## OFF

### NC – K

#### The theoretical foundation for the affirmative is the genocidal impulse of *terra nullius* – the Deleuzian origin of their theory must not be separated from its colonial nostalgia for a settler fantasy of clearing – their attempt to move beyond the subject through a proliferation of difference is merely the performance of a self-actualizing, free-form whiteness on the horizon of an ever-expanding frontier

King 17 (Tiffany Lethabo King, Assistant Professor of Women’s, Gender and Sexuality Studies at Georgia State, PhD in American Studies from the University of Maryland at College Park, Spring 2017, “Humans Involved: Lurking in the Lines of Posthumanist Flight,” *Critical Ethnic Studies* Volume 3 Number 1) gz

Jodi Byrd in particular attends to the colonialist, genocidal, and therefore humanist impulses of the rhizome in her book *Transit of Empire*.26 What is particularly instructive is the way that Byrd operationalizes her critique of Deleuze and Guattari’s first chapter, “Rhizome,” in their tome *A Thousand Plateaus*.27 Byrd’s deconstruction, or picking apart, of the poststructuralist and nonsubject- and nonobject-related Deleuzoguattarian rhizomatics are a masterful (and frankly thuggish and rude) demonstration of refusing to adapt or “repair” colonial epistemologies and geographies. Byrd’s refusal is a moment that further helps one distinguish between the works of postcolonial and decolonial studies.

Byrd performs an outright refusal that short circuits the colonial and postcolonial comportments of politesse, which allow genocidal Western thought to continue uninterrupted. Byrd’s interrogation of the “colonial nostalgia” latent in poststructural and nonrepresentational forms of thought like Deleuze and Guattari’s rhizome is an explicit example of how the violence of white nonrepresentational theory creates an immediate space of impasse for Indigenous, decolonial, Black, and abolitionist intellectual traditions. As Byrd argues, the Deleuzian and Guattarian rhizome assumes its errant, untraceable, and de/reterritorializing path through Native genocide. The rhizome obtains its metaphorical and theoretical elasticity from the discursive genocide of Indigenous peoples. The territory of maneuver or ground that the rhizome gains its bearing on is unwittingly or perhaps indifferently anchored in the disavowal of the Indigenous ancestral claims, history, presence, and ongoing relationship with the land in North America. Deleuze and Guattari covet the free-range and bloody movements in the West, described as a land of “Indians without Ancestry” primarily because they do not have to contend with the presence of Indigenous peoples and their prior relationships (ancestors) to the land and space through which they move and clear as nomads. There are no existing people to which Deleuze and Guattari have to be accountable. Therefore, their own and others’ self-actualizing, free-form whiteness can proceed unimpeded. The rhizomatic West—*terra nullius*—is without a people, history, or a cosmology to navigate.

Byrd’s reading of Deleuze and Guattari’s reproduction or transit of the “Indian” in their book *A Thousand Plateaus* limns some of the methods in which colonialism and modes of conquest are enacted on behalf of the self-actualization of white subjects who produce nonrepresentational theory. In fact, Byrd argues that the “Indian is the ontological prior through which poststructuralism functions.”28 Byrd traces the appearance or deployment of the Indian as a simulation or “present absent” in Jacques Derrida’s and then Deleuze and Guattari’s work, which creates space for the white subject and the unending frontier. Byrd also argues that nonrepresentational theory heralded as a liberatory path beyond the subject is colonialist. Byrd indicts Deleuze and Guattari’s use of Leslie Fiedler’s work in order to invoke the American West and the Indian as exceptional cases that inspire rhizomatic movement through the notion of an ever-receding frontier.29 It is colonialist on (at least) two accounts: in its need to render the Indian already and inevitably (ontologically) dead as “it” has no ancestors or living community to whom one needs to be accountable; and in its invocation of the vanishing “Indian,” which opens up the possibility of an “ever-receding frontier” and inspiration for the metaphor of the rhizome. This logic and mode of conquistador thought undergirds the Deleuzian and Guattarian ethos of experimental and rhizomatic lines of flight. Their nonrepresentational theory of lines of flight are only possible as a form of white self-actualizing posthumanism due to the death of Indigenous peoples and their excision from the Earth/land. White posthumanism and its flows and lines of flight are made possible through Native death.

#### Preciado’s account of the pharmacopornographic regime grants a figment of legibility to a unified cognitive capitalism – this biocapitalist regime is neither unitary nor a break from traditional accumulation and their account of the world economy blurs the social ontology of biotechnological production devastating the periphery – what’s more, their praxis is actively dependent on those same genomic control machines

Rosenberg 14 (Jord/ana Rosenberg, associate professor of Literature at UMass Amherst, PhD from Cornell, 2014, “The Molecularization of Sexuality: On Some Primitivisms of the Present,” *Theory & Event* Volume 17 Issue 2, footnote 45 included in curly braces, modified) gz

Recently, work that shapes itself within the Spinozist tradition31 makes recourse to the fields of molecular biology and chemistry as representative of the “self-organizing capacity of inorganic systems.”32 It appears to some as if the molecular-biological present is a realization of Spinoza’s materialism. ~~Beatriz~~ [Paul] Preciado, for example, has recently argued that the capacity to produce “molecular joy” – the “*potential gaudendi*” (or, “orgasmic potential”) of the body – represents the “raw material” of what the Italian autonomists refer to as “cognitive capitalism”: “the biomolecular and organic structure of the body,” Preciado asserts, “is the last hiding place of these biopolitical systems of control. This moment contains all the horror and exaltation of the body’s political potential.”33

While Preciado’s interventions are engaging and vital – and the history of the industrial production of testosterone that she charts is invaluable – there is a certain (reductive) economism to this argument, one we might not recognize immediately but that requires our attention. Mark the logic of the claims, particuarly the assertion that the molecular is a new frontier of raw material extraction/exploitation so significant as to shape the world-system: “the world economy is dependent on the production and circulation of hundreds of tons of synthetic steroids and technically transformed organs, fluids, cells (techno-blood, techno-sperm, techno-ovum, etc.).”34 I think that Preciado’s insistence about the epochal centrality of the molecular to the “world economy” might be debatable. As Kaushik Sunder Rajan has argued extensively, biocapital in itself does not mark a distinct phase of capitalist production: “I wish to clarify the relationship of biocapital to capital (and to capitalisms) in precisely these terms. Biocapital does not signify a distinct epochal phase of capitalism that leaves behind or radically ruptures capitalism as we have known it.”35 The reason why biocapital, in itself, does not represent a critical new phase of capitalism is both that capitalism is “not a unitary category,” and that “biocapital itself takes shape in incongruent fashion across the multiple sites of its global emergence.”36 Preciado’s “world economy,” in other words–not to mention the figure of “biotechnology” itself – presents a figment of coherence that is illegible outside of the uneven spatial contexts of production, extraction, circulation and consumption at work in the constitution of biocapital-as-value. As Sunder Rajan explains: “The everyday existence of a biotech or a pharmaceutical company … involves the coexistence of at least these two simultaneous, distinct, yet mutually constitutive forms of capital.”37 Preciado’s account of what “the world economy” “is,” however, focuses largely on circulation and commodity-usage (such as the testosterone ~~she~~ [he] self-administers). From this vantage point, the molecular may appear (to Preciado) as both a uniquely “horrifyingly” exploited raw material and an immediately available resource for resistance. But to make such claims runs the risk of blurring the many mediations of labor, spatial unevenness, and geopolitical contingencies that define the production of the biotechnology itself: that constitute, in fact, its *social ontology*. The ontological Being of testosterone, put another way, is not legible from the point of its consumption, even if one claims that, in taking it, one is making one’s own body available as an exploitable resource and that one is thus in some more immediate way in relation to the production of biocapitalistic value (though I think this tendency of Preciado’s argument is also debatable).38 What Sunder Rajan makes clear is that biotechnology is most legible from the perspective of its production.

We may hear an echo between Preciado’s argument and Eugene Thacker’s (to my mind) unaccountable conviction regarding revolutionary immediacies of molecular “agency” in which:

… the nonhuman domain of cells, enzymes, and genes… metabolic networks, biopathways, single-point mutations, immunoknowledge, protein folding – offer a resistance to the genecentric and reductionist approaches taken by the biotech and pharmaceutical industries.39

Here, Thacker eliminates questions of confrontation, contingency, collectivization (not to mention passion) from the thinking of resistance, and instead ascribes a kind of determinate trajectory to the autonomization of cellular life. One wants, at this point, to ask: was it only in 1989 that Stuart Hall directed our attention to the “arena of social reproduction” as a “critical ‘new’ sit[e] of politics?” – one that, he argued, is “both material and symbolic, since we are reproducing not only the cells of the body but also the categories of the culture.” Hall argued against a scientific socialism for which “reproduction” was restricted to cellular reproduction. The intervention here was to direct us away from cells and towards the composite of intimacies, gendered comportments, and affective life that make up the field of reproduction and that, in part after Hall’s urging, we have extrapolated quite a bit since then. And yet now we are back to cells. Given that it has only been 25 years, something significant must have happened to cells to have erased the disciplinary memory of their association with the stodgiest Stalinisms. Of course, as we know, things have happened to cells since 1989; Nadia Abu El-Haj, Sunder Rajan, Dorothy Roberts, and Kim Tallbear have eloquently and forcefully charted the racialized geopolitics of the production of biocommodities.40 Bruce Braun, Sandro Mezzadra, Neil Smith, Nikolas Rose and others have explained how molecular material might represent a new frontier of primitive accumulation and resource extraction.41 But if the conditions have shifted, surely this shift doesn’t mean that the location of our resistance is now molecular?42

Sunder Rajan’s presentation of biotechnology’s corrugation by the uneven terrain of capital accumulation demonstrates that the “molecular” as such – the “nonhuman domain” to which Thacker refers – is less an empirical description of the stuff of biocapital, as it is figure-of-concealment that flattens the contradictory dynamics of the production and circulation of these forms of value.

I would like now to return to the question of the molecularity of consciousness with which we began. Delany has presented us with a unique proposition regarding the molecular: that Spinoza could only imagine the materiality of affect, the potentiality of substance, and the interrelated substance of the world via an emphatically un-molecular conception of consciousness. In *Through the Valley*, materiality and the molecular are unaligned.

I have opened with Mama Grace’s pronouncements on the molecular because it is here, I believe, that Delany restores the radically social quality of Spinoza’s thought to a present that threatens to de-historicize and de-socialize materialism and the Spinozist tradition. What *Through the Valley* allows us to notice – and now to question – are the ways in which discourses of embodiment, subjectivity, sexuality, and life itself in the present have come to be marked by a kind of molecularization.43

4. Molecularization of Sexuality/Molecularization of Sociality

By “molecularization of sexuality,” then, we might be referencing at least three things: the thinking of sexuality at the particulate level of the body and of objects; the popularization of the biomedical management of sexuality (especially – but not exclusively – rendered in the coming-into-focus of transgender as a category of analysis); the Deleuze and Guattarian sense of a microphysics of desire and desiring-production.

