# **You Can Do More K (EF K)**

## Framework

#### [ROJ & Giroux] CORPORATIONS ARE TAKING OVER EDUCATION – we desperately need critical pedagogy to resist that.

**Giroux:** Giroux, Henry A. [Waterbury Chair Professor, Pennsylvania State University] “Radical Politics in the Age of American Authoritarianism: Connecting the Dots.” *Truthout*,April 2016. https://truthout.org/articles/radical-politics-in-the-age-of-american-authoritarianism-connecting-the-dots/ CH

At the root of this notion of developing a comprehensive view of politics is the need for educating ourselves by developing a critical formative culture along with corresponding institutions that promote a form of permanent criticism against all elements of oppression and unaccountable power.**One important task of emancipation is to fight the dominant culture industry by developing alternative public spheres and education**al institutions **capable of nourishing critical thought and** action. The time has come for educators, artists, workers, young people and others to push forward **a** new **form of politics** in which public values, trust and compassion trump neoliberalism's celebration of self- interest, the ruthless accumulation of capital, the survival-of-the-fittest ethos and the financialization and market-driven corruption of the political system. Political responsibility is more than a challenge -- it is the projection of a possibility in which new modes of identification and agents must be enabled that can sustain new political organizations and transnational anti-capitalist movements. Democracy must be written back into the script of everyday life, and doing so demands overcoming the current crisis of memory, agency and politics by collectively struggling for a new form of politics in which matters of justice, equity and inclusion define what is possible. Such struggles demand an increasingly broad-based commitment to a new kind of activism. As Robin D. G. Kelley has recently noted there is a need for more pedagogical, cultural and social spaces that allow us to think and act together, to take risks and **to get to the roots of the conditions that are submerging the United States into a new form of authoritarianism wrapped in the flag, the dollar sign and the cross.** Kelley is right in calling for a politics that places justice at its core, one that takes seriously what it means to be an individual and social agent while engaging in collective struggles. We don't need tepid calls for repairing the system; instead, we need to invent a new system from the ashes of one that is terminally broken. We don't need calls for moral uplift or personal responsibility. We need calls for economic, political, gender and racial justice. Such a politics must be rooted in particular demands, be open to direct action and take seriously strategies designed to both educate a wider public and mobilize them to seize power. The left needs a new political conversation that encompasses memories of freedom and resistance. Such a dialogue would build on the militancy of the labor strikes of the 1930s, the civil rights movements of the 1950s and the struggle for participatory democracy by the New Left in the 1960s. At the same time, there is a need to reclaim the radical imagination and to infuse it with a spirited battle for an independent politics that regards a radical democracy as part of a never-ending struggle. **None of this can happen unless progressives understand education as a political and moral practice crucial to creating new forms of agency, mobilizing a desire for change and providing a language** that underwrites the capacity to think, speak and act so as to challenge the sexist, racist, economic and political grammars of suffering produced by the new authoritarianism. The left needs a language of critique that enables people to ask questions that appear unspeakable within the existing vocabularies of oppression. We also need a language of hope that is firmly aware of the ideological and structural obstacles that are undermining democracy. We need a language that reframes our activist politics as a creative act that responds to the promises and possibilities of a radical democracy. Movements require time to mature and come into fruition. They necessitate educated agents able to connect structural conditions of oppression to the oppressive cultural apparatuses that legitimate, persuade, and shape individual and collective attitudes in the service of oppressive ideas and values. Under such conditions, radical ideas can be connected to action once diverse groups recognize the need to take control of the political, economic and cultural conditions that shape their worldviews, exploit their labor, control their communities, appropriate their resources, and undermine their dignity and lives. Raising consciousness alone will not change authoritarian societies, but it does provide the foundation for making oppression visible and for developing from below what Étienne Balibar calls "practices of resistance and solidarity." We need not only a radical critique of capitalism, racism and other forms of oppression, but also a critical formative culture and cultural politics that inspire, energize and provide elements of a transformative radical education in the service of a broad-based democratic liberation movement.

