## Off

### 1

**We endorse the aff’s method absent the usage of the undercommons---**

**1] They let feds in debate rounds coopt their movement---Moten and Harney hate it**

**Schepers 17** (Emily Schepers, veteran civil and immigrant rights activist, doctorate in cultural anthropology from Northwestern University, September 18, 2017. “Agents provocateurs and the manipulation of the radical left.” https://www.peoplesworld.org/article/agents-provocateurs-and-the-manipulation-of-the-radical-left/)

Right now, there is considerable discussion going on about the best way to do all these things. **Tactics** **that make us feel good because they are exhilarating are not** necessarily **the same as** **effective tactics**. **They can**, in fact, **be** precisely **the opposite**. History teaches us is that the ruling class, **the** **state** and non-state institutions it controls, as well as the right **have learned** the **political judo** **whereby the left’s actions may be turned around** **and used to strengthen the right** **and weaken the left**. Specifically, **we should learn from the history of the agent provocateur, a specialist in manipulating conflict so as to benefit our enemies**. **Agents provocateurs** **are not merely enemy spies** within the people’s movement. **The** **provocateur** **has an** even more **sinister mission**, which sometimes has deadly results. What **the provocateur frequently provokes is actions that either discredit the left or the people’s movement in the eyes of large numbers of people, or which entrap the unwary into acts that will allow police to pounce, accuse activists of plotting violent or other anti-social acts, and then lock them up**. Agents provocateurs have been known for well over a century, in many countries; the breed was especially rife in tsarist Russia in the late 1800s and early 1900s. In the United States, agents provocateurs often targeted labor union organizing efforts. Since the end of the Second World War and the beginning of the Cold War, **there are many accounts** **of the FBI**, **other police bodies**, the military, and private right-wing vigilante groups **sending agents provocateurs into people’s organizations** **with the purpose of dividing, disrupting, and discrediting** **them and then laying them open to arrest** and prosecution, or worse. More radical than thou In the 1960s and 1970s, there was a great outpouring of grassroots rejection of the policies, domestic and international, of the Cold War. **The Civil Rights Movement**, **plus the movement against the Vietnam War**, **brought millions into the streets protesting courageously against the many injustices of our society. The Cold Warriors and the ruling class did not like this, as they saw their interests** threatened. So they **developed** open and **covert strategies** **for undermining the new radicalism** as well as the “old left” (communists and socialists). **The idea was to make sure that the left did not continue to win over the support of the mass of the people of the United States to progressive and ultimately, revolutionary, socialist ideas.** The “new left” tendencies that arose at this time included many positive features but had some dangerous flaws also. One flaw was that too often, a fetish was made of the absolute right of anybody involved in an organization to express his or her opinion no matter how divergent from the main goals of the organization, or to engage in any activity which was “radical” regardless of whether it helped or harmed the cause. This extreme liberalism laid many organizations open to manipulation of some of their weakest elements by agents provocateurs. **There was also a tendency to compete to see who was most radical. The competition for revolutionary “cred” was a godsend for agents provocateurs, who actively encouraged such competition**. The lack of connections, especially among campus-based white radicals, to the working class and its politics exacerbated this trend by eliminating an important reality check. Picking off leaders and undermining public support There also tended to be a cult of leadership within many radical organizations which put their leaders into a vulnerable position in which they could be targeted for neutralization so as to undermine the whole movement. J. Edgar Hoover’s FBI, for instance, put a huge amount of effort into neutralizing leaders. **The agents provocateurs were deployed in such a way as to discredit the leaders and their organizations, to create splits in the movement, and in some cases to provoke violence which would lead to physical elimination of leaders plus a societal repudiation of the movement.** The 1960s campus-based movement against the Vietnam War was a top target for agents provocateurs. There were several at work, but one, known as “[Tommy the Traveler](https://jeffsharletandvietnamgi.blogspot.com/2011/04/tommy-traveler.html)” was particularly memorable. He, too, **concentrated on** **enticing** impressionable young would-be “**revolutionaries**” **to commit acts that would divide the movement** while **landing them in jail**. Hoover, a crusading anti-communist and paranoid racist, paid particular attention to **disrupting** **the** [**highly-effective**](http://www.peoplesworld.org/article/want-to-punch-a-nazi-think-twice/) **African American people’s movement**, **often employing agents provocateurs to create friction within and between liberation organizations**. **This led to several murders**. In 1967, for example, agents provocateurs, especially a certain [William O’Neal](https://www.thenation.com/article/was-fred-hampton-executed/), described in a Nation article as “infatuated with weapons,” played a role in the police murder of Illinois Black Panther Party leaders Fred Hampton and Mark Clark. Hampton had been suspicious of O’Neal because of his violent talk, but others did not see through him, with tragic results. O’Neal’s promotion of crackpot violent schemes should have been a giveaway. When O’Neal set up Hampton and Clark for a brutal murder by police acting under the orders of Cook County State’s Attorney Ed Hanrahan, the perpetrators were able to convince sectors of the public that the Panthers were prone to violence and shot first, which was untrue. Another example was the crime of Cerro Maravilla, in Puerto Rico, on July 25, 1978. An agent provocateur, [Alejandro González Malavé](https://nacla.org/article/cerro-maravilla-deaths-police-cover-rock-puerto-rico), working undercover for the Puerto Rican police, enticed two idealistic young supporters of independence for Puerto Rico into a reckless act that cost them their lives. One was Carlos Enrique Soto Areví, the son of one of Puerto Rico’s most important literary figures, the novelist Pedro Juan Soto. The second was a self-taught worker, Arnaldo Dario Rosado. Both were on fire with indignation at the colonialist treatment that Puerto Rico received at the hands of the United States (treatment which continues today). They wanted to demonstrate this indignation in some dramatic way. Their lack of practical political experience made them easy prey for González Malavé. He persuaded them that a noble act for their homeland would be to destroy some communications towers on the top of a hill called “Cerro Maravilla.” This was supposed to express solidarity with some imprisoned Puerto Rican independence fighters. The three kidnapped a taxi driver and forced him to drive them up to Cerro Maravilla. But when they arrived, they found they had been led into a police ambush. As the armed police approached, González Malavé identified himself as an agent, but Soto and Rosado were killed, and the “official” story was put out that they had been shot in a firefight with the cops. The right-wing, pro-statehood governor at the time, Carlos Romero Barceló, hailed the police as heroes, and the FBI helpfully pitched in to support the Puerto Rican Justice Department with the cover-up. However, the police had left a “loose end,” namely the taxi driver, who spoke to the press and revealed that in fact González Malavé was a police agent and that the two young men were still alive when he left the place. The police had entrapped the two men, then murdered them after they surrendered. This became a big scandal, and eventually led to prosecutions and the defeat of Romero Barceló’s party in the next elections. But the use of agents provocateurs to divide and isolate the Puerto Rican left has been unrelenting, both before and after that incident. Disrupting today’s movements Such **agent provocateur** **tactics** **surfaced** again **during the protests against the Iraq War,** **and in** the “**Occupy**” movement. **In each case, glib charismatic strangers wormed their way into protest organizations, and then entrapped inexperienced young radicals to get involved in plans, which were sometimes really just talk, to engage in violence**. A typical case is that of the “[Cleveland bomb plot](http://articles.latimes.com/2012/may/02/nation/la-na-nn-fbi-stings-20120502)” of 2012. Another is the San Francisco [Mission District riot](https://missionlocal.org/2012/05/occupysf-reacts-to-monday-nights-destruction-of-valencia/) of May 2012, when a mysterious black-clad contingent hijacked part of a peaceful “Occupy” demonstration and turned it toward random violence. In both cases, **the purpose of the provocateurs was to discredit the movement in the eyes of the public, which otherwise might have been receptive to Occupy’s “99 percent versus one percent” message**. **This kind of manipulation** **still continues** by all accounts. **As before, the purpose is to discredit the movement, divide it, deprive it of allies, and set up leaders and organizations for repressive action while making sure that this repression will not produce a wave of public indignation**, as happened with the Cerro Maravilla case. The right and the ruling class always try to portray these people’s movements as violent, because this is the alchemy best suited to turn public opinion against them. This is the main lesson to be learned from the agent provocateur experiences of the past. In the conditions of our country today, **injecting violent tactics into the mass movement of protest undermines that movement and plays the enemy’s game**. Loose talk about violence can be just as dangerous. This danger is multiplied by the development of online communications and social media—there are no secrets now. Hijacking other people’s protest actions to “move them to a higher level,” meaning toward violent confrontations, is really a dirty kind of pseudo-left politics. What is needed now is to build the movement into a great wave of rejection against the reactionary policies of the ruling class, the right, and the Trump administration and its allies. Let us work on that basis and avoid tactics that undermine it.