These conceptions of the molecular are not identical. In fact, at times they are explicitly counterposed or in friction. But the discursive phenomenon of *the molecular* – rather than a catalogue of its various usages – is what we are concerned with here. More specifically, we are concerned with the way in which the molecular operates as an abstraction, and comes to function fungibly across different methodological approaches.

To say that the molecular is an abstraction is not to say that it signifies in a vague manner. Quite the opposite. A concept becomes an abstraction when it collects within itself a number of different, singular – but knotted – instantiations. Here I am drawing on Marx’s well-known conception of a “concrete abstraction” as the “synthesis of many definitions, thus representing the unity of diverse aspects.”44 Along similar lines, if the molecular is an abstraction, it is so due to its variety of concrete significations and uses, and because historical forces have combined to make it so.45 {45. And here, Preciado’s history of the production of synthetic hormones post-WWII becomes quite useful, although as one can anticipate, I do not agree with ~~her~~ [his] conception of “adding” value in what follows: “what if, in reality, the insatiable bodies of the multitude—their cocks, clitorises, anuses, hormones, and neurosexual synapses – what if sexuality, seduction, and the pleasure of the multitude were all the mainsprings of the creation of value added to the contemporary economy? Preciado, *Testo Junkie* (Kindle Locations 385–386). In much the same way that Silvia Federici argued that the body – specifically its “vivisection” into “useful” and “unuseful” capacities was the “first machine produced under capitalism” – Preciado points us to the ways in which sexuality and sexual difference continue to be an engine for the reproduction of capitalism. However, where Federici is concerned with the mediating sphere of reproduction, and its myriad labors, Preciado turns to the body as a kind of self-mediating factory of“value. This “socialization” of production – I use Alberto Toscano’s term here – tends to occlude two “hidden abodes”: both the labor of production itself along with that of the reproductive spheres.} Consequently, the question with which we are concerned is not so much *what are the constituent parts of the molecular* (such a question would produce an endless list – a tendency, in fact, that is proper to object-oriented methods, and has been noted by many of its commentators), but rather: *what are the historical relationships that make possible the abstraction of the molecular as such?*

#### That affective reading of politics assimilates indigeneity into a racial schema that reproduces colonial binaries and proves mutual exclusivity – you should instead understand violence as principally geopolitical

Rifkin 9 – Associate Professor of English & WGS @ UNC-Greensboro

(Mark, “Indigenizing Agamben: Rethinking Sovereignty in Light of the ‘Peculiar’ Status of Native Peoples,” *Cultural Critique*, Number 73, pp. 88-124)

In using Agamben’s work to address U.S. Indian policy, though, it needs to be reworked. In particular, his emphasis on biopolitics tends to come at the expense of a discussion of geopolitics, the production of race supplanting the production of space as a way of envisioning the work of the sovereignty he critiques, and while his concept of the exception has been immensely influential in contemporary scholar- ship and cultural criticism, such accounts largely have left aside discussion of Indigenous peoples. Attending to Native peoples’ position within settler-state sovereignties requires investigating and adjusting three aspects of Agamben’s thinking: the persistent inside/outside tropology he uses to address the exception, specifically the ways it serves as a metaphor divorced from territoriality; the notion of “bare life” as the basis of the exception, especially the individualizing ways that he uses that concept; and the implicit depiction of sovereignty as a self-confident exercise of authority free from anxiety over the legitimacy of state actions.5 Such revision allows for a reconsideration of the “zone of indistinction” produced by and within sovereignty, opening up analysis of the ways settler-states regulate not only proper kinds of embodiment (“bare life”) but also legitimate modes of collectivity and occupancy—what I will call bare habitance.¶ If the “overriding sovereignty” of the United States is predicated on the creation of a state of exception, then the struggle for sovereignty by Native peoples can be envisioned as less about control of particular policy domains than of metapolitical authority—the ability to define the content and scope of “law” and “politics.” Such a shift draws attention away from critiques of the particular rhetorics used to justify the state’s plenary power and toward a macrological effort to contest the “overriding” assertion of a right to exert control over Native polities. My argument, then, explores the limits of forms of analysis organized around the critique of the settler-state’s employment of racialized discourses of savagery and the emphasis on cultural distinctions between Euramerican and Indigenous modes of governance. Both of these strategies within Indigenous political theory treat sovereignty as a particular kind of political content that can be juxtaposed with a substantively different—more Native-friendly or Indigenous-centered—content, but by contrast, I suggest that discourses of racial difference and equality as well as of cultural recognition are deployed by the state in ways that reaffirm its geopolitical self-evidence and its authority to determine what issues, processes, and statuses will count as meaningful within the political system. While arguments about Euramerican racism and the disjunctions be- tween Native traditions and imposed structures of governance can be quite powerful in challenging aspects of settler-state policy, they cannot account for the structuring violence performed by the figure of sovereignty. Drawing on Agamben, I will argue that “sovereignty” functions as a placeholder that has no determinate content.6 The state has been described as an entity that exercises a monopoly on the legitimate exercise of violence, and what I am suggesting is that the state of exception produced through Indian policy creates a monopoly on the legitimate exercise of legitimacy, an exclusive uncontestable right to define what will count as a viable legal or political form(ul)ation. That fundamentally circular and self-validating, as well as anxious and fraught, performance grounds the legitimacy of state rule on nothing more than the axiomatic negation of Native peoples’ authority to determine or adjudicate for themselves the normative principles by which they will be governed. Through Agamben’s theory of the exception, then, I will explore how the supposedly underlying sovereignty of the U.S. settler-state is a retrospective projection generated by, and dependent on, the “peculiar”-ization of Native peoples.

#### Vote negative for a cartography of refusal which seeks to materially disrupt settler sovereignty through incremental land reclamation and direct action protest

Day 15 Iyko, Associate Professor of English. Chair, Critical Social Thought. “Being or Nothingness: Indigeneity, Antiblackness, and Settler Colonial Critique.” Source: Critical Ethnic Studies, Vol. 1, No. 2 (Fall 2015), pp. 102-121

And so the potential relations that Wilderson sets up through a critique of sovereignty are at best irrelevant or at worse false in Sexton’s absolute claim that slavery stands alone as the “threshold of the political world.”45 I suggest that this wavering relation/nonrelation of antiblackness and Indigeneity exhibited in Wilderson’s and Sexton’s work reveal the problem in any totalizing approach to the heterogeneous constitution of racial difference in settler colonies. Beyond this inconsistency, the liberal multiculturalist agenda that Wilderson and Sexton project into Indigenous sovereignty willfully evacuates any Indigenous refusal of a colonial politics of recognition. Among other broad strokes, Sexton states, “as a rule, Native Studies reproduces the dominant liberal political narrative of emancipation and enfranchisement.”46 This provides a basis for Wilderson’s assertion that Indigenous sovereignty engages in a liberal politics of state legitimation through recognition because “treaties are forms of articulation” that buttress “the interlocutory life of America as a coherent (albeit genocidal) idea.”47 But such a depoliticized liberal project is frankly incompatible with Indigenous activism and scholarship that emerges from Native studies in North America. The main argument in Glen Sean Coulthard’s book Red Skin, White Masks is to categorically reject “the liberal recognition-based approach to Indigenous selfdetermination.”48 This is not a politics of legitimizing Indigenous nations through state recognition but rather one of refusal, a refusal to be recognized and thus interpellated by the settler colonial nation-state. Drawing on Fanon, Coulthard describes the “necessity on the part of the oppressed to ‘turn away’ from their other-oriented master-dependency, and to instead struggle for freedom on their own terms and in accordance with their own values.”49 It is also difficult to reconcile the depoliticized narrative of “resurgence and recovery” that Wilderson and Sexton attribute to Indigenous sovereignty in the face of Idle No More, the anticapitalist Indigenous sovereignty movement in Canada whose national railway and highway blockades have seriously destabilized the expropriation of natural resources for the global market. These are examples that Coulthard describes as “direct action” rather than negotiation—in other words, antagonism, not conflict resolution: The [blockades] are a crucial act of negation insofar as they seek to impede or block the flow of resources currently being transported to international markets from oil and gas fields, refineries, lumber mills, mining operations, and hydroelectric facilities located on the dispossessed lands of Indigenous nations. These modes of direct action . . . seek to have a negative impact on the economic infrastructure that is core to the colonial accumulation of capital in settler-political economies like Canada’s.50 These tactics are part of what Audra Simpson calls a “cartography of refusal” that “negates the authority of the other’s gaze.”51 It is impossible to frame the blockade movement, which has become the greatest threat to Canada’s resource agenda,52 as a struggle for “enfranchisement.” Idle No More is not in “conflict” with the Canadian nation-state; it is in a struggle against the very premise of settler colonial capitalism that requires the elimination of Indigenous peoples. As Coulthard states unambiguously, “For Indigenous nations to live, capitalism must die.”

## OFF

### 1NC – T

#### Interpretation and violation – the affirmative should not garner offense from anything other than the hypothetical implementation of a topical plan – they didn’t.

#### “Resolved” means enactment of a law.

Words and Phrases 64 Words and Phrases Permanent Edition (Multi-volume set of judicial definitions). “Resolved”. 1964.

Definition of the word **“resolve,”** given by Webster is “to express an opinion or determination by resolution or vote; as ‘it was resolved by the legislature;” It **is** of **similar** force **to the word “enact,”** which is defined by Bouvier as **meaning “to establish by law”.**

#### At best, it’s extra topical, which still skews neg prep and links to our offense.

#### Vote negative for predictable limits and ground—-allowing the affirmative to pick any grounds for the debate makes negative engagement impossible, by skirting a predictable starting point and making our preparation and research useless. Because debate is a competitive game, there is an incentive to revert to truisms that give the negative no chance at engagement. The lack of a plan also means the affirmative can shift their advocacy in later speeches instead of being tied to a particular text, which obviates negative arguments.

#### This has two impacts –

#### Fairness – A predictable limit is the only way to give the neg a chance to win—-radical aff choice shifts the grounds for the debate and puts the aff far ahead. Pre-tournament negative preparation is structured around topical plans as points of offense, which means anything other than a topical plan structurally favors the affirmative. Fairness is an intrinsic good—-debate is fundamentally a game and requires effective competition between the aff and the neg—-the only way for any benefit to be produced from debate and the reason why people are incentivized to do prep and research is to help them do better in their next round is if the judge can make a decision between two sides who have had a relatively equal chance to prepare for a common point of debate. Fairness also comes before substance—-deciding any other argument in this debate cannot be disentangled from our inability to prepare for it—-any argument you think they’re winning is a link, not a reason to vote for them, because it’s just as likely that they’re winning it because we weren’t able to effectively prepare to defeat it.

#### Second is Argument Engagement---advocacy tied to the resolution incentivizes nuanced research and CLASH with a well prepared opponent---They turn debate into one with no negative counterargumentation which causes confirmation bias and less good affirmatives. It also doesn’t subject the aff to rigorous arugmentation which eliminates the skills necessary to make real material change in the world and doesn’t generate real productive discussions – turns their offense.

#### Topical version of the aff – ban microgravity station – their Kulu card concedes the labs are either on shuttles, on government property, or both. Kulu 18 [Harker reads yellow.]