Thus, **the Role of the Judge is to Promote Critical Thinking**, which means helping students develop the skills to question the squo.

#### [ROB & Kellner] AND that requires rejecting the one-dimensional thought that underlies capitalistic culture.

**Kellner:** Kellner, Douglas. [George Kneller Chair in the Philosophy of Education in the Graduate School of Education and Information Studies at the University of California, Los Angeles]. “One-Dimensional Man: Introduction to the Second Edition.” Beacon Press,1964. https://tinyurl.com/2tpwevjk EM/CH

Thus, I would propose interpreting “one-dimensional” as conforming to existing thought and behavior and lacking a critical dimension and a dimension of potentialities that transcend the existing society. In Marcuse's usage the adjective **“one-dimensional” describes practices that conform to pre-existing structures, norms, and behavior, in contrast to multidimensional discourse, which focuses on possibilities that transcend the established state of** affairs. This epistemological distinction presupposes antagonism between subject and object so that the subject is free to perceive possibilities in the world that do not yet exist but which can be realized. In the one**-dimensional society, the subject is assimilated into the object and follows the dictates of external, objective norms and structures, thus losing the ability to discover more liberating possibilities and to engage in transformative practice to realize them.** Marcuse's theory presupposes the existence of a human subject with freedom, creativity, and self-determination who stands in opposition to an object-world, perceived as substance, which contains possibilities to be realized and secondary qualities like values, aesthetic traits, and aspirations, which can be cultivated to enhance human life.

He adds:

In his early works, Marcuse himself attempted to synthesize Heidegger's phenomenological existentialism with Marxism, and in One-Dimensional Man one recognizes Husserl and Heideggerian motifs in Marcuse's critiques of scientific civilization and modes of thought. In particular, Marcuse develops a conception of a technological world, similar in some respects to that developed by Heidegger, and, like Husserl and Heidegger, sees technological rationality colonizing everyday life, robbing individuals of freedom and individuality by imposing techno- logical imperatives, rules, and structures upon their thought and behavior. Marcuse thought that **dialectical philosophy could promote critical thinking.** One-Dimensional Man is perhaps Marcuse's most sustained attempt to present and develop the categories of the dialectical philosophy developed by Hegel and Marx. For Marcuse, **dialectical thinking involved the ability to abstract one's perception and thought from existing forms in order to form more general concepts.** This conception helps explain the difficulty of One-Dimensional Man and the demands that it imposes upon its reader. For Marcuse abstracts from the complexity and multiplicity of the existing society its fundamental tendencies and constituents, as well as those categories which constitute for him the forms of critical thinking. **This demands that the reader also abstract from existing ways of looking at society and modes of thinking and attempt to perceive and think in a new way. Uncritical thinking derives its beliefs, norms, and values from existing thought and social practices, while critical thought seeks alternative modes of thought and behavior from which it creates a standpoint of critique. Such a critical standpoint requires developing what Marcuse calls “negative thinking,” which “negates” existing forms of thought and reality from the perspective of higher possibilities.** This practice presupposes the ability to make a distinction between existence and essence, fact and potentiality, and appearance and reality. Mere existence would be negated in favor of realizing higher potentialities while norms discovered by reason would be used to criticize and overcome lower forms of thought and social organization. Thus grasping potentialities for freedom and happiness would make possible the negation of conditions that inhibited individuals' full development and realization. In other words, perceiving the possibility of self-determination and constructing one's own needs and values could enable individuals to break with the existing world of thought and behavior. Philosophy was thus to supply the norms for social criticism and the ideal of liberation which would guide social change and individual self- transformation.

Thus, **the Role of the Ballot is to Endorse the Rejection of One-Dimensional Thought.** This means distancing ourselves from essentializing modes of thinking – e.g., the notion that value can only come from money. We measure the standard based on whether we remain open to multiple ways of knowing or approaching problems; the more restrictive the approach, the less we adhere to the framework.