#### 2] Tying ballots to survivability or the aff is violent as it forces the judge to determine whether their method was “good enough” to get the ballot, which causes self hatred given losses

#### 3] Allows judges to dissuade their guilt by voting aff instead of participating in actual movements

#### 4] No solvency and turn – debate as a communicative act may be violent, but their authors don’t differentiate it from the rest of the world it’s just an institution inside logistics – eradicating it will do nothing. They just create cruel optimism by creating a feel good solution to logistics which turns case

#### 5] The act of co-opting and affirming through the topic engages in a form of completeness, so the Net Benefit is Incompleteness – strategies of completeness are genocidal.

- modified for problematic rhetoric

Harney and Moten 11 Stephano Harney and Fred Moten March 2021 "Refusing Completion: A Conversation" <https://www.e-flux.com/journal/116/379446/refusing-completion-a-conversation/> (Stefano Harney is the Professor of Strategic Management Education at Singapore Management University., Fred Moten is the professor of Performance Studies at New York University and has taught previously at University of California, Riverside, Duke University, Brown University, and the University of Iowa)//Elmer

FM: Maybe what we always also want to be doing is operating under the assumption that when it comes to thought, rigor and generosity are not separate from one another. That “intra-action,” to use Karen Barad’s term, is intra-active with another: that of black study and black studies. That’s where it’s at, as the Godfather would say. That’s what we’re interested in. And that’s also where we’re at in our lives, in our intellectual life together, and in our social life together as friends. It’s just that the syntax and the semantics that we have been given in order to try to understand that double intra-action is inadequate for the most part. We ask ourselves, how do we understand the relation between black study and black studies, and then we have to take two months to try to overcome the fact that “relation” ain’t the right word. In other words, the **intra-action of black study** and black studies **requires** something like what Barad calls “**experimental metaphysics**.” Or, maybe another way to put it is that what’s required are some experiments in anti-metaphysics. Maybe black study is just this continual experiment in anti-metaphysics. SH: All Incomplete is also **about the next town**, about what we heard about the next town, about **the next experiment** already going on, continually as Fred says. And so, for instance, I’m very grateful to the current generation of Guyanese feminist, activist scholars such as Kamala Kempadoo and Alissa Trotz who have made more available the work of the great Guyanese feminist activist intellectual Andaiye. We’ve been studying and teaching with Andaiye’s The Point Is to Change the World, and also with Lessons from the Damned by the Damned, the latter a collectively written book about a freedom school set up by black women in the late 1960s and early ’70s in Newark. Now, Andaiye talks about the research she did as part of Red Thread, an independent cross-racial organization of women in Guyana. She talks about how the poor and working class women who are keeping diaries on their social reproductive labor were doing research that she, Andaiye, could never do as well as them. Then, from the Damned, we hear the story of a key turning point in the freedom school. The women running the school have met some middle-class, teacher-qualified black women at a Vietnam protest and invited them back to the school. Much is gained by the encounter, but after a few weeks the women who run the school say something to the effect of, we loved them, but we had to send them away because they could not believe that we—in our position as black working-class women—were better placed to theorize this world. If we take these lessons from Andaiye and the Damned seriously, maybe we can get out of some of the metaphysical assumptions of our positions and roles. What Andaiye and the Damned are saying is that **poor people, poor black and Indian and indigenous women**, in these most vital instances **were better researchers and** better **theorists** than those of us who are traditionally and institutionally trained as such and rise through the “meritocracy.” So, we have to find some other reason for doing what we are doing—cause it is not because we are the best at it—and so we have to **find some other way**, **beyond** this **metaphysics of meritocracy we inhabit.** And from there it becomes clear that we are not the ones to sit in judgment, and this means we can **practice nothing but open admissions** and open promotion in the places where we teach, whether elementary schools, universities, or art academies. And what we would do is support the primary theorists and researchers as they come through, should they wish to come through, and should they wish to stay. And isn’t this serving the people? After all, serving the people never meant serving them breakfast. It meant being at the service of the people, because the people held what we all need, precariously, with only partial access sometimes themselves to this wealth, knowledge, and practice of how to learn about society and how to analyze it because it needs to be changed. That is why it was called a party of self-defense: to defend all this, not to imagine that the party was going to generate the wealth itself. Service becomes the answer to all the anxieties about allyship and class. And service is debt, partiality, incompleteness in action. SS: Your use of **incompleteness** reminds me in certain ways of how before you talked about **debt not as this crushing condition** **but** **as something that, in being unpayable**, **is the very principle of sociality**. So debt not as IMF-backed austerity measures, but **debt as** all those **things we owe to each other**. The way you talk about incompleteness strikes me as similar in that it’s **not incompleteness as a problem**—**like there’s something lacking in myself** which is fulfilled through another person—**but rather as a permanent state which is more of a blessing**, or something to be preserved. It’s not something that needs to be dealt with as a problem. Is that a fair reading? SH: Yes, I think that’s right. FM: Have you ever seen the film Jerry Maguire? The title character is this brutal drone of individuation whose whole life ends up depending upon his exploitation of a black football player, which he accomplishes with the help of a female assistant whom he later marries. The movie begins with Jerry Maguire being a successfully individuated man who’s complete, or thinks he is, until he gets stripped of all that. In order to find himself he’s got to attach himself in a more or less straight Hegelian mode to one who’s not quite really one, this player who shows out on and off the playing field while also modeling an authentic and loving family life, all of which reveals him never to have been the kind of free subject Jerry used to be. They call this a romantic comedy. It’s the story of the man who at the end of his personal (re)development—after having the biggest night of his life because the black football player literally endangers his own health in order to make a catch that will make him a superstar so that Jerry MaFuckingGuire can exploit him and attract other superstars who he can also exploit—finds that he can’t enjoy it without the woman who has made it all possible but whom he has exploited and demeaned and overlooked. That’s when this motherfucker breaks into a feminist consciousness-raising group in order to reclaim his wife. How does he get her back? Just by saying, “Hello,” according to her, but he gets to finish his speech by saying to her, “You complete me.” Like, he was at 87 percent and she was the final 13 percent. Now, he’s fucking complete when he gets her back. Well, [**screw**] ~~fuck~~ **completeness**. Not only that, ~~fuck~~ completeness **as a way of understanding** anything about what love actually is. What they call romantic comedy is really anti-romantic tragedy. It’s amazing that something like Jerry Maguire is offered as a representation of what it’s like to fall in love. If you’ve ever fallen you know that **the other person** or persons don’t complete you. They **incomplete you**. They fuck you the fuck up. It doesn’t leave you intact. It plays you, undermines you. It disturbs and **disrupts your individuation**. It obliterates not only the possibility of but the desire for individuation. If you think about it in those terms, incompleteness is a consummation devoutly to be wished. The entire genre of the romantic comedy is usually some white dude who’s being dragged against his will into the condition of incompleteness. When, finally, he submits to it, you know that the sequel of that movie will be all about the breakup, which follow’s the idea of individuation having had a chance to rally, which the regular miseries of monogamous heterosexuality—which Samuel R. Delany teaches us is the deepest perversion—are happy to provide. The idea of **completeness** **is ridiculous and genocidal**. **There’s** just no end **to the ways it continually seeks to destroy our shared capacity to breathe and ground**. It **predicates** **and requires** the constantly asserted revision of what Robinson calls “**the terms of order**.” It predicates and necessitates the constant **brutalization** of all the people in the world who resist those terms of order and who practice modalities of **social existence** that are not predicated on those terms of order, as Robinson shows in his beautifully radical use of ethnographic and anthropological work in The Terms of Order. We advocate for incompleteness. We think such advocacy is part of what it is “to preserve,” as he says, “the ontological totality.” To preserve the totality is to refuse its completion. That’s our ongoing ante- and anti-metaphysical experiment.