Kulu(Factories in space, Medicine and drugs, Erik Kulu 2018-2021, Manufacturing of pharmaceutical drugs in low orbit <https://www.factoriesinspace.com/medicine-and-drugs>)

Microgravity changes how crystal structures develop and in the process creates better samples than can be grown on Earth. Improving the 3D structure can have a positive impact on drug delivery, manufacturing and storage. A high percentage of pharmaceutical company executives (60%) said the space economy will have a high disruption on their sector in the coming decades. In a nutshell, space affords Big Pharma unique conditions in order to improve their drugs and potentially find new treatments. A long-term goal is the manufacturing of pharmaceuticals in a low orbit. While manufacturing in a low orbit could improve drugs, it could also increase the price.[1](https://www.factoriesinspace.com/medicine-and-drugs#fn1) Liquid-liquid separation and chemical extraction are key processes in drug manufacturing and many other industries, including oil and gas, fragrances, food, wastewater filtration, and biotechnology. MIT spinout Zaiput Flow Technologies launched a novel continuous-flow liquid-liquid separator that makes those processes faster, easier, and more efficient. Today, nine pharmaceutical giants and a growing number of academic labs and small companies use the separator. Having proved its efficacy on Earth, the separator is now being tested as a tool for manufacturing drugs and synthesizing chemicals in outer space.[2](https://www.factoriesinspace.com/medicine-and-drugs#fn2) In space, microgravity lets materials grow without encountering walls, and it allows them to mix evenly and hold together without traditional supports. And a nearby ultrahigh vacuum helps things form without impurities. In microgravity, crystals can grow larger; in one experiment, crystals made from proteins grew to be 6 cubic millimeters, on average, compared with 0.5 cubic millimeters here on Earth. Once grown, those crystals can be analyzed to determine the proteins' 3D structures, which can help inform new strategies for drug discovery. Growing other crystals, like those used to manufacture drugs or those that can detect gamma-rays and neutrons, in space so that they're bigger and purer can make the resulting (in) material (of) higher-quality.[3](https://www.factoriesinspace.com/medicine-and-drugs#fn3) For drug delivery, uniformity is ideal, but it will still be some time before Merck is manufacturing drugs in space.[5](https://www.factoriesinspace.com/medicine-and-drugs#fn5) Paul Reichert, a research scientist at Merck pharmaceuticals, has been an advocate for zero gravity drug development for 25 years. Weightless drug manufacturing, he says, would enable engineers to better control chemical processes, especially when it comes to synthesizing complicated large-molecule medicines. Reichert has never left Earth, but he has designed more than a dozen experiments performed by astronauts aboard the space shuttle and the International Space Station. Still, progress is slow. “I’ve done 14 experiments in space in 24 years,” he says. “I can do 14 experiments in a day here on Earth.” Kelly hopes that more pharmaceutical experiments will be done on the Space Station, but he says an even better research site is the Moon: “It’s perfectly designed, and placed at a good distance. It’s got a sixth of the gravity of Earth, and has no atmosphere.”[6](https://www.factoriesinspace.com/medicine-and-drugs#fn6)

#### Banning ISS prevents experimentation

Howell 19(Elizabeth Howell, How Big Pharma Was Wooed To Space-Based 'Business Park, August 14 2019, https://www.forbes.com/sites/elizabethhowell1/2019/08/14/how-big-pharma-was-wooed-to-space-based-business-park/?sh=e97d10632e17)