## A. Links

#### 1] The framework says “only consequentialism explains degrees of wrongness” – any time they say things like “only util” is a form of disimagination. They don’t allow for any possibilities beyond the framework they justify.

#### 3] They represent Privs in ONE WAY – they use securitization logic for the whole nation, and only allow us to see Privs through violence.

## B. Impacts

#### [Duren] DISIMAGINATION – the aff assumes private companies can only use outer space in ONE WAY, but private non-profits are working to benefit the environment.

**Duren:** Duren, Riley. [Research Scientist at the University of Arizona and an Engineering Fellow at NASA’s Jet Propulsion Laboratory.] "In Partnership with UArizona, New Nonprofit to Launch Satellite Program to Track Greenhouse Gas Emissions" *UArizona.* April 15, 2021. TB

**In a first-of-its-kind coalition to accelerate climate change action**, and with help from UArizona researchers, **a** new **nonprofit organization called Carbon Mapper is launching a program to improve scientific understanding of global methane and carbon dioxide emissions**. Carbon Mapper, a new nonprofit organization partnering with the University of Arizona, today announced a groundbreaking program **to help improve understanding of and accelerate reductions in global methane and carbon dioxide emissions.** The **Carbon Mapper** consortium also **announced plans to deploy a satellite constellation to pinpoint, quantify and track methane and carbon dioxide emissions.** "This decade represents an all-hands-on-deck moment for humanity **to make critical progress in addressing climate change**," said Riley Duren, research scientist in the UArizona Office of Research, Innovation and Impact and CEO of Carbon Mapper. "**Our mission is to** help **fill gaps in the emerging global ecosystem of methane and CO2 monitoring systems by delivering data that's timely, actionable and accessible for science-based decision making**." **Current approaches to measuring** methane and carbon dioxide **emissions** at the scale of individual facilities – particularly intermittent activity – **present challenges, especially in terms of transparency, accuracy, scalability and cost.** **Carbon Mapper** – which also is **partnering with** the state of California, **NASA**'s Jet Propulsion Laboratory, Planet, Arizona State University, High Tide Foundation and RMI – **will help overcome these technological barriers and enable accelerated action by making publicly available high emitting methane and carbon dioxide sources quickly and persistently visible** at the facility level. The data collected by the Carbon Mapper constellation of satellites will provide more complete, precise and timely measurement of methane and carbon dioxide source level emissions as well as more than 25 other environmental indicators. **Through the** Carbon Mapper-**UArizona partnership**, Duren and other UArizona **researchers offer scientific leadership** of the methane and carbon dioxide emissions data delivery **including developing new algorithms** and analytic frameworks **for testing** them with an ongoing research program. "Time is of the essence when it comes to understanding and mitigating methane and CO2 emissions," said Senior Vice President for Research and Innovation Elizabeth "Betsy" Cantwell. "Partnering with **Carbon Mapper will give** University of Arizona **researchers the tools needed to** not only see emissions hot spots, but to **understand their causes and develop actionable plans** for reducing or eliminating these sources." **Carbon Mapper, in collaboration with its public and private partners, is developing the satellite constellation** in three phases. The initial study phase, now complete, included two years of preliminary engineering development and manufacturing. **The first phase is underway and includes development of the first two satellites** by Planet and JPL, **scheduled for launch in 2023**, accompanying data processing platforms, and ongoing cooperative methane mitigation pilot projects using aircraft in California and other U.S. states. P;’

#### [Arendt] ASSUMING PRIVATE ENTITIES CAN ONLY BE BIG CORPORATIONS IS THE ESSENCE OF ONE-DIMENSIONAL THOUGHT – the notion that they can only be used one way utilitarianizes the world and equates “private” with “for-profit.” This makes it impossible to find meaning in *anything*: if everything’s a means, nothing can be an end.