## On

### AT Debate bad

#### 1] Cruel Optimism – Trying to eliminate debate produces cruel optimism and repetition compulsion because they target discriminatory acts produced by the state at large i.e debate, instead of the structure itself. Turns the case – causes endless repetitious targeting of smaller structures never destroying the structure itself and ensuring the failure of the 1ac’s project.

#### 2] Repositioning – Even if debate is bad it can tactically be used to teach people their correct positioning in the world and the undercommons so they can approach the world without investing hope in it – the alternative is not learning this position and investing hope in everything which recreates cruel optimism and turns the case.

#### 3] Debate good -- double bind either the AC performance is strong enough to destroy debate which should have been done many bids ago or the Ac’s performance doesn’t have anything to prove which means the squo is quite strong and that causes presumption.

### Presumption

#### Frame the 1AC through solvency, not impacts – any attempt to filter offense through the RotB or the speech act of the aff is an arbitrary goalpost that only serves to insulate it from criticism and nuanced testing – the aff can’t change the material structures that reproduce racial capitalism– no warrant for how the aff spills up to impact structures writ large or out of debate means you vote neg on presumption. You have to do something; you can’t point at a problem and say it’s bad to win the round.

### Method Fails

#### Their aff is incredibly shifty about what their method actually is – err neg on method indicts if you can’t explain their method without using polysyllables and their own terms

#### Imaginings within debate fail -

#### 1 – Empirically disproven – debaters have read anti capitalist literature in bigger debates with bigger audiences and nothing happened – imaginations do nothing

#### 2- Competition – only means debaters will prep more because they are in a competition rather than a discussion we are forced to disagree so we can’t help imagine Fugitive Science

#### 3- Backfires – anti-colonial practices get massive backlash from colonial structures i.e the BPP and COINTELPRO – the only way to get around getting shot in your sleep is to work within the state. It’s a rigged game but it’s the only chance we have.

#### 4- Abstraction – they create an endless feedback loop of YouTube videos debunking “white science” that can’t spillover to shape material conditions

Bryant ‘12

Levi Bryant 12, currently a Professor of Philosophy at Collin College. In addition to working as a professor, Bryant has also served as a Lacanian psychoanalyst. He received his Ph.D. from Loyola University in Chicago, Illinois, where he originally studied 'disclosedness' with the Heidegger scholar Thomas Sheehan. Bryant later changed his dissertation topic to the transcendental empiricism of Gilles Deleuze, "Critique of the Academic Left", <http://larvalsubjects.wordpress.com/2012/11/11/underpants-gnomes-a-critique-of-the-academic-left/> rc // Phoenix

Unfortunately, the academic left falls prey to its own form of abstraction. It’s good at carrying out critiques that denounce various social formations, yet very poor at proposing any sort of realistic constructions of alternatives. This because it thinks abstractly in its own way, ignoring how networks, assemblages, structures, or regimes of attraction would have to be remade to create a workable alternative. Here I’m reminded by the “underpants gnomes” depicted in South Park: The underpants gnomes have a plan for achieving profit that goes like this: Phase 1: Collect Underpants Phase 2: ? Phase 3: Profit! They even have a catchy song to go with their work: Phase 1: Ultra-Radical Critique Phase 2: ? Phase 3: Revolution and complete social transformation! Our problem is that we seem perpetually stuck at phase 1 without ever explaining what is to be done at phase 2. Often the critiques articulated at phase 1 are right, but there are nonetheless all sorts of problems with those critiques nonetheless. In order to reach phase 3, we have to produce new collectives. In order for new collectives to be produced, people need to be able to hear and understand the critiques developed at phase 1. Yet this is where everything begins to fall apart. Even though these critiques are often right, we express them in ways that only an academic with a PhD in critical theory and post-structural theory can understand. How exactly is Adorno to produce an effect in the world if only PhD’s in the humanities can understand him? Who are these things for? We seem to always ignore these things and then look down our noses with disdain at the Naomi Kleins and David Graebers of the world. To make matters worse, we publish our work in expensive academic journals that only universities can afford, with presses that don’t have a wide distribution, and give our talks at expensive hotels at academic conferences attended only by other academics. Again, who are these things for? Is it an accident that so many activists look away from these things with contempt, thinking their more about an academic industry and tenure, than producing change in the world? If a tree falls in a forest and no one is there to hear it, it doesn’t make a sound! Seriously dudes and dudettes, what are you doing? But finally, and worst of all, us Marxists and anarchists all too often act like assholes. We denounce others, we condemn them, we berate them for not engaging with the questions we want to engage with, and we vilify them when they don’t embrace every bit of the doxa that we endorse. We are every bit as off-putting and unpleasant as the fundamentalist minister or the priest of the inquisition (have people yet understood that Deleuze and Guattari’s Anti-Oedipus was a critique of the French communist party system and the Stalinist party system, and the horrific passions that arise out of parties and identifications in general?). This type of “revolutionary” is the greatest friend of the reactionary and capitalist because they do more to drive people into the embrace of reigning ideology than to undermine reigning ideology. These are the people that keep Rush Limbaugh in business. Well done! But this isn’t where our most serious shortcomings lie. Our most serious shortcomings are to be found at phase 2. We almost never make concrete proposals for how things ought to be restructured, for what new material infrastructures and semiotic fields need to be produced, and when we do, our critique-intoxicated cynics and skeptics immediately jump in with an analysis of all the ways in which these things contain dirty secrets, ugly motives, and are doomed to fail. How, I wonder, are we to do anything at all when we have no concrete proposals? We live on a planet of 6 billion people. These 6 billion people are dependent on a certain network of production and distribution to meet the needs of their consumption. That network of production and distribution does involve the extraction of resources, the production of food, the maintenance of paths of transit and communication, the disposal of waste, the building of shelters, the distribution of medicines, etc., etc., etc. What are your proposals? How will you meet these problems? How will you navigate the existing mediations or semiotic and material features of infrastructure? Marx and Lenin had proposals. Do you? Have you even explored the cartography of the problem? Today we are so intellectually bankrupt on these points that we even have theorists speaking of events and acts and talking about a return to the old socialist party systems, ignoring the horror they generated, their failures, and not even proposing ways of avoiding the repetition of these horrors in a new system of organization. Who among our critical theorists is thinking seriously about how to build a distribution and production system that is responsive to the needs of global consumption, avoiding the problems of planned economy, ie., who is doing this in a way that gets notice in our circles? Who is addressing the problems of micro-fascism that arise with party systems (there’s a reason that it was the Negri & Hardt contingent, not the Badiou contingent that has been the heart of the occupy movement). At least the ecologists are thinking about these things in these terms because, well, they think ecologically. Sadly we need something more, a melding of the ecologists, the Marxists, and the anarchists. We’re not getting it yet though, as far as I can tell. Indeed, folks seem attracted to yet another critical paradigm, Laruelle. I would love, just for a moment, to hear a radical environmentalist talk about his ideal high school that would be academically sound. How would he provide for the energy needs of that school? How would he meet building codes in an environmentally sound way? How would she provide food for the students? What would be her plan for waste disposal? And most importantly, how would she navigate the school board, the state legislature, the federal government, and all the families of these students? What is your plan? What is your alternative? I think there are alternatives. I saw one that approached an alternative in Rotterdam. If you want to make a truly revolutionary contribution, this is where you should start. Why should anyone even bother listening to you if you aren’t proposing real plans? But we haven’t even gotten to that point. Instead we’re like underpants gnomes, saying “revolution is the answer!” without addressing any of the infrastructural questions of just how revolution is to be produced, what alternatives it would offer, and how we would concretely go about building those alternatives. Masturbation. “Underpants gnome” deserves to be a category in critical theory; a sort of synonym for self-congratulatory masturbation. We need less critique not because critique isn’t important or necessary– it is –but because we know the critiques, we know the problems. We’re intoxicated with critique because it’s easy and safe. We best every opponent with critique. We occupy a position of moral superiority with critique. But do we really do anything with critique? What we need today, more than ever, is composition or carpentry. Everyone knows something is wrong. Everyone knows this system is destructive and stacked against them. Even the Tea Party knows something is wrong with the economic system, despite having the wrong economic theory. None of us, however, are proposing alternatives. Instead we prefer to shout and denounce. Good luck with that.