The most exclusive business park for humankind is so remote that it takes a rocket to get there — and big pharma is among the growth industries in this difficult-to-reach location. The "weightless" lab is packed with experiments that develop drugs and 3D-print human tissue, among other things. It's called the U.S. National Laboratory and its address is on the International Space Station. Its sole manager — Florida's non-profit Center for the Advancement of Space (CASIS) — has been in charge there for eight years, working with astronauts who contend with packed schedules and a dangerous environment. While CASIS says its ecosystem is growing and thriving, NASA's Office of the Inspector General criticized the organization for its work, as late as January 2018: "The organization has underperformed on tasks important to achieving NASA's goal of building a commercial space economy in low Earth orbit," the OIG wrote in a report at that time. "After more than five years of operation, CASIS has not fully met a majority of the goals and expectations set out by NASA," it added. (At the time, NASA said it concurred or partially concurred with OIG recommendations, although OIG and NASA clashed as to how the report's performance metrics for CASIS were defined.) Yet CASIS says it has been working hard amid unique requirements for its lab. It's a tough place to work, because the principal investigators are nowhere near their experiments. Further, astronaut time is precious — so experiments ideally are somewhat autonomous, able to be controlled from Earth or to run on their own. German astronaut Alexander Gerst works on a CASIS-developed experiment called Space Algae. German astronaut Alexander Gerst works on a CASIS-developed experiment called Space Algae. Algae ... [+] NASA CASIS had a classic "blue ocean" advantage — the ability to offer experiment environments that are completely unavailable to competitors, for obvious reasons — but at the same time, it had to move quickly to gain community trust. MORE FOR YOU New Research Finds A Connection Between Domestic Violence And These Two Personality Disorders This Scientist Helps Andean Forests And Ecuador’s Women In STEM Exceptional Fossil Preservation Suggests That Discovering Dinosaur DNA May Not Be Impossible Any success so far is due to quick growth in partnerships, said Ken Shields, the laboratory's chief operating officer, in an interview. "We knew very quickly we had a limited time to get our organization and the national lab ramped up," he said, which required a good deal of forecasting. One of the potential winners CASIS identified was "big pharma", and nearly a decade later that idea is paying off in a big way, Shields said. While that industry is thriving, there are special requirements to consider. In space, experiments can take years to plan due to requirements in fire safety and astronaut safety — not to mention the usual research approvals and funding challenges that principal investigators go through at their individual institutions. How Schools Can Better Serve Hispanic And Latino Students SpaceX's Falcon 9 is one of the providers launching CASIS cargo to space. SpaceX's Falcon 9 (pictured here atop a Falcon 9 rocket during a July 25, 2019 launch from Cape ... [+] NURPHOTO VIA GETTY IMAGES Shields said his non-profit's first step was to understand who in big pharma was investing "a lot of dollars in applied development", and then make the pitch to those folks about how microgravity could simplify the production of drugs. CASIS had to rapidly demonstrate a robust supply chain of rocket launches and high-speed connections to allow results to come out quickly. While drug development takes years of work (meaning tangible financial results can often come decades down the line) what CASIS can point to is demonstrated interest of well-known industry names. Merck has studied the crystallization of antibodies in space. AstraZeneca recently launched a regenerative medicine payload. And Dover Lifesciences won a technology in space award (sponsored by Boeing) to crystallize a protein complex that is tough to make in Earth's gravity. <https://www.the-scientist.com/bio-business/pharma-looks-to-outer-space-to-boost-drug-rd--68183> On a cool December afternoon in 2018, on a viewing platform at the Kennedy Space Center at Cape Canaveral in Florida, Jordan Greco watched his research project leave planet Earth. As chief scientific officer of the Connecticut-based biotech LambdaVision, he had spent years developing a protein-based artificial retina to treat patients blinded or severely visually impaired by retinal degenerative diseases. At 1:15 PM that day, a Falcon 9 launch rocket lit up the sky as it blasted the SpaceX Dragon cargo spacecraft toward (blasted to) the International Space Station (ISS), carrying onboard the proteins that make up Greco’s artificial retina. “It didn’t really hit me until we were sitting on the balcony at the NASA complex and seeing that rocket off in the distance,” Greco recalls. “Our protein, our experiment that we’ve been working on for years, is on that thing.” Once the SpaceX capsule docked at the ISS, an astronaut in the station’s near-weightless environment was to initiate an experiment that Greco hoped would help him understand how to improve the artificial retina’s function. Back on Earth, he and his colleagues had been making progress with the retina—essentially a small film covered in hundreds of layers of the microbial light-activated protein bacteriorhodopsin—but were struggling to produce consistently high-quality retinas. The team suspected that the bacteriorhodopsin proteins should be oriented the same way with respect to one another for the artificial retina to create robust electrical signals and communicate effectively with patients’ neurons. But the team’s process of dipping the film into protein solutions seemed to generate somewhat disordered protein arrangements. Greco suspected that gravity was negatively affecting the layering process—for instance, by causing the proteins in the solution to undergo sedimentation, he explains. To test that hypothesis, he and his colleagues sent materials to the ISS to repeat part of the experiment in microgravity. Microgravity influences scientific experiments in many ways that appeal to drug developers. Scientific research in space has thrived over the past decade, but it’s only recently that the pharmaceutical and biotech sector has started getting in on the action, pursuing new ways to study drugs and other medical treatments. Pharma giants including Merck, AstraZeneca, Eli Lilly, and Sanofi, along with dozens of smaller companies, have all sent experiments to the ISS to reap the unique benefits of microgravity. Of the 150 or so life science research projects supported in the 2019-2020 fiscal year by the Center for the Advancement of Science in Space (CASIS)—a nonprofit that collaborates with NASA to manage the US National Laboratory on the ISS—more than a third have been led by pharmaceutical and biotechnology companies, says CASIS’s interim chief scientist, Mike Roberts. Such endeavors could one day help improve astronaut health and equip humanity for longer ventures into space, but their primary aim is to develop or improve drugs for people on Earth. That’s certainly the hope of Greco and his colleagues, who found out a few months after that December afternoon that, as they’d hypothesized, the proteins layered in space appeared to have more-orderly arrangements—an improvement that could benefit the artificial retina’s function. Studies such as these have yet to yield new blockbuster drugs or even significant improvements to existing ones. Research in space is slow, and the costs are sky-high. All projects are subsidized through NASA, and many rely on additional financial support through federal grants, spurring a new kind of space race—one aiming to prove that such projects are profitable enough for the private sector to fund on their own. “Overcoming that 1G gravitational pull to get rockets up to low Earth orbit or beyond is expensive still,” says Roberts. But even so, “we’ve seen a significant uptick in interest” in conducting experiments in space. The benefits of microgravity While microgravity can be achieved for a few moments on an aircraft rounding the top of a parabolic flight, or simulated imperfectly in bioreactors on Earth, the best way to conduct experiments under sustained microgravity is to go to the ISS. The station orbits approximately 400 km from the planet’s surface and is close enough to Earth to experience about 90 percent of its gravitational pull, but astronauts aboard the station feel nearly weightless because it’s in constant free fall around the planet. The resulting microgravity conditions in this setting influence scientific experiments in many ways that appeal to drug developers. There are minimal convection currents in fluids, for instance, and hardly any sedimentation—conditions advantageous not only for LambdaVision’s layering procedure but also for processes such as protein crystallization, whereby proteins form a regular array. Under near weightlessness, “you get a [higher-quality] crystal than [what you’d get through] the crystallization process on Earth,” making certain proteins easier to study and more attractive as drugs, explains Marlise dos Santos, an aerospace pharmacy specialist at InnovaSpace, a UK-based think tank that promotes life science in space, among other activities related to extreme environments. Paul Reichert, a research scientist at Schering-Plough and at Merck after their merger, was one of the first in the pharmaceutical industry to recognize the value of near weightlessness for protein crystallization. In the 1990s, before the ISS was operational, he collaborated with NASA to send interferon alfa-2b, the active ingredient in the company’s antiviral and cancer drug intron A, into low Earth orbit on the Space Shuttle to see if it would crystallize in space. Upon studying the product that was returned to Earth, Reichert noticed that the protein had turned into small crystals with perfectly uniform size—the kind that would be ideal for drug delivery. Although the crystallized interferon alfa-2b was never commercialized, Reichert has conducted similar experiments on the ISS with the monoclonal antibody pembrolizumab, the key ingredient in Merck’s popular oncology drug Keytruda. Because antibodies aren’t very soluble under standard conditions, treatments such as Keytruda tend to form viscous solutions at high concentrations and need to be delivered in burdensome, lengthy, and regular intravenous infusions. If pembrolizumab took the form of a compact crystalline suspension, however, it could be deliverable as an injection, Reichert explains. In his most recent experiment, published in npj Microgravity, he and his colleagues found that cooling pembrolizumab on the ISS yielded “a uniform population of particles [that] actually gave a better injectability profile than the heterogeneous population of crystals that we got on Earth,” Reichert says. Eli Lilly has also sent its products to the ISS to be crystallized, in this case to make them easier to study structurally using analytical techniques such as X-ray diffraction. The company has also flown mice to the ISS to test an experimental drug that boosts muscle growth. Under microgravity, the loss of physical strain on bone and muscle accelerates the natural onset of common musculo-skeletal diseases in rodents, making them ideal models of such human conditions, explains Jeremy Hinds, a senior research scientist at Lilly. In addition, Hinds is studying whether near weightlessness affects the process of freeze-drying materials, a common step in drug distribution and storage. Microgravity “could have positive outcomes on the physical properties and resulting drug product performance,” he explains in an email to The Scientist. CASIS, which selects the research projects that go to the US national lab on the ISS and provides companies with logistical support, is also working with a number of smaller companies studying everything from treatments for rare diseases to medical devices. One such company is MIT spinout MakerHealth, which has spent nearly a decade creating a device that can produce a number of personalized pharmaceuticals on demand. A mission is slated for 2021 to carry the device’s mechanical reactors to the ISS, where they’ll produce some simple compounds in space. Engineer Jose Gomez-Marquez of MIT’s Little Devices Lab who helped develop the device says the experiment could not only show that it’s possible to make drugs in space—a prerequisite for humanity’s future ventures into outer space—but also help his team understand the typical gravitational constraints on the device’s function and how they can improve it further: “It’s a fundamental physics question.” EXTRATERRESTRIAL LAB: The Destiny Lab on the International Space Station allows researchers to carry out experiments in microgravity. COURTESY OF NASA Challenges in space research While research and development in space is well underway, progress has been slow, says Reichert. “We’re still in the infancy of doing this kind of work.” Many of the challenges are logistical. Only six astronauts are stationed on the ISS; their time for experimental work is limited, and basic laboratory tasks such as pipetting and moving reagents around are challenging in microgravity. That’s in part why pharma entities and biotechs typically contract companies that specialize in automating scientific experiments and packing them into flight-ready “cube labs,” which astronauts simply need to activate to have the experiments conduct themselves. LambdaVision, for instance, worked with the microgravity research company Space Tango to turn their 2018 layering experiment and a more recent study of how bacteriorhodopsin functions under microgravity into miniature labs. The downside of such arrangements is that researchers are often limited to one experiment at a time, and results can be a long time coming, Reichert says. “The astronaut just activates the experiment that sits there for two to three weeks, and then it comes back on a Dragon SpaceX module a month later, and then we first see what the results are.” Doing research in space comes with a host of other challenges as well, such as organizing simultaneous control experiments on the ground, and adapting research methods to the nonstandard laboratory equipment on the ISS. For Paul Jaminet, founder and president of the Massachusetts-based oncology startup Angiex, which undertook an experiment on the ISS in 2018, the endeavor “turned out to be significantly more work than we thought it would be.” The company’s experiment showed that endothelial cells’ response to one of the company’s cancer drugs changed over the course of their time on the ISS, and that the cells generally grew and behaved differently in space than on Earth. In particular, the cells displayed unique characteristics that Angiex founder and head of research Shou-Ching Jaminet tells The Scientist could mimic certain features of cardiovascular conditions afflicting humans on Earth. The husband-and-wife team is interested in continuing that line of research, but due to the amount of labor, time, and money involved, it’s taken a backseat to the company’s work on drug candidates and other projects that are further along. Researchers are often limited to one experiment at a time, and results can be a long time coming. The biggest challenge is indeed the sheer cost of space experiments. Getting a single experiment to and back from the ISS can cost some $7.5 million, according to CASIS. Currently, flights to and from the ISS and astronaut time are covered by NASA, and the hardware and research costs of such experiments are sometimes partially funded through federal grants. Some smaller companies, including MakerHealth, Lambda-Vision, and Angiex, financed their endeavors with six-figure microgravity research grants awarded by a partnership between CASIS and Boeing through the Boston-based business accelerator program MassChallenge. These generous subsidies and incentives are part of a long-term effort by NASA to coax private companies to recognize the value of R&D in space. In addition to bringing benefits to people on Earth, companies ideally would ultimately pay for their own research and help the US National Laboratory on the ISS become self-supporting. However, a 2018 report by NASA’s Office of the Inspector General criticized CASIS for failing to recruit enough commercial users to the space station, and “question[ed] whether a sufficient business case exists under which private companies will be able to develop a self-sustaining and profit-making business [on the ISS].” That’s broadly in line with an analysis by Nicholas Vonortas, a microeconomist at George Washington University who received a NASA grant in 2015 to conduct a cost-benefit analysis of using protein crystallization on the ISS to get better structural information about peptides. Through economic models that considered the risk of experiments failing, among other factors, Vonortas found that the potential financial benefits of crystallizing proteins on the ISS will likely not be enough to outweigh the costs if they’re shouldered by the private sector alone. “All of this together, when you do the calculations, brings a result that is not as attractive as the scientists think,” he tells The Scientist. Space pharmacy ahead? Costs may decrease over time as travel to and from the ISS becomes more frequent, Vonortas says. Entrepreneur Elon Musk, for instance, has said he wants to establish a more regular service to the station than there is currently—an idea not without its skeptics. But a significant source of uncertainty is that the ISS, after more than 110,000 laps around the planet, may be nearing the end of its life. NASA and other participating space agencies plan to continue operations through 2024, but what happens after that is unclear. Instead, pharma research of the future may take advantage of independent initiatives developed by a growing community of companies working to make conducting experiments in sustained microgravity cheaper, faster, and more accessible for life scientists. For instance, the Israeli-Swiss company SpacePharma, founded in 2011, develops autonomous research stations that can be operated from the ground. “Until now, unless you were part of NASA or some space agency, it was very difficult to initiate and perform such experiments” in space, says Guy Samburski, SpacePharma’s director of chemical and pharmaceutical applications. The company recently launched the satellite DIDO 3, carrying four experiments by Italian and Israeli researchers on board, all packed into a milk carton–size box. The satellite won’t return to Earth, but is currently recording and transmitting research data back to scientists on the ground. SpacePharma’s next launch will involve a larger system that will eventually return home so researchers can physically collect materials and results. British spaceflight company Virgin Galactic and Jeff Bezos’s space company Blue Origin have also begun to offer such opportunities to scientists. The emergence of an entire ecosystem devoted to bringing pharmaceutical research into space has opened up new possibilities to those in the industry. “Could we have space labs in the sky that can operate autonomously and discover new lifesaving medications for us?” Gomez-Marquez asks. And while the return on investment currently isn’t ideal, many believe such research will become profitable over time. Eventually, “[it] might be financially beneficial for a company to have things produced or manufactured in space,” in the same way we outsource drug production to different countries on Earth, suggests Thais Russomano, a space medicine expert and cofounder and CEO of InnovaSpace. In fact, LambdaVision is already considering launching production of its artificial retina in space, encouraged by the potential superiority of space-made products. Whether such visions become reality, only time will tell. “If you’re asking me whether this is possible—absolutely, this is technically possible,” Vonortas says. But “the economics is a problem.”

#### Use sufficiency when evaluating the TVA because all deficits are neg ground. This and SSD solve their offense by re-centering debate on queer experimentation.

#### Topicality must be a voting issue—the role of the ballot is to vote for whoever does the better debating over the resolutional question. Any aff role for debate must explain why we switch sides and why there has to be a winner and a loser—switching sides within the competitive yet limited bounds of the topic performs the labor of the negative which avoids group polarization and untested advocacy

#### Theory is an issue of competing interpretations because reasonability invites arbitrary judge intervention based on preference rather than argumentation and encourages a race to the bottom in which debaters will exploit a judge’s tolerance for questionable argumentation.

## OFF

### NC – CP

#### Counterplan: We endorse the entirety of the affirmative with the exception of declaring the appropriation of outer space by private entities unjust. Spacefaring nations should decommission the ISS.

#### NASA is preserving resources by leveraging private partnerships

Miriam Kramer 21, author of Space, “NASA's plans for the future hinge on the success of private companies,” Axios, 12-7-2021, https://www.axios.com/nasa-private-spaceflight-plans-5a5710e6-5223-4da3-8c5d-5a712e1d862e.html

The private space players who will drive NASA's plans for the coming decade are declaring themselves and defining the stakes. Why it matters: NASA plans to focus on getting people to Mars and the Moon, and its deep space exploration ambitions hinge on the agency being able to successfully hand over major operations in low-Earth orbit to private companies. The space agency hopes companies will build private space stations that its astronauts can use and to continue to buy space on private rockets for launching its satellites and other payloads to orbit and beyond. NASA's "big experiment" right now is to test where these commercial partnerships work, the Planetary Society's Casey Dreier told Axios. What's happening: Last week, NASA announced it would award multimillion-dollar contracts to three teams of commercial space companies to start designing and building privately operated space stations.

#### Plan forces spending trade-offs that crush effective Earth sciences --- risks catastrophic climate change

Haymet 7 (Tony, Director of the Scripps Institution of Oceanography – University of California, San Diego, Mark Abbott, Dean of the College of Oceanic and Atmospheric Science – Oregon State University, and Jim Luyten, Acting Director – Woods Hole Oceanographic Institution, “The Planet NASA Needs to Explore”, Washington Post, 5-10, [http://www.washingtonpost.com/wp-dyn/content/article/2007/05/09/AR2007050902451.html](http://www.lexis.com/research/retrieve))

Decades ago, a shift in NASA priorities sidelined progress in human space exploration. As momentum gathers to reinvigorate human space missions to the moon and Mars, we risk hurting ourselves, and Earth, in the long run. Our planet -- not the moon or Mars -- is under significant threat from the consequences of rapid climate change. Yet the changing NASA priorities will threaten exploration here at home.

NASA not only launches shuttles and builds space stations, it also builds and operates our nation's satellites that observe and monitor the Earth. These satellites collect crucial global data on winds, ice and oceans. They help us forecast hurricanes, track the loss of Arctic sea ice and the rise of sea levels, and understand and prepare for climate changes.