Arendt: Arendt, Hannah. [Political philosopher] *The Human Condition*, 2nd edition. Chicago: University of Chicago Press, 1958, reprinted 1998. <https://monoskop.org/images/e/e2/Arendt_Hannah_The_Human_Condition_2nd_1998.pdf> CH

The implements and tools of homo faber, from which the most fundamental experience of instrumentality arises, determine all work and fabrication. Here it is indeed true that the end justifies the means; it does more, it produces and organizes them. The end justifies the violence done to nature to win the material, as the wood justifies killing the tree and the table justifies destroying the wood. Because of the end product, tools are designed and implements invented, and the same end product organizes the work process itself, decides about the needed specialists, the measure of co-operation, the number of assistants, etc. During the work process, everything is judged in terms of suitability and usefulness for the desired end, and for nothing else. The same standards of means and end apply to the product itself. Though it is an end with respect to the means by which it was produced and is the end of the fabrication process, it never becomes, so to speak, an end in itself, at least not as long as it remains an object for use. The chair which is the end of carpentering can show its usefulness only by again becoming a means, either as a thing whose durability permits its use as a means for comfortable living or as a means of exchange. The trouble with the utility standard inherent in the very activity of fabrication is that the relationship between means and end on which it relies is very much like a chain whose every end can serve again as a means in some other context. In other words, in a strictly utilitarian world, all ends are bound to be of short duration and to be transformed into means for some further ends.19 This perplexity, inherent in all consistent utilitarianism, the philosophy of homo faber par excellence, can be diagnosed theoretically as an innate incapacity to understand the distinction between utility and meaningfulness, which we express linguistically by distinguishing between "in order to" and "for the sake of." Thus the ideal of usefulness permeating a society of craftsmen-— like the ideal of comfort in a society of laborers or the ideal of acquisition ruling commercial societies—is actually no longer a matter of utility but of meaning. It is "for the sake of" usefulness in general that homo faber judges and does everything in terms of "in order to." The ideal of usefulness itself, like the ideals of other societies, can no longer be conceived as something needed in order to have something else; it simply defies questioning about its own use. Obviously there is no answer to the question which Lessing once put to the utilitarian philosophers of his time: "And what is the use of use?" The perplexity of utilitarianism is that it gets caught in the unending chain of means and ends without ever arriving at some principle which could justify the category of means and end, that is, of utility itself. The ‘in order to’ has become the content of the ‘for the sake of’; in other words, utility established as meaning generates meaninglessness. Within the category of means and end, and among the experiences of instrumentality which rules over the whole world of use objects and utility, there is no way to end the chain of means and ends and prevent all ends from eventually being used again as means, except to declare that one thing or another is "an end in itself."

## C. Alternative

#### [Jones] Thus, the alternative is to reject the aff and replace their representations with Ethnofuturism, abbreviated “EF,” a method that emphasizes critical thinking by confronting colonialist capitalism.

**Jones:** Jones, Craig Henry. [Writer at Society and Space] “Enclosing the Cosmos: Privatising Outer Space and Voices of Resistance” *Society and Space,* 2021. https://www.societyandspace.org/articles/enclosing-the-cosmos-privatising-outer-space-and-voices-of-resistance CH