### Case

#### These are important consequences—disregarding the destruction of the planet is antithetical to the purpose of radical resistance

Moten and Kelley, 17—professor of Performance Studies at New York University AND Gary B. Nash Professor of American History at UCLA (Fred and Robin D.G., “Robin D.G. Kelley & Fred Moten In Conversation,” transcribed from <https://www.youtube.com/watch?v=fP-2F9MXjRE>, 31:49-55:57, dml)

MOTEN: Well, first of all, I just want to say how much I appreciate having a chance to be here with all of you tonight, and thank you, Rinaldo, and, uh, Alicia, and Afua, of course. Robin, as always, uh, an honor to be, have a chance to hang out with you, and uh, and to learn from you, and um, let me see. Um, well, I tend to think of Black studies not so much as an academic discipline or confluence of disciplines but as the atmosphere in which I grew up, and so, and I love that, that atmosphere. I love the way that it felt, and I love the way that it smelled, and I love the flavors, and I love the sounds, and I love the movements. Um, and so, it is, again, something that I think has a certain place, maybe, in the university, and what it meant, what it has meant for Black studies to take that place in the university has had both, has been both good and bad. I think it’s probably done much more for the university than it has for Black studies, and, and that’s something worth thinking about. And I don’t say that because I’m trying to advocate some withdrawal from the university of Black studies, but I’m thinking that, you know, that at this stage of the game in having done the work of attempting to actually bring, um, the university into some sense of its own, of what ought to be its own intellectual mission, Black studies has the right to look out for itself now, for a little bit, um, and I think it’s worth it to do that. And insofar as Black studies has earned a right to look out for itself, what that really means, I think, is that Black studies has earned the right to try again to take its fundamental responsibility, which is to be, uh, a place where we can look out for the Earth. Um, I think that Black studies has a fundamental and specific, though not necessarily exclusive mission, and that mission is to try to save the Earth, or at least to try to save, not, well, on the most fundamental level to save the Earth, and on a secondary level, to try to save the possibility of human existence on the Earth. Um, and I know that’s a big statement, and I don’t wanna take up all the time, but I’m happy to try to say more about what I think I mean by that later on, but, um, but I think maybe it’s important just to leave that big statement out there for a minute, and just to make sure that you know that I knew that I said it when I said it.

KELLEY: Okay, well, actually I wanna echo, uh, Fred’s sentiments, that it’s really an honor to be here, in this space. Um, this is the second time that we’ve had kind of a public conversation, and it’s always packed, you know, and it’s always a lot of people, and expectations are always high, and one of my favorite things on the planet, besides just talking to my daughters, talking to Fred Moten, um, you know, and it’s just really, you know, I learn so much from it, and in fact, let me just begin by saying that one of the pieces that Rinaldo was referring to was an essay I wrote called, uh, “Black Study, Black Struggle,” which was entirely inspired by, uh, Fred Moten and Stefano Harney’s, uh, book, “The Undercommons.” It was a way of the application of the notion of the undercommons to understanding what was happening at that moment, which in, in the fall of 2015, there was like an explosion of, um, Black protests on, on campus, and, you know, I won’t repeat what’s in the article, uh, but it, it’s not an accident that some of those struggles, uh, were products of what was happening in the streets. In other words, what happened in Ferguson, and what happened in Baltimore, what happened all over the country, and what happened in places like here in Toronto, were the catalyst for, um, a kind of explosion on campuses, where, uh, students were trying to figure out their place in the university. They’re dealing with racism, and microaggressions on university campuses, uh, they’re dealing with a, a kind of deracinated, you know, curriculum where ethnic studies wasn’t what it was, in its inception. Um, and, I was also dealing with, or many of us were also dealing with, uh, a culture of, and I hate to put it this way, but a culture of anti-intellectualism in, in a different sort of way. I mean, universities are often anti-intellectual, in that they actually disavow certain forms of knowledge and put other knowledge above that, which is an anti-intellectual position by the way. Um, but then when you’re assaulted by that all the time, uh, sometimes you end up mirroring that culture. And you’re saying “well I’m not gonna read this, I’m not gonna read that, because so-and-so wrote it,” as opposed to saying that there’s nothing off the table, uh, that Black studies, and Fred knows this ‘cause he repeats it more than I do, that our mutual, uh, teacher, Cedric Robinson, who paraphrased C. L. R. James, said you know, Black studies is a critique of Western civilization, and if that is the case, then we both have to dismantle it, recognize the weak edifice upon which it’s built, but also know everything that’s happening within it. But anyway, let me just back up, um, so, I just, so the three points I wanna make in reference to the question, one is that, uh, social movements have always been the catalyst for Black studies. When Fred was talking about, you know, Black studies as, as, uh, kinda, kinda like a way of life, as an atmosphere in which he grew up and which I grew up and many of us grew up, that’s so true. I never thought about it that way, but, you know, that’s so true. And in fact, um, if anything, Black Studies is not a multidiscipline but a project, a project for liberation, whatever that means, and liberation is an ongoing project. Um, Ruthie Gilmore, uh, who was at USC, uh, with me and Fred, had come up with this idea of renaming ethnic studies “liberation studies.” And, you know, we were actually serious about that, we were like, trying to figure out how to do that, and never filled it, but it reminds us that, you know, it’s not about, um, it’s not about a body. It’s not about bodies. It’s about ideas, and about the future, you know. It’s about recognizing the past and the construction of a new future. And so I think, in that respect, in order to understand the future of Black studies, we gotta understand the movements that produced it—that, that the Movement for Black Lives, that, um, uh, We Charge Genocide, that Black Youth Projects 100—all these struggles that erupted have, in fact, uh, pointed the way for Black Studies. The problem is, is that what gets constituted as the institutional space of Black studies, in many cases, isn’t really that. And I hate to bring people down, because we’re supposed to be up, right? But there are a lot of departments that I wouldn't call Black studies departments that have that name, you know, there are a lot of, there's a lot of scholarship that goes on that has no relationship at all to the project of transformation, or to people, to actual people in community. And one of the important things to always remember is that, um, we wouldn't have Black studies if it wasn't—in the United States, that is, I'm talking about the US—if it wasn't for Watts, if it wasn't for Detroit in 67, and if it wasn't for those kinds of urban rebellions, if it wasn't for the struggles in the South, that's where Black studies comes from. Uh, and so it moves into the university as a, as a transformative project. Um, it's not—and that's why I think there was a disconnect between some of the, the protests and what was happening in the academy. Finally, there’s this question of, of ethnic studies versus, or against, or for, or within or bedded in Black studies. And one of the things that, that I think a lot of us are trying to figure out is to deepen the relationship between indigenous studies and Black studies. Um, to understand that this was what I call second wave ethnic studies in the 1990s was itself a project that was, believe it or not, in a, a response to neoliberalism. And I think we don't always see that because we, we tend to read backwards in the 1990s and 1980s as, like, ethnic studies as identity politics in the narrowest sense of the word, that somehow this was about producing a sense of, of pride and a sense of identity devoid of the question of power. But if you actually look at the struggles for ethnic studies in the 80s and 90s, it was all about power. That, that what we think of as comparative or critical ethnic studies was, wasn't about the celebration of difference. It wasn't liberal multiculturalism. It was an assault on a neoliberal turn. And we, we sometimes forget that and, and, and then we write the history. And so I think I want to at some point talk more about that, but I think that's something to remember, because, right now, if we don't have Black studies as a critique in response to the neoliberal neofascist turn, then it's sort of worthless. You know, it's going to continue to exist. Maybe not in the academy though. So I'll just stop there.