NASA's budget for science missions has declined 30 percent in the past six years, and that trend is expected to continue. As more dollars are reallocated to prepare for missions back to the moon and Mars, sophisticated new satellites to observe the Earth will be delayed, harming Earth sciences.

The National Academy of Sciences has noted that the Landsat satellite system, which takes important measurements of global vegetation, is in its fourth decade of operation and could fail without a clear plan for continuation. The same is true for the QuikSCAT satellite, which provides critical wind data used in forecasting hurricanes and El Niño effects.

In January, a partnership of university and NASA scientists demonstrated that climate change and higher ocean temperatures were reducing the growth of microscopic plants and animals at the heart of the marine food web.

Their analysis was based on nearly a decade of NASA satellite measurements of ocean color, which unfortunately are at risk of being interrupted for several years.

Sea levels are rising, and the Arctic Ocean may be ice-free in summer. The buildup of carbon dioxide in the oceans threatens to make them more acidic, which may in turn hinder the ability of some types of marine life, including corals, to build their shells and skeletons. We must learn as much as we can to assess these threats and develop solutions.

Satellites provide coverage of vast, remote regions of our planet that would otherwise remain unseen, especially the oceans, which play an important role in climate change. Without accurate data on such fundamentals as sea surface height, temperatures and biomass, as well as glacier heights and snowpack thickness, we will not be able to understand the likelihood of dangers such as more severe hurricanes along the Gulf Coast or more frequent forest fires in the Pacific Northwest.

Climate change is the most critical problem the Earth has ever faced.

Government agencies and the private sector, as well as individual citizens, need to better grasp the risks and potential paths of global climate change. Mitigating these risks and preparing for the effects of warming will require scientific understanding of how our complex planet operates, how it is changing, and how that change will affect the environment and human society.

John F. Kennedy's brilliant call to put a man on the moon by the end of the 1960s set an arbitrary deadline, but the deadline we face today is set by nature. NASA must continue to play a vital role in helping find ways to protect our planet for (and perhaps from) its intelligent life. Exploration of space is a noble quest. But we can't afford to be so starry-eyed that we overlook our own planet.

#### Warming is inevitable but adjusting government policy can address the worst effects – specifically, for sea level rise. US responses are modeled globally.

**Economist 17**, "How government policy exacerbates hurricanes like Harvey," Economist, https://www.economist.com/news/leaders/21727898-if-global-warming-were-not-enough-threat-poor-planning-and-unwise-subsidies-make-floods

THE extent of the devastation will become clear only when the floodwater recedes, leaving ruined cars, filthy mud-choked houses and the bloated corpses of the drowned. But as we went to press, with the rain pounding South Texas for the sixth day, Hurricane Harvey had already set records as America’s most severe deluge (see Briefing). In Houston it drenched Harris County in over 4.5trn litres of water in just 100 hours—enough rainfall to cover an eight-year-old child. The fate of America’s fourth-largest city holds the world’s attention, but it is hardly alone. In India, Bangladesh and Nepal, at least 1,200 people have died and millions have been left homeless by this year’s monsoon floods. Last month torrential rains caused a mudslide in Sierra Leone that killed over 1,000—though the exact toll will never be known. Around the world, governments are grappling with the threat from floods. This will ultimately be about dealing with climate change. Just as important, is correcting short-sighted government policy and the perverse incentives that make flooding worse. Judgment day The overwhelming good news is that storms and flooding have caused far fewer deaths in recent decades, thanks to better warning systems and the construction of levees, ditches and shelters. The cyclone that struck Bangladesh in 1970 killed 300,000-500,000 people; the most recent severe one, in 2007, killed 4,234. The bad news is that storms and floods still account for almost three-quarters of weather-related disasters, and they are becoming more common. According to the Munich Re, a reinsurer, their number around the world has increased from about 200 in 1980 to over 600 last year. Harvey was the third “500-year” storm to strike Houston since 1979. At the same time, floods and storms are also becoming more costly. By one estimate, three times as many people were living in houses threatened by hurricanes in 2010 as in 1970, and the number is expected to grow as still more people move to coastal cities. The UN reckons that, in the 20 years to 2015, storms and floods caused $1.7trn of destruction; the World Health Organisation estimates that, in real terms, the global cost of hurricane damage is rising by 6% a year. Flood losses in Europe are predicted to increase fivefold by 2050. One cause is global warming. The frequency and severity of hurricanes vary naturally—America has seen unusually few in the past decade. Yet the underlying global trend is what you would expect from climate change. Warmer seas evaporate faster and warmer air can hold more water vapour, which releases energy when it condenses inside a weather system, feeding the violence of storms and the intensity of deluges. Rising sea levels, predicted to be especially marked in the Gulf of Mexico, exacerbate storm surges, adding to the flooding. Harvey was unusually devastating because it suddenly gained strength before it made landfall on Friday; it then stayed put, dumping its rain on Houston before returning to the Gulf. Again, that is consistent with models of a warmer world. Poor planning bears even more blame. Houston, which has almost no restrictions on land-use, is an extreme example of what can go wrong. Although a light touch has enabled developers to cater to the city’s rapid growth—1.8m extra inhabitants since 2000—it has also led to concrete being laid over vast areas of coastal prairie that used to absorb the rain. According to the Texas Tribune and ProPublica, a charity that finances investigative journalism, since 2010 Harris County has allowed more than 8,600 buildings to be put up inside 100-year floodplains, where floods have a 1% chance of occurring in any year. Developers are supposed to build ponds to hold run-off water that would have soaked into undeveloped land, but the rules are poorly enforced. Because the maps are not kept up to date, properties supposedly outside the 100-year floodplain are being flooded repeatedly. Government failure adds to the harm. Developing countries are underinsured against natural disasters. Swiss Re, a reinsurer, says that of the $50bn or so of losses to floods, cyclones and other disasters in Asia in 2014, only 8% were covered. The Bank of International Settlements calculates that the worst natural catastrophes typically permanently lower the afflicted country’s GDP by almost 2%. America has the opposite problem—the federal government subsidises the insurance premiums of vulnerable houses. The National Flood Insurance Programme (NFIP) has been forced to borrow because it fails to charge enough to cover its risk of losses. Underpricing encourages the building of new houses and discourages existing owners from renovating or moving out. According to the Federal Emergency Management Agency, houses that repeatedly flood account for 1% of NFIP’s properties but 25-30% of its claims. Five states, Texas among them, have more than 10,000 such households and, nationwide, their number has been going up by around 5,000 each year. Insurance is meant to provide a signal about risk; in this case, it stifles it. Mend the roof while the sun shines What to do? Flooding strengthens the case for minimising climate change, which threatens to make wet places wetter and storms stormier. Even those who doubt the science would do well to see action as an insurance policy that pays out if the case is proven. However, that will not happen fast, even if all countries, including America, sign up to international agreements. More immediately, therefore, politicians can learn from Houston. Cities need to protect flood defences and catchment areas, such as the wetlands around Kolkata and the lakes in and around Pokhara in Nepal, whose value is becoming clear. Flood maps need to be up to date. Civil engineers, often starved of funds and strangled by bureaucracy, should be building and reinforcing levees and reservoirs now, before it is too late. The NFIP should start to charge market premiums and developing countries should sell catastrophe bonds. All this is a test of government, of foresight and the ability to withstand the lobbying of homeowners and developers. But politicians and officials who fail the test need to realise that, sooner or later, they will wake up to a Hurricane Harvey of their own.

#### The impact’s global war

Eric **Holthaus 15**, editor at rollingstone magazine citing James Hansen, former NASA climatologist, "The Point of No Return: Climate Change Nightmares Are Here," Rolling Stone, accessed 10-23-2016, http://www.rollingstone.com/politics/news/the-point-of-no-return-climate-change-nightmares-are-already-here-20150805

On July 20th, James Hansen, the former NASA climatologist who brought climate change to the public's attention in the summer of 1988, issued a bombshell: He and a team of climate scientists had identified a newly important feedback mechanism off the coast of Antarctica that suggests mean sea levels could rise 10 times faster than previously predicted: 10 feet by 2065. The authors included this chilling warning: If emissions aren't cut, "We conclude that multi-meter sea-level rise would become practically unavoidable. Social disruption and economic consequences of such large sea-level rise could be devastating. It is not difficult to imagine that conflicts arising from forced migrations and economic collapse might make the planet ungovernable, threatening the fabric of civilization."

#### Death outweighs---it’s the upmost moral evil and disavowal of the risk makes it more likely.

Burns 2017 (Elizabeth Finneron-Burns is a Teaching Fellow at the University of Warwick and an Affiliated Researcher at the Institute for Futures Studies in Stockholm, What’s wrong with human extinction?, <http://www.tandfonline.com/doi/pdf/10.1080/00455091.2016.1278150?needAccess=true>, Canadian Journal of Philosophy, 2017)

