# 1AC

### Adv

#### The billionaire space race is shaped by societal conceptions of gender- we can’t understand space policy without understanding gender inequity

Willsky 21

(Kate, <https://www.inverse.com/science/billionaire-space-cowboys>, 12-5)

In the late 1970s, when Sally Ride was preparing to become the first American woman in space, that was the number NASA engineers estimated for something that was, apparently, more complex than rocket science: when sending a woman into outer space, how many tampons did she require? The number they settled on was 100 for a one-week flight. The incident has retroactively gone somewhat viral (including inspiring a TikTok I can’t stop watching and continues to blow minds many decades later. It has such staying power, in part, because it’s hilariously absurd. But it’s also a particularly striking example of the institutional sexism women have long experienced in the space industry — a long history of alienation, the repercussions of which are still being felt. The feelings women today have toward space travel are, of course, diverse and nuanced, but out of the people in my orbit, it’s my male friends who seemed to have the most interest in the latest space travel news. And it was male-helmed mega-companies that spurred this surge in space travel. In July, Richard Branson launched himself into suborbital flight on a Virgin Galactic spacecraft. A week later, Jeff Bezos followed suit on a Blue Origin rocket. Elon Musk’s SpaceX launched the first all-civilian space flight in mid-September. Then, Bezos brought sci-fi to life by sending Captain Kirk himself, William Shatner, on a suborbital flight in October. While women made their own history — as members of the first all-civilian space flight in September, and when Wang Yaping became the first Chinese woman astronaut to do a spacewalk on November 8 — men seemingly remain light years ahead in the gender space race. Space, inherently, should interest all of us. We are literally made of stardust. There is, very likely, intelligent life elsewhere in the universe. Yet, while space feels deeply compelling to some, for many others it is unrelatable, inaccessible, and irrelevant.

#### Billionaire space race papers over dramatic gender inequality – space policy has ripple effects throughout society

Carter 21

(Tom, <https://www.indiependent.co.uk/we-need-more-women-in-space-not-billionaires/>, 7-20)

As excitement goes, there are few things more thrilling than a space race. In fact the very idea of competing to conquer galaxies unknown is literally out of this world. Shuttle test flights, televised launches, never-before-seen technology — it’s a sci-fi movie unfolding before our eyes. And now, 52 years after man first set foot on the Moon, a new chapter is to be written into the history book of space travel. On Tuesday 20 July 2021, Amazon founder Jeff Bezos (along with his brother and two other crew members) will be launching into space aboard his company’s debut shuttle New Shepard, and in doing so staking his claim as one of space tourism’s major players. The maiden flight comes eight days after Sir Richard Branson and his brainchild Virgin Galactic had a voyage of their own, providing more competition to what has become known as the ‘billionaire space race’. Historically, the challenge of exploring beyond our atmosphere has been a state-run operation, with significant amounts of government (and taxpayer’s) money going to space organisations, and scientific motives at the forefront of priority. This new space race, however, is an entirely different affair. For the likes of Jeff Bezos, Sir Branson and Elon Musk (the third contender in the mix), the goal is purely commercial. Society has come a long way from the days of the USA and Soviet Union battling it out for space supremacy, with three billionaires (and titans of industry in their own right) now competing to convert outer-Earth travel into a tourist attraction. According to Branson, Virgin Galactic has already seen nearly 600 pre-order tickets for ‘trips to space’, with each ticket priced at $250,000 and celebrities such as Justin Bieber and Leonardo Di Caprio reportedly signed up to launch. However, while the idea of space tourism and some of the world’s richest people fighting to pioneer it is an undoubtedly exciting prospect, a fundamental problem has been overlooked in the whirl of anticipation — gender inequality. Of the 566 people that have gone to space, only 65 of them (around 11.5%) have been women, and this is a major issue not just for the current industry and modern society, but for future generations. A reason for this inequality is largely down to the fact women were unable to become astronauts during the initial prevalence of space flight, with NASA not having a female crew member aboard any spacecraft/mission until June 1983. Fast forward almost 40 years, and there has been nowhere near enough of a significant difference in the matter of gender disparity. Even in the case of Bezos’ Blue Origin launch, 82-year-old female American aviator Wally Funk being part of the crew is hard not to see as a tokenistic publicity stunt. While some progress has of course been made in tackling issues regarding diversity (the amount of female astronauts is on a gradual increase), the need to solve the problem is as important as ever. As has been the case since the inception of space exploration, astronauts and those involved with the operations have been role models in the society, on both a domestic and global level. Therefore this platform must be used to inspire the next generation of explorers, scientists and other jobs alike. The lack of female astronauts (and consequently role models) means less young girls are wanting to pursue a career in the STEM field, thus weakening our society as a whole. Space4Women, a program part of the United Nations Office of Outer Space Affairs, says that the reason for the gender gap in the sciences is because girls have “limited exposure to the creativity and contributions” of female workers in the industry, “making it difficult to picture themselves in STEM roles”. As mentioned, the ripple effect on the wider community could see devastating consequences, such as young people having less confidence in finding careers and one of the most valuable industries in the world being plagued by a lack of inclusivity. Additionally, microgravity and weightlessness environments means there are no physical barriers between the two genders, so there is no viable reason that further equality shouldn’t be achieved. With that said, let’s take the opportunity while we can and get more women into space. Let’s create a new generation of Sharmans, Jemisons and Tereshkovas, defying gender stereotypes in the industry. And crucially, let’s make the exploration of space about the size of one’s spirit, as opposed to their wallet.