These manoeuvres to privatise Outer Space rely not only on the enclosure of physical and legislative places but also seek to enclose imaginative spaces through the process(es) of disimagination. Broadly conceived, disimagination is a process that curtails our ability to think critically and imagine new futures through cultural apparatuses and public pedagogies designed to erase the multiplicity of historical realities that deviate from the hegemonic ‘norm’ (Didi-Huberman, 2008: Giroux, 2014). Whilst this concept has been used in Didi-Huberman’s discussion of the destruction of concentration camp materials and Giroux’s work on critical pedagogy and civic rights, the process of disimagination is operating within and upon discourses of Outer Space, as I discuss later in this piece. These attempts at disimagination are not going unchallenged, however, with Ethnofuturist works disrupting the oftentimes de facto futures of Outer Space and asteroid mining. Ethnofuturism critically responds to the disimagination process as it combines the Ethno- (the archaic, indigenous, or cultural histories of peoples) and -futurism (deemed the cosmopolitan, urban, and technological) (Hennoste, 2012). Consequently, Ethnofuturism can be construed as a process by and through which histories that deviate from the hegemonic ‘norm’ are reinvigorated and mobilised to (re)produce alternative discourses of futurity. Ethnofuturism here is used as an umbrella term that contains within it futurisms from a variety of groups and people. Examples of such futurisms include, but are not limited to: Afrofuturism, Aotearoa futurism, Cambrofuturism, and Sinofuturism. The following discusses enclosure, disimagination, and Ethnofuturism to problematise these futures of asteroid mining: highlighting how popular NSE discourses draw upon a Eurocentric rendition of a ‘Grand Historical Narrative’. Through this, we may begin to challenge the totalising concept of ‘humanity’ [4] oft-invoked by asteroid mining advocates and turn a more critical lens to these purported futures and the discourses (re)created to justify them.

### Pleasure:

#### 1. [Korsgaard] Not Measurable: Happiness is subjective since it varies from person to person.

Korsgaard writes:Korsgaard, Christine. 1993. The reasons we can share: An attack on the distinction between agent-relative and agent-neutral values. In Altruism, ed. Ellen Frankel Paul, Fred Dycus Miller, and Jeffrey Paul. Cambridge: Cambridge University Press. Previously published in Social Philosophy and Policy 10, no. 1: 24-51. DD

The second and related difference concerns the possibility of adding and subtracting value across the boundaries between persons. On an Intersubjectivist interpretation, neutral reasons are shared, but they’re alwaysinitiallysubjectiveor agent-relative reasons. So on this view, everythingthat is good or badis sobecause its good or bad for someone.This makes it natural for an Intersubjectivist to deny that values can be added across the boundaries between people. My happiness is good for me and yours is good for you, but the sum of these two values is[n’t] good for anyone**,** and so the Intersubjectivist will deny that the sum, as such, is a value. But an Objective Realist, who thinks that the value is in the object rather than in its relation to the subject, may think

#### 2. [Hart] By only looking towards what maximizes well-being for a whole group, there is no stopping point to where individual pleasure can be sacrificed as long as the general will is marginally increased. Util is a dehumanizing way to view ethics.

Hart**:** Hart, H.L.A. "Between Utility and Rights." Columbia Law Review, 1979, 828-46. DD

The first point is this: In the perspective of classical maximizing **util**itarianism **separate** individuals are of **no intrinsic importance but only important as** the points at which **fragments of what *is* important, *i.e.* the total aggregate of pleasure** or happiness, are located. Individual persons for it are therefore merely the channels or locations where what is of value is to be found. It is for this reason that **as long as the totals are** thereby **increased** there isnothing, if no independent principles of distribution are introduced, to **limit permissible trade-offs between** the **satisfactions** of different persons. **Hence one** individual's happiness or **pleasure**, however innocent he may be, may **be sacrificed to procure a greater** happiness or **pleasure in other** persons,and such replacementsof one person by another are not only allowed but required by unqualified utilitarianism when unrestrained by

#### 3. [Anderson] Util is unintuitive and justifies repugnant action.

Anderson: Anderson, Kerby. [National Director of Probe Ministries International] “Utilitarianism: The Greatest Good for the Greatest Number.” *Probe*, 2004**.** RP