WALCOTT: So, um, Robin, where you ended, and, and where Fred began, it’s a, is a good segue into getting you, both of you, to talk about the work that you've been doing around questions of Palestinian struggle and freedom. Fred, the work that, the tremendous work that you did in the ASA, um, American Studies Association, for which the Association is still living true, and, and Robin the work that you continue to do with um, um, with faculty for Palestine. But I'm thinking about Fred's provocation here that Black studies about saving the Earth and if Black studies is indeed about saving the Earth, which I'm very willing to fall right into right now, you know, first to kind of maybe think about this relationship between the struggle and, and freedom of Palestine and the relationship between ongoing settler colonialisms globally, because it seems to me that one of the most powerful things that, um, the kind of Black studies that has taken to the streets recently has done is to make those kinds of concerns present, right? BLM visits to Palestine, BLM in Toronto, always making sure that the invocation of the politics of settler colonialism is a part of a political organizing, and, um, their intimate relations with indigenous communities. So maybe this is a way for us to begin to talk about what's really at stake in this contemporary political moment where, um, or, or a radical politics, a politics that wants to think a different kind of future formation, is grappling with, um, settler colonialism in various kinds of ways. But Palestine being central to that, given that we know as we sit in this university is that often, um, what we call our senior administrators have an entirely different relationship with the question of freedom for Palestine.

MOTEN: Well, um, first, I mean, the work I did around, um, you know, the ASA’s, um, you know, decision to endorse the academic and cultural boycott of Israel was really minimal and minor compared to a lot of other people who were really out front, um, and, and have been working tirelessly for that for many, many years. Um, and I think, you know, the, my contribution was more, you know, rhetorical in many ways in, in, in, and, and maybe, maybe theoretical only in the most minimal sense, in the sense that what I wanted to do was a couple of things. First, to recognize that, um, you know, let's say that the conditions of what people call modernity, um, in, in, in, in, or global modernity, that the fundamental conditions that make that up are, you know, settler colonialism. And I think we can talk about settler colonialism in ways that are broader than the normal way that we usually think of them as a set of violent and brutal relations between Europe and the rest of the world. Because I think it's really important. And, and, and again, our, our mutual friend and mentor Cedric Robinson, pointed this out emphatically, and in brilliant ways early on, that settler colonialism is also an intra-European affair. Um, and it's important to understand that. It's important to understand this historic relationship between settler colonialism in the enclosure of the commons, um, which is part and, part of the origins of, of what we now know or understand as capitalism. But if we understand that settler colonialism, that the transatlantic slave trade, um, and that, you know, the emergence of a set of philosophical formulations that essentially provide for us some modern conception of self that has as its basis a kind of possessive, heteronormative, patriarchal individuation, right? That's what it is to be yourself on the most fundamental level. You know, and if you ask anybody in the philosophy department, they'll tell you that that's true, you know, and they won’t be joking, right, that, um, that, these, that these constitute the basis of, of our modernity. But for most of the people who live in the world, actually for everybody who lives in the world, although most of the people in live in the world are actually able to both recognize this and say this, that modernity is a social and ecological disaster that we live, that we now attempt to survive. Okay? And if we take that up, then part of what's at stake is that we recognize that feminist and queer interventions against heteronormative patriarchy, that Black interventions against the theory and practice of slavery, which is ongoing, that indigenous interventions against settler colonialism constitute the general both practical and intellectual basis for not only our attempts to survive, but also our attempts to, as I said before, save the Earth. And, and I put it in terms that the great poet Ed Roberson puts it; not just to save the Earth, but to see the Earth before the end of the world. And this is an emergency that we're in now and it's urgent. Um, and I believe that there’s a specific convergence of black thought and indigenous thought that situates itself precisely in relation to, and is articulated through, the interventions of queer thought and feminist thought that we want to take up. And, and it, and it strikes me as, for me at least, it's, it's a way of taking up a kind an—it's, it’s a way of imagining how one might be able to, how we might be able to walk more lightly on the Earth. To honor the Earth as we walk on it, as we stand on it. To not stomp on it, to not stomp all over it, where every step you take is a claim of ownership. And, and this is one way to put it, would be to not so presumptuously imagine that the Earth can be reduced to something so paltry and so viciously understood as what we usually call home. This is part of the reason why the queer and the feminist critique is so important. It's a critique of a general problematic notion of domesticity. It's like another way of being on the Earth that doesn't allow you in some vicious and brutal way to claim that it is yours, right? Um, this is important and this is so, you know, often the methods that we use to claim the Earth as ours involved fences, borders. This manifests itself on a private level from household to household, but it also manifests itself on a national level, and at the level of the nation state, and it's not an accident that settler colonial states take it upon themselves to imagine themselves to be the living embodiment of the legitimacy of the nation state as a political and social form. For me, there's two reasons to be in solidarity with the people of Palestine. One is because they're human beings and they're being treated with absolute brutality, but the other is that there's a specific resistance to Israel as a nation state. And for my money, to be perfectly clear about this, I believe that this nation state of Israel is itself an artifact of antisemitism. If we thought about Israel and Zionism, not just as a form of racism that results in the displacement of Palestinians, but if we also think about them as artifacts of the historic displacement of Jews from Europe, right, in the same way that we might think of, let's say Sierra Leone or Liberia as artifacts of racist displacement, okay. If we think about it that way, okay, and another, and the reason I'm saying this is just to make sure that you know that there's a possible argument against the formulation that criticism of Israel is anti-Semitic when we know that Donald Trump is a staunch supporter, that people like Pat Robertson in the United States are staunch supporters that help us to the fact that you can be deeply anti-Semitic and support the state of Israel. These things go together. They're not antithetical to one another. So that it becomes important for us to be able to suggest that resistance to the state of Israel is also resistance to the idea of the legitimacy of the nation state. It's not an accident that Israel has taken upon itself, that when Israel takes upon itself, when the defense of Israel manifests itself as a defense of its right to exist, this is important. It's a defense, not just of Israel's right to exist, but of the nation state as a political form’s right to exist. And nation states don't have rights. What they're supposed to be are mechanisms to protect the rights of the people who live in them, and that has almost never been the case, and to the extent that they do protect the rights of the people who live in them, it's in the expense, it's at the expense of the people who don't, okay. So part of what's at stake, one of the reasons why it's at, it's important to pay particular attention to this issue, why we ought to resist the ridiculous formulation that singling out Israel at this moment is itself anti-Semitic is because it's important to recognize that Israel is the state. [KELLEY: Right.] MOTEN: For reasons that I think are totally bound up with antisemitism, right? Israel is the state that, insofar as it makes the claim about its right to exist, is also making the claim about the nation state’s right to exist as such. It's this, it's that same kind of argument that, I remembered the—and I'm sorry to keep going on so long, but there's—there's those formulations that people often make about Black people in it or indigenous people as if they were the essence of the human, right, so that every time Black people or indigenous people do something that supposedly we're not supposed to do, it constitutes a violation to the very idea of the human. Right, because somehow as a function of the nobility of our suffering, we constitute the very idea of humanity, right? And there's nothing more brutal, right? Nothing more vicious than having been being consigned to that position. Similarly, Israel as a function of anti-Semitism has now been placed in the position of protecting the very idea of the nation state. So for me, first and foremost, it's important to have solidarity with the Palestinian people, but second of all, it's important to actually have some solidarity with the Jewish people insofar as they can and must be separated from the Israeli state because ultimately the fate of the Jewish people, if it is tied to this, to the nation state of Israel, will be more brutal than anything that has yet been done or can be imagined, and I mean everything that you think I mean when I say that.

