns with the “security dilemma”: that is, in anarchy states must assume that any state that can attack will; therefore, power equals threat, and changes in relative power result in conflict and war.2 Discussing the rise of China, Graham Allison calls this condition “Thucydides's Trap,” a reference to the ancient Greek's claim that Sparta's fear of Athens' growing power led to the Peloponnesian War.3 This article argues that there is no Thucydides Trap in international politics. Rather, the world is moving rapidly toward permanent peace, possibly in our lifetime. Drawing on economic norms theory,4 I show that what sometimes appears to be a Thucydides Trap may instead be a function of factors strictly internal to states and that these factors vary among them. In brief, leaders of states with advanced market-oriented economies have foremost interests in the principle of self-determination for all states, large and small, as the foundation for a robust global marketplace. War among these states, even making preparations for war, is not possible, because they are in a natural alliance to preserve and protect the global order. In contrast, leaders of states with weak internal markets have little interest in the global marketplace; they pursue wealth not through commerce, but through wars of expansion and demands for tribute. For these states, power equals threat, and therefore they tend to balance against the power of all states. Fearing stronger states, however, minor powers with weak internal markets tend to constrain their expansionist inclinations and, for security reasons, bandwagon with the relatively benign market-oriented powers. I argue that this liberal global hierarchy is unwittingly but systematically buttressing states' embrace of market norms and values that, if left uninterrupted, is likely to culminate in permanent world peace, perhaps even something close to harmony. My argument challenges the realist assertion that great powers are engaged in a timeless competition over global leadership, because hegemony cannot exist among great powers with weak markets; these inherently expansionist states live in constant fear and therefore normally balance against the strongest state and its allies.5 Hegemony can exist only among market-oriented powers, because only they care about global order. Yet, there can be no competition for leadership among market powers, because they always agree with the goal of their strongest member (currently the United States) to preserve and protect the global order

#### Physical limits aren’t absolute---laundry list of warrants.

Bailey 18 [Ronald; February 16; B.A. in Economics from the University of Virginia, member of the Society of Environmental Journalists and the American Society for Bioethics and Humanities, citing a compilation of interdisciplinary research; Reason, “Is Degrowth the Only Way to Save the World?” https://reason.com/2018/02/16/is-degrowth-the-only-way-to-save-the-wor; RP]

Unless us folks in rich countries drastically reduce our material living standards and distribute most of what we have to people living in poor countries, the world will come to an end. Or at least that's the stark conclusion of a study published earlier this month in the journal Nature Sustainability. The researchers who wrote it, led by the Leeds University ecological economist Dan O'Neill, think the way to prevent the apocalypse is "degrowth."

Vice, pestilence, war, and "gigantic inevitable famine" were the planetary boundaries set on human population by the 18th-century economist Robert Thomas Malthus. The new study gussies up old-fashioned Malthusianism by devising a set of seven biophysical indicators of national environmental pressure, which they then link to 11 indicators of social outcomes. The aim of the exercise is to concoct a "safe and just space" for humanity.

Using data from 2011, the researchers calculate that the annual per capita boundaries for the world's 7 billion people consist of the emission of 1.6 tons of carbon dioxide per year and the annual consumption of 0.9 kilograms of phosphorus, 8.9 kilograms of nitrogen, 574 cubic meters of water, 2.6 tons of biomass (crops and wood), plus the ecological services of 1.7 hectares of land and 7.2 tons of material per person.

On the social side, meanwhile, the researchers say that life satisfaction in each country should exceed 6.5 on the 10-point Cantril scale, that healthy life expectancy should average at least 65 years, and that nutrition should be over 2,700 calories per day. At least 95 percent of each country's citizens must have access to good sanitation, earn more than $1.90 per day, and pass through secondary school. Ninety percent of citizens must have friends and family they can depend on. The threshold for democratic quality must exceed 0.8 on an index scale stretching from -1 to +1, while the threshold for equality is set at no higher than 70 on a Gini Index where 0 represents perfect equality and 100 implies perfect inequality. They set the threshold for percent of labor force employed at 94 percent.

So how does the U.S. do with regard to their biophysical boundaries and social outcomes measures? We Americans transgress all seven of the biophysical boundaries. Carbon dioxide emissions stand at 21.2 tons per person; we each use an average of 7 kilograms of phosphorus, 59.1 kilograms of nitrogen, 611 cubic meters of water, and 3.7 tons of biomass; we rely on the ecological services of 6.8 hectares of land and 27.2 tons of material. Although the researchers urge us to move "beyond the pursuit of GDP growth to embrace new measures of progress," it is worth noting that U.S. GDP is $59,609 per capita.

On the other hand, those transgressions have provided a pretty good life for Americans. For example, life satisfaction is 7.1; healthy life expectancy is 69.7 years; and democratic quality stands at 0.8 points. The only two social indicators we just missed on were employment (91 percent) and secondary education (94.7 percent).

On the other hand, our hemisphere is home to one paragon of sustainability—Haiti. Haitians breach none of the researchers' biophysical boundaries. But the Caribbean country performs abysmally on all 11 social indicators. Life satisfaction scores at 4.8; healthy life expectancy is 52.3 years; and Haitians average 2,105 calories per day. The country tallies -0.9 on the democratic quality index. Haiti's GDP is $719 per capita.

Other near-sustainability champions include Malawi, Nepal, Myanmar, and Nicaragua. All of them score dismally on the social indicators, and their GDPs per capita are $322, $799, $1,375, and $2,208, respectively.

The country that currently comes closest to the researchers' ideal of remaining within its biophysical boundaries while sufficient social indicators is…Vietnam. For the record, Vietnam's per capita GDP is $2,306.

"Countries with higher levels of life satisfaction and healthy life expectancy also tend to transgress more biophysical boundaries," the researchers note. A better way to put this relationship is that more wealth and technology tend to make people happier, healthier, and freer.

O'Neill and his unhappy team fail drastically to understand how human ingenuity unleashed in markets is already well on the way toward making their supposed planetary boundaries irrelevant. Take carbon dioxide emissions: Supporters of renewable energy technologies say that their costs are already or will soon be lower than those of fossil fuels. Boosters of advanced nuclear reactors similarly argue that they can supply all of the carbon-free energy the world will need. There's a good chance that fleets of battery-powered self-driving vehicles will largely replace private cars and mass transit later in this century.

Are we about to run out of phosphorous to fertilize our crops? Peak phosphorus is not at hand. The U.S. Geological Survey (USGS) reports that at current rates of mining, the world's known reserves will last 266 years. The estimated total resources of phosphate rock would last over 1,140 years. "There are no imminent shortages of phosphate rock," notes the USGS. With respect to the deleterious effects that using phosphorus to fertilize crops might have outside of farm fields, researchers are working on ways to endow crops with traits that enable them to use less while maintaining yields.