One problem with utilitarianism is that its leads to an ‘end justifies the means’ mentality. If any worthwhile end can justify the means to attain it, a true ethical foundation is lost. But we all know that the end does not justify the means. If that were so, **t**hen Hitler could justify the Holocaust because the end was to purify the human race. Stalin could justify his slaughter of millions because he was trying to achieve a communist utopia. The end never justifies the means. The means must justify themselves. A particular act cannot be judged as good simply because it may lead to a good consequence. The means must be judged by some objective and consistent standard of morality. Second, utilitarianism cannot protect the rights of minorities if the goal is the greatest good for the greatest number. Americans in the eighteenth century could justify slavery on the basis that it provided a good consequence for a majority of Americans. Certainly the majority benefited from cheap slave labor even though the lives of black slaves were much worse. A third problem with utilitarianism is predicting the consequences.If morality is based on results, then we would have to have omniscience in order to accurately predict the consequence of any action. But at best we can only guess at the future, and often these educated guesses are wrong. A fourth problem with utilitarianism is that consequences themselves must be judged. When results occur, we must still ask whether they are good or bad results. Utilitarianism provides no objective and consistent foundation to judge results because results are the mechanism used to judge the action itself. Inviolability is intrinsically valuable.

#### [Zvobgo & Loken 1] The aff is rooted in INHERENTLY RACIST tenants of international law like global security – their race-neutral extinction scenarios are an “all lives matter” approach that ignores IR’s racism.

Zvobgo & Loken 1: Zvobgo, Kelebogile [Founder and Director, International Justice Lab at William & Mary] and Meredith Loken [Assistant Professor of Political Science, University of Massachusetts, Amherst]. “Why Race Matters in International Relations.” *Foreign Policy*, June 19, 2020. CH

Race is not a perspective on international relations; it is a central organizing feature of world politics. Anti-Japanese racism guided and sustained U.S. engagement in World War II, and broader anti-Asian sentiment influenced the development and structure of the North Atlantic Treaty Organization. During the Cold War, racism and anti-communism were inextricably linked in the containment strategy that defined Washington’s approach to Africa, Asia, Central America, the Caribbean, and South America. And today race shapes threat perception and responses to violent extremism, inside and outside the “war on terror.” Yet mainstream international relations (IR) scholarship denies race as essential to understanding the world, to the cost of the field’s integrity. Take the “big three” IR paradigms: realism, liberalism, and constructivism. These dominant frames for understanding global politics are built on raced and racist intellectual foundations that limit the field’s ability to answer important questions about international security and organization. Core concepts, like anarchy and hierarchy, are raced: They are rooted in discourses that center and favor Europe and the West. These concepts implicitly and explicitly pit “developed” against “undeveloped,” “modern” against “primitive,” “civilized” against “uncivilized.” And their use is racist: These invented binaries are used to explain subjugation and exploitation around the globe. While realism and liberalism were built on Eurocentrism and used to justify white imperialism, this fact is not widely acknowledged in the field. For instance, according to neorealists, there exists a “balance of power” between and among “great powers.” Most of these great powers are, not incidentally, white-majority states, and they sit atop the hierarchy, with small and notably less-white powers organized below them. In a similar vein, raced hierarchies and conceptions of control ground the concept of cooperation in neoliberal thought: Major powers own the proverbial table, set the chairs, and arrange the place settings.

#### [Sarlin et al] Private entities are essential for satellites in space that track climate change.

**Sarlin et al**: Sarlin, Benjy [Policy editor for NBC News], Jacob Ward [Technology correspondent for NBC News, is a 2018-19 Berggruen Fellow at Stanford University’s Center for Advanced Study in the Behavioral Sciences], and Ezra Kaplan [Producer for NBC News]. "Private space industry is helping to change the game", NBC News, October 8, 2021. https://www.nbcnews.com/meet-the-press/news/private-space-industry-helping-change-game-n1280898 EM