#### Racial Capitalism thesis is incorrect – connection between Race and Cap is circumstantial not necessary

Walzer 20 Michael Walzer 7-29-2020 "A Note on Racial Capitalism" <https://www.dissentmagazine.org/online_articles/a-note-on-racial-capitalism> (a prominent American political theorist and public intellectual. A professor emeritus at the Institute for Advanced Study in Princeton, New Jersey)//Elmer

I have been puzzled for many months by the appearance of the phrase “racial capitalism” in the left press (see, for example, the article by K. Sabeel Rahman in the Summer 2020 issue of Dissent). What does it mean? Perhaps the adjective “racial” is simply an ordinary qualifying adjective. Racial capitalism is one kind of capitalism, and then there must be other kinds, requiring other adjectives. Here in the United States we have a kind of capitalism where the majority of exploited workers or a majority of the most exploited workers are people of color. The underclass and the reserve army are defined both racially and economically. Of course, no leftist writer would be indifferent to the exploitation of white workers, who might still make up the majority of the American workforce—and who are certainly the majority of exploited workers in Europe. The point of the adjective, then, is simply to focus our attention, for good reasons, on non-white workers. But is the exploitation of these workers a necessary feature of American capitalism? The phrase “racial capitalism” leaves us unclear about whether the hierarchical location of non-white workers is determined by race or by capitalism or by the two somehow working together. To begin to answer that question, we need to look at some examples of non-racial capitalism. The form of capitalism sponsored by the **Chinese communists** is obviously non-racial. Though the exploited workers are, in Western terminology, people of color, Western terminology is out of place here. If the Chinese imported white workers to take on the most menial jobs, that might make Chinese capitalism “racial,” **but no such importations have been reported**. The predatory version of capitalism that prevails in Putin’s Russia is also non-racial. It may be that Muslims are among the most exploited workers in Russia, but they are mostly Caucasian (some of them the original Caucasians), so we would have to talk about religious capitalism—where Orthodox Christians, not white people, are the privileged group. But no one is doing that. I have no statistics, but from what I read about China and Russia, I doubt that the rate of exploitation is higher in the United States, in racial capitalism, than it is in those two countries, **where capitalism is non-racial**. **Capitalism “works” with and without a racialized underclass** and reserve army. But is that right? The adjective “racial” sometimes makes a much stronger claim: it isn’t a qualifying but rather a definitional adjective. Capitalism is necessarily, inherently, racist. Forget about China and Russia, which are capitalist latecomers. Western capitalism is the prototypical version, and it has been racist from day one (if we can agree on day one)—always and forever racist. Does this mean that Manchester in 1844, as Engels described it, where all the exploited workers were white, wasn’t capitalist? No, for those workers were producing fabrics from cotton raised and harvested by Black slaves in the American South. That’s true enough, but I am not sure it is sufficient for an argument about necessity. Consider a counterfactual possibility: had no Black slaves been available, the recruitment of Irish workers would have started much earlier than it did. The rise of capitalism would not have been halted had the slave trade never begun. But the Manchester/Southern plantation example suggests what we all now know: capitalism is a global economic system, and it depends on the exploitation of people of color around the world. Here, however, it seems clear that the key **issue is exploitation, not racism**. Given global demography, the majority of workers in any global economy will be people of color. Even in a democratically or social democratically regulated global system, the majority of workers and the majority of managers—the underclass and the overclass—will be non-white. Indeed, it would be the refusal of any transnational corporation to hire people of color that would rightly be called racist. (In the Pennsylvania town where I grew up, the local steel company did not hire, and therefore did not exploit, Jews or Black people. I suppose that this is also an example of racial capitalism.) All this suggests that capitalism and racism **have to be analyzed separately**. They overlap sometimes, as they do today in the United States. But the overlap is **circumstantial, not necessary**. **The two phenomena are distinct. They don’t rise and fall together. Each one, for different reasons, requires severe criticism and sustained opposition.** Many years ago, socialist writers argued that the triumph of the working class would liberate women, Jews, Black people, and everyone else. Separate political struggles against sexism, anti-Semitism, or racism were unnecessary—indeed they were a distraction from the all-important class war. Today some people on the left seem to believe that the end of racism will bring with it the downfall of capitalism. Both these theories are wrong. Overthrowing racism will still leave us with capitalism; overthrowing capitalism will still leave us with racism. Putting the adjective and noun together gives us a false sense of the **relationship** between the two phenomena. It might make sense, then, to ban the phrase from the pages of left newspapers and magazines. But since I am opposed to bans of that sort, I would only suggest that the phrase should always be queried by the editors. Do the writers who use it have some idea about what it means? Or are they just against racial capitalism, whatever it means?

### Space Cap Good

#### Space capitalism is good and responsive to their aff – don’t let the 1AR shift out of this when their entire aff is about how current “white” technologies in space and science are bad – we are impact turning their aff.

#### 1] Solves asteroid deflection – preventing extinction

Nelson 18 [Peter Lothian Nelson and Walter E. Block, \*\* Harold E. Wirth Endowed Chair and Professor of Economics, College of Business, Loyola University New Orleans, “Space Capitalism: How Humans will Colonize Planets, Moons, and Asteroids,” 2018, Springer, pp. 106-108, EA]

What of the danger of a comet impacting with the third planet from the Sun? The movie Armageddon depicted just that scenario. In it, our heroes saved the Earth, of course. But which occurrence is more likely? That this protection could be achieved by government, or the private sector of the economy? Most neo-classical economists would choose the former, due to the so-called public goods “market failure.”28 This is the “free-rider” challenge: each entrepreneur will presumably wait for someone else to undertake the costs of an action that will benefit all (saving the Earth from the comet in this case) and no one will actually do it.29 This “let George do it” philosophy presumably creates a “market failure.” But mainstream economists cannot hide behind this mischievous doctrine, since precisely the same phenomenon will afflict nations in the present scenario. In other words, the United States will wait for China, Russia, Europe, Japan, Israel, to deal with the comet,30 while that expectation will afflict all the others with inaction. That is, China, Russia, etc., each country capable of dealing with such an eventuality, will attempt to “free ride” on the efforts of anyone foolish enough to undertake it. As in the case of Buridan’s Ass (Rothbard 2010) that perished from a similar inaction, so will the human population.