Many, though certainly not all, people might believe that it would be wrong to bring about the end of the human species, and the reasons given for this belief are various. I begin by considering four reasons that could be given against the moral permissibility of human extinction. I will argue that only those reasons that impact the people who exist at the time that the extinction or the knowledge of the upcoming extinction occurs, can explain its wrongness. I use this conclusion to then consider in which cases human extinction would be morally permissible or impermissible, arguing that there is only a small class of cases in which it would not be wrong to cause the extinction of the human race or allow it to happen. 2.1. It would prevent the existence of very many happy people One reason of human extinction might be considered to be wrong lies in the value of human life itself. The thought here might be that it is a good thing for people to exist and enjoy happy lives and extinction would deprive more people of enjoying this good. The ‘good’ in this case could be understood in at least two ways. According to the first, one might believe that you benefit a person by bringing them into existence, or at least, that it is good for that person that they come to exist. The second view might hold that if humans were to go extinct, the utility foregone by the billions (or more) of people who could have lived but will now never get that opportunity, renders allowing human extinction to take place an incidence of wrongdoing. An example of this view can be found in two quotes from an Effective Altruism blog post by Peter Singer, Nick Beckstead and Matt Wage: One very bad thing about human extinction would be that billions of people would likely die painful deaths. But in our view, this is by far not the worst thing about human extinction. The worst thing about human extinction is that there would be no future generations. Since there could be so many generations in our future, the value of all those generations together greatly exceeds the value of the current generation. (Beckstead, Singer, and Wage 2013) The authors are making two claims. The first is that there is value in human life and also something valuable about creating future people which gives us a reason to do so; furthermore, it would be a very bad thing if we did not do so. The second is that, not only would it be a bad thing for there to be no future people, but it would actually be the worst thing about extinction. Since happy human lives have value, and the number of potential people who could ever exist is far greater than the number of people who exist at any one time, even if the extinction were brought about through the painful deaths of currently existing people, the former’s loss would be greater than the latter’s. Both claims are assuming that there is an intrinsic value in the existence of potential human life. The second claim makes the further assumption that the forgone value of the potential lives that could be lived is greater than the disvalue that would be accrued by people existing at the time of the extinction through suffering from painful and/or premature deaths. The best-known author of the post, Peter Singer is a prominent utilitarian, so it is not surprising that he would lament the potential lack of future human lives per se. However, it is not just utilitarians who share this view, even if implicitly. Indeed, other philosophers also seem to imply that they share the intuition that there is just something wrong with causing or failing to prevent the extinction of the human species such that we prevent more ‘people’ from having the ‘opportunity to exist’. Stephen Gardiner (2009) and Martin O’Neill (personal correspondence), both sympathetic to contract theory, for example, also find it intuitive that we should want more generations to have the opportunity to exist, assuming that they have worth-living lives, and I find it plausible to think that many other people (philosophers and non-philosophers alike) probably share this intuition. When we talk about future lives being ‘prevented’, we are saying that a possible person or a set of possible people who could potentially have existed will now never actually come to exist. To say that it is wrong to prevent people from existing could either mean that a possible person could reasonably reject a principle that permitted us not to create them, or that the foregone value of their lives provides a reason for rejecting any principle that permits extinction. To make the first claim we would have to argue that a possible person could reasonably reject any principle that prevented their existence on the grounds that it prevented them in particular from existing. However, this is implausible for two reasons. First, we can only wrong someone who did, does or will actually exist because wronging involves failing to take a person’s interests into account. When considering the permissibility of a principle allowing us not to create Person X, we cannot take X’s interest in being created into account because X will not exist if we follow the principle. By considering the standpoint of a person in our deliberations we consider the burdens they will have to bear as a result of the principle. In this case, there is no one who will bear any burdens since if the principle is followed (that is, if we do not create X), X will not exist to bear any burdens. So, only people who do/will actually exist can bear the brunt of a principle, and therefore occupy a standpoint that is owed justification. Second, existence is not an interest at all and a possible person is not disadvantaged by not being caused to exist. Rather than being an interest, it is a necessary requirement in order to have interests. Rivka Weinberg describes it as ‘neutral’ because causing a person to exist is to create a subject who can have interests; existence is not an interest itself.3 In order to be disadvantaged, there must be some detrimental effect on your interests. However, without existence, a person does not have any interests so they cannot be disadvantaged by being kept out of existence. But, as Weinberg points out, ‘never having interests itself could not be contrary to people’s interests since without interest bearers, there can be no ‘they’ for it to be bad for’ (Weinberg 2008, 13). So, a principle that results in some possible people never becoming actual does not impose any costs on those ‘people’ because nobody is disadvantaged by not coming into existence.4 It therefore seems that it cannot be wrong to fail to bring particular people into existence. This would mean that no one acts wrongly when they fail to create another person. Writ large, it would also not be wrong if everybody decided to exercise their prerogative not to create new people and potentially, by consequence, allow human extinction. One might respond here by saying that although it may be permissible for one person to fail to create a new person, it is not permissible if everyone chooses to do so because human lives have value and allowing human extinction would be to forgo a huge amount of value in the world. This takes us to the second way of understanding the potential wrongness of preventing people from existing — the foregone value of a life provides a reason for rejecting any principle that prevents it. One possible reply to this claim turns on the fact that many philosophers acknowledge that the only, or at least the best, way to think about the value of (individual or groups of) possible people’s lives is in impersonal terms (Parfit 1984; Reiman 2007; McMahan 2009). Jeff McMahan, for example, writes ‘at the time of one’s choice there is no one who exists or will exist independently of that choice for whose sake one could be acting in causing him or her to exist … it seems therefore that any reason to cause or not to cause an individual to exist … is best considered an impersonal rather than individual-affecting reason’ (McMahan 2009, 52). Another reply along similar lines would be to appeal to the value that is lost or at least foregone when we fail to bring into existence a next (or several next) generations of people with worth-living lives. Since ex hypothesi worth-living lives have positive value, it is better to create more such lives and worse to create fewer. Human extinction by definition is the creation of no future lives and would ‘deprive’ billions of ‘people’ of the opportunity to live worth-living lives. This might reduce the amount of value in the world at the time of the extinction (by killing already existing people), but it would also prevent a much vaster amount of value in the future (by failing to create more people). Both replies depend on the impersonal value of human life. However, recall that in contractualism impersonal values are not on their own grounds for reasonably rejecting principles. Scanlon himself says that although we have a strong reason not to destroy existing human lives, this reason ‘does not flow from the thought that it is a good thing for there to be more human life rather than less’ (104). In contractualism, something cannot be wrong unless there is an impact on a person. Thus, neither the impersonal value of creating a particular person nor the impersonal value of human life writ large could on its own provide a reason for rejecting a principle permitting human extinction. It seems therefore that the fact that extinction would deprive future people of the opportunity to live worth-living lives (either by failing to create either particular future people or future people in general) cannot provide us with a reason to consider human extinction to be wrong. Although the lost value of these ‘lives’ itself cannot be the reason explaining the wrongness of extinction, it is possible the knowledge of this loss might create a personal reason for some existing people. I will consider this possibility later on in section (d). But first I move to the second reason human extinction might be wrong per se. 2.2. It would mean the loss of the only known form of intelligent life and all civilization and intellectual progress would be lost A second reason we might think it would be wrong to cause human extinction is the loss that would occur of the only (known) form of rational life and the knowledge and civilization that that form of life has created. One thought here could be that just as some might consider it wrong to destroy an individual human heritage monument like the Sphinx, it would also be wrong if the advances made by humans over the past few millennia were lost or prevented from progressing. A related argument is made by those who feel that there is something special about humans’ capacity for rationality which is valuable in itself. Since humans are the only intelligent life that we know of, it would be a loss, in itself, to the world for that to end. I admit that I struggle to fully appreciate this thought. It seems to me that Henry Sidgwick was correct in thinking that these things are only important insofar as they are important to humans (Sidgwick 1874, I.IX.4).5 If there is no form of intelligent life in the future, who would there be to lament its loss since intelligent life is the only form of life capable of appreciating intelligence? Similarly, if there is no one with the rational capacity to appreciate historic monuments and civil progress, who would there be to be negatively affected or even notice the loss?6 However, even if there is nothing special about human rationality, just as some people try to prevent the extinction of nonhuman animal species, we might think that we ought also to prevent human extinction for the sake of biodiversity. The thought in this, as well as the earlier examples, must be that it would somehow be bad for the world if there were no more humans even though there would be no one for whom it is bad. This may be so but the only way to understand this reason is impersonally. Since we are concerned with wrongness rather than badness, we must ask whether something that impacts no one’s well-being, status or claims can be wrong. As we saw earlier, in the contractualist framework reasons must be personal rather than impersonal in order to provide grounds for reasonable rejection (Scanlon 1998, 218–223). Since the loss of civilization, intelligent life or biodiversity are per se impersonal reasons, there is no standpoint from which these reasons could be used to reasonably reject a principle that permitted extinction. Therefore, causing human extinction on the grounds of the loss of civilization, rational life or biodiversity would not be wrong. 2.3. Existing people would endure physical pain and/or painful and/or premature deaths Thinking about the ways in which human extinction might come about brings to the fore two more reasons it might be wrong. It could, for example, occur if all humans (or at least the critical number needed to be unable to replenish the population, leading to eventual extinction) underwent a sterilization procedure. Or perhaps it could come about due to anthropogenic climate change or a massive asteroid hitting the Earth and wiping out the species in the same way it did the dinosaurs millions of years ago. Each of these scenarios would involve significant physical and/or non-physical harms to existing people and their interests. Physically, people might suffer premature and possibly also painful deaths, for example. It is not hard to imagine examples in which the process of extinction could cause premature death. A nuclear winter that killed everyone or even just every woman under the age of 50 is a clear example of such a case. Obviously, some types of premature death themselves cannot be reasons to reject a principle. Every person dies eventually, sometimes earlier than the standard expected lifespan due to accidents or causes like spontaneously occurring incurable cancers. A cause such as disease is not a moral agent and therefore it cannot be wrong if it unavoidably kills a person prematurely. Scanlon says that the fact that a principle would reduce a person’s well-being gives that person a reason to reject the principle: ‘components of well-being figure prominently as grounds for reasonable rejection’ (Scanlon 1998, 214). However, it is not settled yet whether premature death is a setback to well-being. Some philosophers hold that death is a harm to the person who dies, whilst others argue that it is not.7 I will argue, however, that regardless of who is correct in that debate, being caused to die prematurely can be reason to reject a principle when it fails to show respect to the person as a rational agent. Scanlon says that recognizing others as rational beings with interests involves seeing reason to preserve life and prevent death: ‘appreciating the value of human life is primarily a matter of seeing human lives as something to be respected, where this involves seeing reasons not to destroy them, reasons to protect them, and reasons to want them to go well’ (Scanlon 1998, 104). The ‘respect for life’ in this case is a respect for the person living, not respect for human life in the abstract. This means that we can sometimes fail to protect human life without acting wrongfully if we still respect the person living. Scanlon gives the example of a person who faces a life of unending and extreme pain such that she wishes to end it by committing suicide. Scanlon does not think that the suicidal person shows a lack of respect for her own life by seeking to end it because the person whose life it is has no reason to want it to go on. This is important to note because it emphasizes the fact that the respect for human life is person-affecting. It is not wrong to murder because of the impersonal disvalue of death in general, but because taking someone’s life without their permission shows disrespect to that person. This supports its inclusion as a reason in the contractualist formula, regardless of what side ends up winning the ‘is death a harm?’ debate because even if death turns out not to harm the person who died, ending their life without their consent shows disrespect to that person. A person who could reject a principle permitting another to cause his or her premature death presumably does not wish to die at that time, or in that manner. Thus, if they are killed without their consent, their interests have not been taken into account, and they have a reason to reject the principle that allowed their premature death.8 This is as true in the case of death due to extinction as it is for death due to murder. However, physical pain may also be caused to existing people without killing them, but still resulting in human extinction. Imagine, for example, surgically removing everyone’s reproductive organs in order to prevent the creation of any future people. Another example could be a nuclear bomb that did not kill anyone, but did painfully render them infertile through illness or injury. These would be cases in which physical pain (through surgery or bombs) was inflicted on existing people and the extinction came about as a result of the painful incident rather than through death. Furthermore, one could imagine a situation in which a bomb (for example) killed enough people to cause extinction, but some people remained alive, but in terrible pain from injuries. It seems uncontroversial that the infliction of physical pain could be a reason to reject a principle. Although Scanlon says that an impact on well-being is not the only reason to reject principles, it plays a significant role, and indeed, most principles are likely to be rejected due to a negative impact on a person’s well-being, physical or otherwise. It may be queried here whether it is actually the involuntariness of the pain that is grounds for reasonable rejection rather than the physical pain itself because not all pain that a person suffers is involuntary. One can imagine acts that can cause physical pain that are not rejectable — base jumping or life-saving or improving surgery, for example. On the other hand, pushing someone off a cliff or cutting him with a scalpel against his will are clearly rejectable acts. The difference between the two cases is that in the former, the person having the pain inflicted has consented to that pain or risk of pain. My view is that they cannot be separated in these cases and it is involuntary physical pain that is the grounds for reasonable rejection. Thus, the fact that a principle would allow unwanted physical harm gives a person who would be subjected to that harm a reason to reject the principle. Of course the mere fact that a principle causes involuntary physical harm or premature death is not sufficient to declare that the principle is rejectable — there might be countervailing reasons. In the case of extinction, what countervailing reasons might be offered in favour of the involuntary physical pain/ death-inducing harm? One such reason that might be offered is that humans are a harm to the natural environment and that the world might be a better place if there were no humans in it. It could be that humans might rightfully be considered an all-things-considered hindrance to the world rather than a benefit to it given the fact that we have been largely responsible for the extinction of many species, pollution and, most recently, climate change which have all negatively affected the natural environment in ways we are only just beginning to understand. Thus, the fact that human extinction would improve the natural environment (or at least prevent it from degrading further), is a countervailing reason in favour of extinction to be weighed against the reasons held by humans who would experience physical pain or premature death. However, the good of the environment as described above is by definition not a personal reason. Just like the loss of rational life and civilization, therefore, it cannot be a reason on its own when determining what is wrong and countervail the strong personal reasons to avoid pain/death that is held by the people who would suffer from it.9 Every person existing at the time of the extinction would have a reason to reject that principle on the grounds of the physical pain they are being forced to endure against their will that could not be countervailed by impersonal considerations such as the negative impact humans may have on the earth. Therefore, a principle that permitted extinction to be accomplished in a way that caused involuntary physical pain or premature death could quite clearly be rejectable by existing people with no relevant countervailing reasons. This means that human extinction that came about in this way would be wrong. There are of course also additional reasons they could reject a similar principle which I now turn to address in the next section. 2.4. Existing people could endure non-physical harms I said earlier than the fact in itself that there would not be any future people is an impersonal reason and can therefore not be a reason to reject a principle permitting extinction. However, this impersonal reason could give rise to a personal reason that is admissible. So, the final important reason people might think that human extinction would be wrong is that there could be various deleterious psychological effects that would be endured by existing people having the knowledge that there would be no future generations. There are two main sources of this trauma, both arising from the knowledge that there will be no more people. The first relates to individual people and the undesired negative effect on well-being that would be experienced by those who would have wanted to have children. Whilst this is by no means universal, it is fair to say that a good proportion of people feel a strong pull towards reproduction and having their lineage continue in some way. Samuel Scheffler describes the pull towards reproduction as a ‘desire for a personalized relationship with the future’ (Scheffler 2012, 31). Reproducing is a widely held desire and the joys of parenthood are ones that many people wish to experience. For these people knowing that they would not have descendants (or that their descendants will endure painful and/or premature deaths) could create a sense of despair and pointlessness of life. Furthermore, the inability to reproduce and have your own children because of a principle/policy that prevents you (either through bans or physical interventions) would be a significant infringement of what we consider to be a basic right to control what happens to your body. For these reasons, knowing that you will have no descendants could cause significant psychological traumas or harms even if there were no associated physical harm. The second is a more general, higher level sense of hopelessness or despair that there will be no more humans and that your projects will end with you. Even those who did not feel a strong desire to procreate themselves might feel a sense of hopelessness that any projects or goals they have for the future would not be fulfilled. Many of the projects and goals we work towards during our lifetime are also at least partly future-oriented. Why bother continuing the search for a cure for cancer if either it will not be found within humans’ lifetime, and/or there will be no future people to benefit from it once it is found? Similar projects and goals that might lose their meaning when confronted with extinction include politics, artistic pursuits and even the type of philosophical work with which this paper is concerned. Even more extreme, through the words of the character Theo Faron, P.D. James says in his novel The Children of Men that ‘without the hope of posterity for our race if not for ourselves, without the assurance that we being dead yet live, all pleasures of the mind and senses sometimes seem to me no more than pathetic and crumbling defences shored up against our ruins’ (James 2006, 9). Even if James’ claim is a bit hyperbolic and all pleasures would not actually be lost, I agree with Scheffler in finding it not implausible that the knowledge that extinction was coming and that there would be no more people would have at least a general depressive effect on people’s motivation and confidence in the value of and joy in their activities (Scheffler 2012, 43). Both sources of psychological harm are personal reasons to reject a principle that permitted human extinction. Existing people could therefore reasonably reject the principle for either of these reasons. Psychological pain and the inability to pursue your personal projects, goals, and aims, are all acceptable reasons for rejecting principles in the contractualist framework. So too are infringements of rights and entitlements that we accept as important for people’s lives. These psychological reasons, then, are also valid reasons to reject principles that permitted or required human extinction.