Having witnessed the spectacle of billionaires, contest winners, teen socialites — even, soon, "Star Trek" legend William Shatner — launching into space this year, Americans could be forgiven for assuming that the whole venture has simply become a playground for the rich and famous. **But the private space industry isn't just a rivalry between oligarchs. It's also revolutionizing the global economy in ways that may be less obvious. Space tourism is one small piece of a rapidly growing and highly profitable sector. Led by companies like Elon Musk's SpaceX and Jeff Bezos' Blue Origin, private companies have driven down launch costs to record lows, making it cheaper and easier to send thousands of satellites into orbit for a wide array of commercial uses.** Workers at Relativity Space, a smaller startup, use 3D printers to manufacture rocket parts piece by piece, fuse them with lasers and then launch them for $12 million a pop. The process, which is designed to speed the typical timeline to manufacture a rocket, can make 95 percent of the parts in 60 days. "We get paid by people like NASA, the DOD, so, government entities," co-founder and CEO Tim Ellis told "MTP Reports." "But there's also a huge commercial market that's hundreds of billions of dollars from companies that have telecom satellites," he said. And, much as NASA technology ended up filtering down to a variety of other uses on Earth, Ellis hopes to use the company's 3D printing methods to solve spaceflight challenges in a variety of ways. **Commercial satellites power imaging software like Google Maps, beam television into homes and help planes and boats stay connected in remote locations. SpaceX's Starlink service is working to provide broadband internet through a network of over 1,700 satellites. For those who can't afford launches of their own, private companies will sell the use of their satellites to perform a variety of tasks. Will Marshall, CEO of Planet Labs, sells image surveillance services powered by 200 satellites to businesses, including NBC News, as well as nonprofit and government institutions. "We've changed the business models, really, so that anyone that wants a picture, we've already taken it of your area," Marshall said. Private clients use Planet's satellites to track farming conditions across vast areas. Scientists use the data to track climate change in real time and detect changes in emissions from fires and deforestation.** A think tank even detected over 100 suspected nuclear silos in China by using Planet's imaging services. "I think that that's just the new world as it is. It's going to be a more transparent one," Marshall said. **It's a major shift from our old conception of space as largely the purview of superpowers that have poured tens of billions of dollars into space programs to showcase their engineering prowess and push the limits of science and exploration.** Some of that is still going on: China's space agency plans to go to the moon, and the U.S. would like to return. Meanwhile, NASA will probe the origins of the universe with the James Webb Space Telescope, which it plans to launch this year. Such projects cost billions, but the benefits are primarily better for scientific research, and they boost national pride. "I've never heard of any NASA satellite that generates revenue, OK?" Bill Ochs, who oversees the Webb project, said with a laugh. "We're nonprofit. Big time." The old romantic notion of space as the final frontier is also driving its entrepreneurs, who grew up reading sci-fi novels and idolizing astronauts. Like Musk, Ellis said his ultimate goal is to spearhead a flight to Mars. Bezos, whose space company, Blue Origins, is Ellis' former employer, envisions moving all heavy manufacturing into orbital stations. Meanwhile, there's plenty of money to be made here on Earth.

### PEs better protect the environment better than Govs

#### [Meyer] Outer Space provides resources that can be used to solve an earth bound energy crisis, that could potentially lead to climate change.

**[Meyer]** Meyer, Zach [Writer and Author for Northwestern Journal of International Law & Business] “Private Commercialization of Space in an International Regime: A Proposal for a Space District” Winter 2010, MR

**Outer space need not be all about dollars and cents though. Great social benefit also attaches to the exploration and development of outer space. Notably, outer space may provide solutions to energy and hazardous waste problems here on Earth. As finite energy sources are slowly depleted here on Earth, it is extremely relevant that bountiful supplies of energy exist in outer space. Solar energy is in almost infinite supply, significant hydrocarbon deposits exist nearby,  and the fuel for ultra-clean fusion orbits the Earth**. Outer space also provides a possible answer for the problem of accumulating hazardous waste on Earth-simply eject it into the far recesses of space.**Importantly, both of the above resolutions to the energy crisis and the hazardous waste problem could be of great social benefit to all people of Earth, whether they are citizens of space-faring States or not. Furthermore, an appropriate legal regime for the commercial development of outer space could also level the playing field and enable undeveloped States to compete with developed States, thereby promoting the social benefit of equality for Earth-bound States.**

#### [Williams] When exploring space and investing our money into the appropriation of outer space, we are benefiting the economy, not harming it.