Such a scenario is unlikely in the extreme. There are all sorts of reasons to expect that the “externality will become internalized.” That is, that private firms, more likely than the state apparatus, will prove flexible enough to overcome this impasse. Private railroad companies, not governments, created standard gauge, so that cargo no longer had to be loaded and unloaded each time it passed onto the property of a different firm. This benefitted all of them, and yet, somehow,31 they could overcome the tendency toward inaction. In like manner, the railroad firms also got together32 and created the now-familiar time zones. Not only did they themselves gain by being better able to coordinate with each other, but these vast benefits “spilled over” into society as a whole. We cannot rule out of consideration such cooperation on the part of governments on praxeological grounds,33 but it seems more probable that space companies could sort out a comet aimed at the Earth than a bunch of statist politicians and bureaucrats.

#### 2] Space colonization

Zarkadakis 19 [George; December 26; Ph.D. in Artificial Intelligence; George Zardakis, “Abandoning the metropolis: space colonisation as the new imperative,” <https://georgezarkadakis.com/2019/12/26/abandoning-the-metropolis-space-colonisation-as-the-new-imperative/>]

Space colonization is not only the subject of fiction but of serious science too. The late physicist Stephen Hawking argued that unless colonies were established in space the human race would become extinct. There are several natural phenomena beyond our control that could spell our obliteration. Over a long enough period of time our planet is vulnerable to catastrophic meteorite strikes, or getting exposed to the deadly radiation of a nearby supernova explosion. As our Sun burns its fuel it will start to expand and, in a few million years, will scorch Earth. We can also self-destruct by waging nuclear war, or by tilting our planet’s climate towards a runaway greenhouse effect. Space colonization is therefore the ultimate insurance policy of long-term human survival[4].

#### Space colonization brings immeasurable expected value – o/ws inequality

Baum 16 – Executive Director of the Global Catastrophic Risk Institute [Seth D. Baum, “The Ethics of Outer Space: A Consequentialist Perspective,” 2016, Springer, pp. 115-116, EA]

Space colonization is notable because it may be able to bring utterly immense increases in intrinsic value. Early colonies might start small, given that other planets and moons have inhospitable environments. However, it may be possible to build large indoor colonies or create more hospitable outdoor environments (i.e., terraforming). Even just on other planets and moons in the Solar System, space colonies could multiply the total area available for human habitation. And there are many more planets around other stars, as ongoing research on exoplanets is now learning. One recent study estimates 22 % of Sun-like stars have Earth-like exoplanets (Petigura et al. 2013), implying billions to tens of billions of potentially habitable planets across the galaxy.

Opportunities at any given star may also be quite a bit greater than those available only on planets. Earth only receives about one two-billionth of the Sun’s radiation. To collect all the Sun’s radiation, humanity would need a Dyson swarm (named after Dyson 1960), which is a series of structures that surrounds a star, collecting its radiation to power a civilization. A Dyson swarm around the Sun could potentially enable a civilization a billion times larger than is possible on Earth. Likewise, Dyson swarms around one billion stars would bring humanity approximately 1018 (one billion–billion) times more energy per unit time.

Space colonies could also increase the amount of time available for human civilization. Earth will remain habitable for a few billion more years (O’Malley-James et al. 2014). Stars will continue shining for about 1014 more years (Adams 2008). That gives us an additional 105 times more energy, for a total of 1023 times more energy than is available on Earth. After the stars fade, other energy sources may be available. And even if our current universe eventually becomes uninhabitable, it may be possible to move to other universes (Kaku 2005). The physics here is speculative, but it cannot be ruled out, and hence there is a nonzero chance of a literally infinite opportunity for space colonization (Baum 2010a).

Whether the opportunity is infinite or merely, say, 1023 times larger than what can be done on Earth, the opportunity is clearly immense. As long as space colonization is an improvement (Sect. 8.3.1), then it would seem that the consequentialist should prioritize space colonization. The sooner space colonization begins, the more of its immense opportunity can be gained. Indeed, Ćirković (2002) estimates 5 × 1046 human lifetimes are lost for every century in which space colonization is delayed.

There can also be large value for space colonization under ecocentric intrinsic value. It is sometimes argued that Earth would be better off without humans. For example, the Voluntary Human Extinction Movement states that “Phasing out the human race by voluntarily ceasing to breed will allow Earth’s biosphere to return to good health” (http://vhemt.org, accessed 25 October 2015). However, this makes sense only if extraterrestrial locations are not intrinsically valued. Otherwise, exterminating humanity ruins the opportunity for humans to bring flourishing ecosystems into outer space. Terraforming other planets or bringing ecosystems into Dyson swarms could bring immense amounts of ecosystem flourishing.

#### 3] Solves sustainability

Robin G. Andrews 19, doctor of experimental volcanology, freelance science journalist, 9/6/19, “Can Spaceflight Save the Planet?” https://www.scientificamerican.com/article/can-spaceflight-save-the-planet/

The planet is warming, the oceans are acidifying, the Amazon is burning down, and plastic is snowing on the Arctic. Humanity’s environmental devastation is so severe, experts say, that a global-scale ecological catastrophe is already underway. Even those holding sunnier views would be hard-pressed to deny that our global footprint is presently less a light touch and more a boot stamping on Earth’s face. Against this dark background, one might ask if spending lavish sums to send humans to other worlds is a foolhardy distraction—or a cynical hedge against life’s downward spiral on this one.

Spaceflight, however, has the potential to be more than just a planetary escape hatch for eccentric billionaires. Whether in today’s Earth-orbiting spacecraft or the outposts that may someday be built on the moon and Mars, to exist beyond Earth, we must somehow replicate all of our planet’s life-giving essentials off-world. Technologies that recycle practically everything—that make water, air and food as renewable and self-sustaining as possible—are essential for current and future human spaceflight.

Then again, we already know how we are jeopardizing the planet and what needs to be done about it. “We have almost all of the tools we need to live sustainably right here, right now,” says Kate Marvel, a climate scientist at Columbia University and NASA. “Our failure to address climate change is not just because we’re interested in space.” Similarly, spaceflight alone cannot save Earth, but that does not mean it solely aids and abets naive dreams of leaving our planet behind.

TIN CAN AGRICULTURE

Astronauts need technological innovations to survive in space, but in the past, those solutions have been somewhat temporary—think of NASA’s crewed Apollo missions to the moon, which maxed out at just more than 12 days in duration. Change is afoot: the Trump administration now wants boots on the moon by 2024. Luke Roberson, senior principal investigator for flight research at NASA’s Kennedy Space Center, says the agency is pursuing sustainable architecture on the lunar surface as early as 2028—the sort requiring technology to provide long-term, regenerating caches of food, air and water.

Some of this tech may not remain in space. After all, a surprising number of inventions funded or designed by space agencies have been transferred to the commercial sector. These include several ecology-focused projects, including one to make sustainable oil and another that uses LED color combinations, or “light recipes,” to trigger different styles of crop growth.

Growing crops in space is anything but trivial. But, says Gioia Massa, a plant scientist at NASA, technologies such as specialized lighting and advanced sensors are of vital importance onboard the International Space Station (ISS), where experiments such as the Veggie system showcase energy-efficient food production. The system’s use of LEDs for plant growth was a concept conceived by NASA-funded research in the 1980s. That tech, Massa says, is now saving a lot of energy for indoor agriculture.

NASA has also worked with Florikan, a company that developed a fertilizer whose polymer coating allows for a controlled, slow release of nutrients. It is designed to reduce the runoff of fertilizer into the environment, which can cause ecological havoc. This fertilizer is being used in space, Massa says, and it has demonstrated its ability to enhance plant growth on the ISS. These products, tweaked for continued use in space, are also being marketed to commercial greenhouse owners.