#### Non consequential ethics are impossible

Greene 07 – Joshua, Associate Professor of Social science in the Department of Psychology at Harvard University (The Secret Joke of Kant’s Soul published in Moral Psychology: Historical and Contemporary Readings, accessed: <https://www.gwern.net/docs/philosophy/ethics/2007-greene.pdf>, pages 47-50)

**What turn-of-the-millennium science** **is telling us is that human moral judgment is not a pristine rational enterprise**, that our **moral judgments are driven by a hodgepodge of emotional dispositions, which themselves were shaped by a hodgepodge of evolutionary forces, both biological and cultural**. **Because of this, it is exceedingly unlikely that there is any rationally coherent normative moral theory that can accommodate our moral intuitions**. Moreover, **anyone who claims to have such a theory**, or even part of one, **almost certainly doesn't**. Instead, what that person probably has is a moral rationalization. It seems then, that we have somehow crossed the infamous "is"-"ought" divide. How did this happen? Didn't Hume (Hume, 1978) and Moore (Moore, 1966) warn us against trying to derive an "ought" from and "is?" How did we go from descriptive scientific theories concerning moral psychology to skepticism about a whole class of normative moral theories? The answer is that we did not, as Hume and Moore anticipated, attempt to derive an "ought" from and "is." That is, our method has been inductive rather than deductive. We have inferred on the basis of the available evidence that the phenomenon of rationalist deontological philosophy is best explained as a rationalization of evolved emotional intuition (Harman, 1977). Missing the Deontological Point I suspect that **rationalist deontologists will remain unmoved by the arguments presented here**. Instead, I suspect, **they** **will insist that I have simply misunderstood what** Kant and like-minded **deontologists are all about**. **Deontology, they will say, isn't about this intuition or that intuition**. It's not defined by its normative differences with consequentialism. **Rather, deontology is about taking humanity seriously**. Above all else, it's about respect for persons. It's about treating others as fellow rational creatures rather than as mere objects, about acting for reasons rational beings can share. And so on (Korsgaard, 1996a; Korsgaard, 1996b). **This is, no doubt, how many deontologists see deontology. But this insider's view**, as I've suggested, **may be misleading**. **The problem**, more specifically, **is that it defines deontology in terms of values that are not distinctively deontological**, though they may appear to be from the inside. **Consider the following analogy with religion. When one asks a religious person to explain the essence of his religion, one often gets an answer like this: "It's about love**, really. It's about looking out for other people, looking beyond oneself. It's about community, being part of something larger than oneself." **This sort of answer accurately captures the phenomenology of many people's religion, but it's nevertheless inadequate for distinguishing religion from other things**. This is because many, if not most, non-religious people aspire to love deeply, look out for other people, avoid self-absorption, have a sense of a community, and be connected to things larger than themselves. In other words, secular humanists and atheists can assent to most of what many religious people think religion is all about. From a secular humanist's point of view, in contrast, what's distinctive about religion is its commitment to the existence of supernatural entities as well as formal religious institutions and doctrines. And they're right. These things really do distinguish religious from non-religious practices, though they may appear to be secondary to many people operating from within a religious point of view. In the same way, I believe that most of **the standard deontological/Kantian self-characterizatons fail to distinguish deontology from other approaches to ethics**. (See also Kagan (Kagan, 1997, pp. 70-78.) on the difficulty of defining deontology.) It seems to me that **consequentialists**, as much as anyone else, **have respect for persons**, **are against treating people as mere objects,** **wish to act for reasons that rational creatures can share, etc**. **A consequentialist respects other persons, and refrains from treating them as mere objects, by counting every person's well-being in the decision-making process**. **Likewise, a consequentialist attempts to act according to reasons that rational creatures can share by acting according to principles that give equal weight to everyone's interests, i.e. that are impartial**. This is not to say that consequentialists and deontologists don't differ. They do. It's just that the real differences may not be what deontologists often take them to be. What, then, distinguishes deontology from other kinds of moral thought? A good strategy for answering this question is to start with concrete disagreements between deontologists and others (such as consequentialists) and then work backward in search of deeper principles. This is what I've attempted to do with the trolley and footbridge cases, and other instances in which deontologists and consequentialists disagree. **If you ask a deontologically-minded person why it's wrong to push someone in front of speeding trolley in order to save five others, you will get** characteristically deontological **answers**. Some **will be tautological**: **"Because it's murder!"** **Others will be more sophisticated: "The ends don't justify the means**." "You have to respect people's rights." **But**, as we know, **these answers don't really explain anything**, because **if you give the same people** (on different occasions) **the trolley case** or the loop case (See above), **they'll make the opposite judgment**, even though their initial explanation concerning the footbridge case applies equally well to one or both of these cases. **Talk about rights, respect for persons, and reasons we can share are natural attempts to explain, in "cognitive" terms, what we feel when we find ourselves having emotionally driven intuitions that are odds with the cold calculus of consequentialism**. Although these explanations are inevitably incomplete, **there seems to be "something deeply right" about them because they give voice to powerful moral emotions**. **But, as with many religious people's accounts of what's essential to religion, they don't really explain what's distinctive about the philosophy in question**.

## Case

### --TOP

1. No Arbitrary roles of the ballot- the judge should vote for the side that produces the best material consequences. Anything else moots 6 minutes of AC and lets the neg choose a self-serving starting point for discussion.

#### Revolution/Abdication of pharma turns the aff more than it helps conditions

#### 2] Their movement worsens conditions

Hester, 15—Associate Professor of Media and Communication, University of West London (Helen, “Synthetic Genders and the Limits of Micropolitics,” …ment Issue 06 [the name of the journal is “…ment,” ellipses and all…], dml)

Of course, the alignment or conformity of certain ideas and practices with neoliberalism is hardly an isolated phenomenon, and should not in itself be seen as sufficient to render an activity irredeemably problematic. Moreover, we must be careful to ensure that the saturation of the city by capital is not simply assumed, and that accounts do not neglect the incipient potentials for resistance that these kinds of urban spaces can afford35. However, there are issues with the framing of political agency in Testo Junkie. Preciado, for all hir avowed cosmopolitanism, talks primarily in terms of small-scale interventions and repurposings, arguing that self-experimentation is ‘a requirement for the possibility of any future micropolitical action’36. This ‘micropolitics’ often seems to manifest itself almost exclusively at the level of the atomised subject, with little imaginative space being given to the ways in which diverse embodied appropriations might interconnect, or in which the project might be expanded or scaled up. As Preciado hirself admits, ‘romantic autoexperimentation carries the risk of individualism and depoliticization’37, and hir project might all too easily coincide with those currents of neoliberalism that depress awareness of shaping structural influences such as class.