**Williams:** Williams, Matthew [Author at Interesting Engineering] “Why we keep going to space and shouldn’t fix earth first” Interesting Engineering, September 5th 2021, Updated November 15th 2021, MR

**Here is a rather popular variant, where it's argued that the billions spent on spaceflight would be better spent alleviating poverty and other problems here at home. On its face, it certainly seems like a valid point. We could always use more money combatting want, scarcity, poverty, and misery. It's outrageous how common and persistent these things are! But it begins to show cracks the moment you dig into it or examine it from other angles. Once again, why is it assumed that money not directed towards spaceflight would otherwise be spent on economic, social, and environmental problems? And if all space programs today were shelved, are we really to believe that money saved would be put towards humanitarian causes? Second**, you’d be hard-pressed to find an investment with the same amount of returns as space exploration. **According to one estimate, every dollar spent during the Apollo Era resulted in a $7−$8 return on investment (ROI) thanks to the spinoffs and commercial applications that resulted. Today, that ROI has climbed to $40 for every dollar spent.** Shop around. You can’t beat that!**Third, if we’re going to talk about “money better spent elsewhere,” why are we singling out space exploration, which costs less and comes with far more payoffs than other expenditures? In truth, there's plenty of examples of wasteful spending that yield comparatively little (or nothing) by comparison. For example, according to the Centers for Disease Control and Prevention (CDC), the healthcare costs and loss of productivity caused by cigarettes account for $300 billion a year. According to the Organisation for Economic Co-operation and Development (OECD), in 2015 the world's richest nations spent $21 billion on health care and lost 1.2 billion workdays due to illnesses caused by air pollution.**By 2060, that's projected to increase to 3.7 billion lost workdays, which will result in a global loss of $2.6 trillion in Gross Domestic Product (GDP) annually. Even worse than that is the fact that an estimated 6-9 million people are likely to die annually between now and then because of worsening air quality associated with urban growth**. Meanwhile, the International Monetary Fund (IMF) estimates that the world spends roughly $5 trillion USD a year subsidizing the oil and coal industries, which constitutes about 85% of all annual global subsidies. Meanwhile, renewable energy sources like solar and wind have become price-competitive with oil and coal without the same level of financial assistance! There are two ways to look at this. At best, we are spending trillions of dollars to ensure that gas prices remain within a certain threshold for the good of the consumer.** At worst, we are financing the very industries driving climate change, and when we need to be transitioning to clean energies, that will actually cost less! **All told, the US government spent a total of around $25.4 billion on the Apollo Program over the course of 11 years.** Adjusted for inflation, that works out to around $175 billion today and an average of around $16 billion adjusted dollars a year. Add to that the costs of the Mercury (1958-1963) and Gemini Program (1961-1966), and you get an adjusted total of around $179 billion. **In terms of the national budget, these expenditures constituted about 0.1% of the nation's GDP in 1958, 4.5% in 1966 (at its peak), and less than 1% again by 1975.**Now compare that to military spending during the same period, especially between 1955-1975 when the US became embroiled in the Vietnam War. The expense of deploying American forces in Vietnam cost a total of $168 billion, or $1 trillion today. In addition to that, the draft fell disproportionately on the poor and working-class, who could not afford school deferments. In total, military expenditures during this entire period accounted for 10-13% of GDP from 1955 to 1966 and 11%-17% of GDP from 1967 to 1975. In 2018, the US government allocated a total of $890.8 billion for the sake of defense spending, which represented a 9 to 21% increase over the previous ten years. In that same year, the entire world spent an estimated $72.34 billion USD on space. What did that get us?