Some eco-friendly innovations result from NASA simply trying to be environmentally responsible, says Daniel Lockney, who oversees the agency’s technology transfer efforts. Building spacefaring equipment on Earth is a dirty business, with fuels, paints, solvents and other toxic materials threatening to infiltrate the natural environment. That is why NASA has developed emulsified zero-valent iron (EZVI), a material that adheres to chlorinated solvents in groundwater. When dirty launchpads are scrubbed with potent chemicals, EZVI helps clean them up afterward. Beyond the launchpad, the compound has entered routine use at chemical-manufacturing plants and severely polluted Superfund sites across the country.

A supply of potable water is also paramount for both spacefarers and surface dwellers. And water pollution happens to contribute to the deaths of millions every year, so any tech that could help nix that tragedy would be welcome.

Lockney points to the microbial check valve as a solid example of how NASA can assuage this issue. Originally developed for the agency’s fleet of space shuttles, a more advanced version of the system now passively stops harmful microbes in wastewater from swimming back into potable-water reservoirs onboard the ISS. Other versions are at work right here on Earth, keeping water clean with minimal energy in areas with dirty water and without electricity access, as well as in dentists’ offices. (Remember the liquid you swish around in your mouth after a dental examination? That water is often purified by the very same valve to minimize the risk of oral infections.)

Roberson and Melanie Pickett, a postdoctoral research fellow at NASA, both work on water-purification systems for spaceflight, including on the ISS. Wastewater there is typically broken down with chemical concoctions. “But that chemistry isn’t sustainable,” Roberson says, because it requires regular refills via resupply missions from Earth. He and Pickett are now designing systems harnessing plants and microbes to recycle waste more sustainably, and these approaches may eventually help redesign toilets and septic tanks on Earth.

As is the case for water, it is far from easy to make breathable air a limitless resource in space. Up on the ISS, oxygen is traditionally extracted from water that has to be brought from Earth, which is costly and wasteful. As of 2018, the European Space Agency (ESA) is changing that status quo with its new Advanced Closed Loop System, which scrubs the Space Station’s environs of carbon dioxide and, in the process, siphons out oxygen to replenish supplies of breathable air while saving water at the same time.

Although on a far larger scale and with somewhat different operational requirements, carbon-capture systems are probably needed on Earth as part of a larger mix to slow down the pace of climate change. Technology developed for use in orbit may inform plans to do the same on our planet.

SERENDIPITOUS SPIN-OFFS

Not leaving anything to waste is the underlying principle of many of these innovations. In space, Massa says, waste must be seen as a resource, not something to mindlessly discard. That is part and parcel of so-called closed-loop systems: if such a system is perfect, all its components are recycled, and nothing is ejected from it as waste. Just think of sealed terraria, in which miniature plant ecosystems thrive by themselves for decades with no outside intervention.

The Micro Ecological Life Support System Alternative (MELiSSA) project strongly abides by that ideal. Featuring a constantly tweaked “pilot plant” test facility in Barcelona, the target of this ESA-led endeavor is to create a self-sustaining, biologically driven closed-loop life-support system.

The pilot plant, whose compartments attempt to degrade waste and use photosynthesis to clean the air, provide oxygen and produce food, employs a cohort of rats as astronaut stand-ins to see how effective the system could be at sustaining a crew for months at a time. Several generations of rats have been used, and so far, there have been zero casualties. Some MELiSSA-derived experiments, such as the photosynthesis-powered oxygen- and edible-biomass-making ARTEMISS, are being flown up to the ISS to see how they fare.

The project, started in 1989, is intended to mature into a system capable of sustaining a human crew on a long-duration interplanetary voyage by the mid-2020s. In the meantime, its spin-offs are already showing promise, says Christophe Lasseur, head of MELiSSA at ESA. For instance, its urine-recycling tech could eventually be deployed in remote places and disaster sites to provide potable water in a cost-effective manner, with minimal environmental impact, obviating the need for porting in supplies of clean water from far afield.

Lofty ideals are one thing, but the proof, as always, is in the pudding. Not all innovative ideas may become a reality, and for those that do, their development and transference from space to Earth hardly happen overnight. Roberson explains that his own inventions take, on average, seven to 10 years to be commercialized. MELiSSA is considered to be a 50-year effort.

Patience is certainly a virtue. “There’s a serendipity to it,” Lockney says. “Just like we know that water is wet, we know that investment in these new missions will yield inventions that are of benefit to all of humankind.”

If anything, these innovations underline why investment in basic R&D can be so worthwhile. “The really cool thing about science is that you really don’t know what’s going to come out of it,” Marvel says. After all, no one thought the World Wide Web would come out of the same journey that led to the Large Hadron Collider.

Lengthy engineering timescales and unpredictability aside, spaceflight has already resulted in a range of effective (if not game-changing) eco-friendly by-products for consumers. So why do they remain so relatively unknown? Chad Anderson, CEO of venture capitalist group Space Angels, suspects that it partially comes down to poor marketing.

Technology transfer from space-related R&D, Anderson says, has sparked significant innovations not only in eco-friendly products but also in the broader fields of transportation, health care and communications. The problem is that space agencies are not effectively communicating such success stories to the general public. “Space companies are notoriously bad at talking about what they are doing,” Anderson says.

#### 4] Profit motive is key – even if they win FG is key

Cobb 21 [Wendy N. Whitman Cobb, Associate Professor of Strategy and Security Studies at the School of Advanced Air and Space Studies, “Privatizing Peace: How Commerce Can Reduce Conflict in Space,” 2021, Routledge, EA]

Admittedly, demonstrating that government investment in space technology impacts the general economy is not the same as demonstrating the government has an interest directly in the economy. However, spending on space is routinely justified by government officials precisely because it is a net positive to the economy.27 In the United States, this justification began early. In April 1963, in response to a request from President John F. Kennedy to review NASA’s budget, Vice President Lyndon B. Johnson justified the spending on space largely in economic terms, writing,

It cannot be questioned that billions of dollars directed into research and development in an orderly and thoughtful manner will have significant effect upon our national economy. No formula has been found which attributes specific dollar values to each of these areas of anticipated developments, however, the “multiplier” of space research and development will augment our economic strength, our peaceful posture, and our standard of living.28

More recently, in a March 2019 announcement tasking NASA to return to the moon by 2024, Vice President Mike Pence invoked economic rationales several times to justify the project:

The United States must remain first in space, in this century as in the last, not just to propel our economy and secure our nation, but above all because the rules and values of space, like every great frontier, will be written by those who have the courage to get there first and the commitment to stay.29

This justification of space development in terms of its economic potential is not limited to the United States. Both Russia and China have concerned themselves with the economic and commercial potentials of their space programs.30 The Chinese government in particular has emphasized the commercial applications of its launch systems since it entered the global launch market in the 1980s. For China, space development is not just a means of enhancing their economy but also of connecting their disparate population centers with outlying areas and of further supporting space development.31 If politicians are supporting space funding, even in part, because they believe it benefits the economy, then this first premise, that states are interested in a successful economy, is more than plausible.

#### 5] Only profit motive solves debris.

Nelson & Block 18 [Peter Lothian Nelson and Walter E. Block, \*\* Harold E. Wirth Endowed Chair and Professor of Economics, College of Business, Loyola University New Orleans, “Space Capitalism: How Humans will Colonize Planets, Moons, and Asteroids,” 2018, Springer, pp. 108, EA]

Space debris is a major challenge to space exploration (Goldsmith 2015). The higher the speed (see Chap. 1 on the need for hyper speeds), the worse will be the issue of impact avoidance or damage in the event of impact. It is through the unregulated free market that solutions to intractable problems are found. Explorers will be well motivated to develop methods for detection of both minuscule and massive invisible objects and quick reaction mechanisms for avoidance of things large and small.