In this sense, one could argue that Preciado’s work – for all its embrace of biotech and transformative media – trenches on what has been pejoratively called the ‘folk political.’ It frequently refuses to think beyond the microcommunity, neglects to directly engage with the ‘rhizomatic connections among […] resistances and insubordinations’38, and deals primarily with small ‘interventions consisting of non-scaleable tactics’39. As such, it risks remaining satisfied with isolated, temporary, and defensive gestures of experimentation, rather than looking toward socially transformative projects. As Srnicek and Williams note, ‘to present an emancipatory process of constructive freedom which might contend on a global scale with capitalism in its myriad forms depends on shifting towards the structural, the generalised, and the non-localised’40, and this is something that Testo Junkie rarely achieves. While the main focus of the book is (quite self-consciously) micropolitical experimentation, there are moments at which Preciado hirself appears to express a desire for larger-scale social change, and it is at these points that the non-scalabilty of hir project demands critical consideration.

In those instances, Preciado tends to veer rather dramatically from the micropolitical towards the other extreme. S/he jumps from toying with the hormonal metabolism of hir own discrete body to species-wide ‘endocrinal reprogramming’41, making the leap from an individualized micropolitics of embodiment to a wider-reaching political vision no less radical than ‘the transformation of the species’42. Again, there is an obvious issue with scale here – from tinkering with individual bodies to re-engineering humanity, with little in between. The sphere of the mesopolitical – a space we might associate with the advance of pragmatic and actionable activist tactics – is entirely absent. Of course, Preciado never claims that hir pharmaceutical and theoretical protocols should be read as a practical handbook for Promethean politics, and as such it would be somewhat unfair to censure hir for failing to engage in feasible counter-hegemonic strategizing. However, it remains instructive to consider how hir rhetoric (with all its intoxicating glimmers of sociopolitical opportunity) might ultimately ‘cash out,’ as well as to reflect upon what we might actually do with Testo Junkie.

In Testo Junkie, the perceived dangers of coalescing into a recognisable movement – of thinking beyond the individual in order to make collective demands – constrain the text’s horizons of possibility. Preciado appears all too aware of the fact that the discourses of feminism can be (and have been) co-opted by the pharmacopornographic regime, just as the tools of said regime can be seen to lend themselves to co-option by hir technologically-minded transfeminism; after all, as s/he points out, this regime ‘exploited the revolutionary and emancipatory rhetoric of the feminist movement of the 1960s to pass off the chemical and contraceptive management of the female body as a step toward sexual liberation’43. It is perhaps for this reason that s/he decides hir proposed movement of gender self-experimentation will have ‘no single name that can be transformed into brand’44 – hence, no brand identity to be recuperated, appropriated or seized; but also little explicit sense of cooperative, collective, or counter-hegemonic purpose.

#### 3] alt alone denies reclamation

-prefer our reading – it’s from an interview with KM’s author and best reflects intent

Preciado 13, Beatriz Preciado, professor of Political History of the Body, Gender Theory, and History of Performance at Paris VIII, Pharmacopornography: An Interview with Beatriz Preciado, Interview conducted by Ricky Tucker, http://www.theparisreview.org/blog/2013/12/04/pharmacopornography-an-interview-with-beatriz-preciado/

Do you think tools like Testogel and estrogen create more of a democracy in the hands of the marginalized?

We don’t have to be afraid of questioning democracy, but I’m also very interested in disability, nonfunctional bodies, other forms of functionality and cognitive experiences. Democracy and the model of democracy is still too much about able bodies, masculine able bodies that have control over the body and the individual’s choices, and have dialogues and communications in a type of parliament. We have to imagine politics that go beyond the parliament, otherwise how are we going to imagine politics with nonhumans, or the planet? I am interested in the model of the body as subjectivity that is working within democracy, and then goes beyond that. Also, the global situation that we are in requires a revolution. There is no other option. We must manage to actually create some political alliance of minority bodies, to create a revolution together. Otherwise these necropolitical techniques will take the planet over. In this sense, I have a very utopian way of thinking, of rethinking new technologies of government and the body, creating new regimes of knowledge. The domain of politics has to be taken over by artists. Politics and philosophy both are our domains. The problem is that they have been expropriated and taken by other entities for the production of capital or just for the sake of power itself. That’s the definition of revolution, when the political domain becomes art. We desperately need it.

#### The K’s anarchic agenda reinforces the neoliberal project of dismantling social welfare and wealth redistribution in favor of a free-market-oriented approach to reducing poverty and social disparities.

Footnote in the article: “Social security” is used here in its French meaning, to refer to all social insurance. For example, France’s national health insurance is part of its “social security” system.

Zamora 14 – Daniel Zamora, postdoctoral fellow at the University of Illinois at Chicago, PhD in Sociology from Université Libre de Bruxelles (“Can We Criticize Foucault?” *Jacobin*, December 10th, interview with Ballast – a French journal – translated from French to English by Seth Ackerman, https://www.jacobinmag.com/2014/12/foucault-interview/#\_ftn1)

Daniel Zamora: It’s practically an unexplored issue within the immense corpus of the “Foucauldians.” To tell the truth, I didn’t think I’d be working on this when I was thinking up the plan of the book. My interest in social security wasn’t originally connected to Foucault directly, but my research on this issue led me to think about how over the past forty years we’ve gone from a politics aimed at combatting inequality, grounded in social security, to a politics aiming to combat poverty, increasingly organized around specific budget allocations and targeted populations.

But going from one objective to the other completely transforms the conception of social justice. Combatting inequalities (and seeking to reduce absolute disparities) is very different from combating poverty (and seeking to offer a minimum to the most disadvantaged). Carrying out this little revolution required years of work delegitimizing social security and the institutions of the working class.

It was while reading closely through the texts of the “late” Foucault (from the late seventies and early eighties) that it became clear to me that he himself fully took part in this operation. So, he not only challenged social security, he was also seduced by the alternative of the negative income tax proposed by Milton Friedman in that period. To his mind, the mechanisms of social assistance and social insurance, which he put on the same plane as the prison, the barracks, or the school, were indispensable institutions “for the exercise of power in modern societies.”

It’s also interesting to note that in François Ewald’s central work, he doesn’t hesitate to write that “the welfare state fulfills the dream of ‘biopower.’” No less! [Ewald was Foucault’s disciple and assistant, now a leading intellectual aligned with France’s insurance industry and the Medef, the main French business federation.]

Given the many defects of the classical social security system, Foucault was interested in replacing it with a negative income tax. The idea is relatively simple: the state pays a benefit to anyone who finds themselves below a certain level of income. The goal is to arrange things so that without needing much administration, no one will find themselves below the minimum level.

In France this debate begins to appear in 1974, through Lionel Stoléru’s book Vaincre la pauvreté dans les pays riches (Conquering Poverty In the Rich Countries). It’s also interesting to note that Foucault himself met with Stoléru several times when Stoléru was a technical advisor on the staff of [right-wing French president] Valéry Giscard D’Estaing. An important argument runs through his work and directly attracted Foucault’s attention: in the spirit of Friedman, it draws a distinction between a policy that seeks equality (socialism) and a policy that simply aims to eliminate poverty without challenging disparities (liberalism).

For Stoléru, I’m quoting, “doctrines. . . can lead us either to a policy aiming to eliminate poverty, or to a policy seeking to limit the gap between rich and poor.” That’s what he calls “the frontier between absolute poverty and relative poverty.” The first refers simply to an arbitrarily determined level (which the negative income tax addresses) and the other to overall disparities between individuals (which social security and the welfare state address).

In Stoléru’s eyes, “the market economy is capable of assimilating actions to combat absolute poverty” but “it is incapable of digesting overly strong remedies against relative poverty.” That’s why, he argues, “I believe the distinction between absolute poverty and relative poverty is in fact the distinction between capitalism and socialism.” So, what’s at stake in moving from one to the other is a political issue: acceptance of capitalism as the dominant economic form, or not.

From that point of view, Foucault’s barely masked enthusiasm for Stoléru’s proposal was part of a larger movement that went along with the decline of the egalitarian philosophy of social security in favor of a very free-market-oriented fight against “poverty.” In other words, and as surprising as it may seem, the fight against poverty, far from limiting the effects of neoliberal policies, has in reality militated for its political hegemony.

So it’s not surprising to see the world’s largest fortunes, like those of Bill Gates or George Soros, engaging in this fight against poverty even while supporting, without any apparent contradiction, the liberalization of public services, the destruction of all these mechanisms of wealth redistribution, and the “virtues” of neoliberalism.

Combatting poverty thus permits the inclusion of social questions on the political agenda without having to fight against inequality and the structural mechanisms that produce it. So this evolution has been part and parcel of neoliberalism, and the objective of my text is to show that Foucault had his share of responsibility in this development.

Ballast: The question of the state is omnipresent in your book. Whoever critiques its raison d’être is allegedly a liberal. But isn’t that forgetting the traditions of anarchism and Marxism, from Bakunin to Lenin? Aren’t you overlooking that dimension?

I don’t think so. I think the critique from the Marxist or anarchist tradition is very different from the one Foucault was formulating, and not only him but also a significant swath of the Marxism of the 1970s.

First, for the simple reason that all those old anarchist and Marxist writers knew nothing of social security or the form the state would take after 1945. The state Lenin was addressing was effectively the state of the dominant class, in which workers played no real role. The right to vote, for example, wasn’t really generalized — for men — until the interwar era. So it’s hard to know what they would have thought of these institutions and their so-called “bourgeois” character.

I’ve always been very irritated by this idea, which is relatively popular within the radical left, that social security is ultimately nothing more than a tool of social control by big capital. This idea demonstrates a complete misunderstanding of the history and origins of our systems of social protection. These systems were not established by the bourgeoisie to control the masses. On the contrary, it was totally hostile to them!

These institutions were the result of the strong position held by the workers’ movement after the Liberation. They were invented by the workers’ movement itself. From the nineteenth century onward, workers and unions had established mutual societies, for example, to pay benefits to those unable to work. It was the very logic of the market and the enormous risks it imposed on the lives of workers that pushed them to develop mechanisms for the partial socialization of income.

In the early phase of the industrial revolution, only property owners were full citizens, and as the sociologist Robert Castel emphasizes, it was only with social security that the “social rehabilitation of non-property-owners” really took place. It was social security that established, alongside private property, a social property, intended to usher the popular classes into citizenship. This is the idea Karl Polanyi advances in The Great Transformation, which sees in the principle of social protection the aim of withdrawing the individual out of the laws of the market and thus reconfiguring relations of power between capital and labor.

One can, of course, lament the statist form in which social security is managed, or say, for example, that it ought to be run by collectives — though I don’t really buy that — but criticizing the tool and its ideological basis as such, that’s very different. When Foucault goes so far as to say it’s “clear that there is hardly any sense in speaking of a ‘right to health,’” and asks, “should a society seek to satisfy individuals’ need for health? And can those individuals legitimately demand the satisfaction of those needs?” we are no longer really within the anarchist register.

For me, and contrary to Foucault, what we should do is deepen the social rights that we have already, we should “build on what already exists,” as Bernard Friot says. And social security is an excellent tool that we should both defend and deepen.

Along the same lines, when I read the philosopher Beatriz Preciado, who writes in Libération that “we’re not going to cry over the end of the welfare state, because the welfare state is also the psychiatric hospital, the disability office, the prison, the patriarchal-colonial-heteronormative school,” it makes me think that neoliberalism has done much more than transform our economy; it has profoundly reconfigured the social imagination of a certain “libertarian” left.