#### Private space race is only possible because of gendered economics – the structure of patriarchy picks “mad male geniuses” to invest in

Marçal 21

(Katrine, Katrine works for the Swedish newspaper Dagens Nyheter. She has given keynotes at institutions such as Oxford University Business and Economics Programme, London School of Economics and The Royal School of Technology in Stockholm. In her role as a financial journalist she has interviewed many of the world's leading economic thinkers. Some of her interviews have been viewed more than a million times on YouTube. <https://www.katrinemarcal.com/blog/male-billionaires-go-to-space-women-are-left-on-the-ground>, 6-9)

The other day, over dinner, my friend told me a very familiar story. About how she needs to start thinking seriously about the prospect of her business failing next year. Not because she’s not selling a lot of products to a lot of customers. But because she has trouble securing funding. - If women can’t get capital in a capitalist society, we are kind of screwed, she sighed pretending to be cool about it. And I let her. Then we ate A LOT of cheese. When it comes to funding and women the facts are indeed BRUTAL: Less than 1 per cent of venture-capital funds in the UK go to start-ups founded by women. For every pound of venture-capital investment, all-female founder teams get less than 1 pence. The picture is starkest for Black female entrepreneurs, they receive 0.02% of the total amount invested. That’s the playing field. Women hardly even have a foot on it. (Maybe a very small toe.) Now, why does this matter? Isn’t this just an issue for a small group of relatively privileged female entrepreneurs? Like, why should I cry about you not getting funding for your organic turmeric latte startup? That’s a fair question. Let me put it like this: You should care because in the end these things end up determining who OWNS SPACE. Yes, THE INFINITE DARKNESS OF THE UNIVERSE. You have probably noticed that there’s a male billionaire space race going on. Amazon CEO Jeff Bezos has revealed he will launch to space on July 20 on the first human spaceflight for his company Blue Origin. This has then sparked reports that Richard Branson might try to beat Bezos to it and obviously Elon Musk has plans to move to Mars. The first space race was a competition between The US and the Soviet Union. We pitted capitalism and communism head to head, whoever reached the moon first would have proven their ideology superior. Space Race 2.0 on the other hand is a male missile measuring competition between a handful of billionaires. (please pause and REFLECT on what this says about our time) Elon Musk wants to colonise Mars. Jeff Bezos does NOT want to go to Mars (probably because he wants to stay as far away from Elon Musk as possible) instead he wants to move manufacturing into space and haul cargo to the moon. Richard Branson basically just thinks space is cool. Which is why if I had to vote I’m inclined to vote for Branson. We tend to think of these men as mad geniuses. Larger than life characters destined for greatness. But they all started with much more mundane things. Okay it wasn’t exactly organic turmeric latte but Bezos sold books, Branson sold records and Musk created a local app. Now they are colonising space. Investors often say women’s ideas are “too small”. And fine, go ahead and mock organic turmeric lattes and girlbosses as much as you like. But that nail salon or that new bike seat invention for children could have been the start of other businesses. The sale of them could have generated capital that could have been invested in other ventures. Now they die because 80 percent of female-owned businesses that need capital are thought to be underserved in the global economy. Who gets the money today determines what cars we will get to drive, what groundbreaking medical treatments we will receive, and what logic will guide the robots to whom we are yielding increasing power. And that’s capitalism, baby!

#### Space colonization relies on patriarchal values of domination. While Bezos and Musk fight over their rockets in space, feminized groups will be fighting for their lives on Earth.

Bianco, PhD, 18

(Marcie Bianco is a writer and the Editorial and Communications Manager of the Clayman Institute for Gender Research at Stanford University. <https://www.nbcnews.com/think/opinion/patriarchal-race-colonize-mars-just-another-example-male-entitlement-ncna849681>, 2-21)

What does a midlife crisis look like in the 21st century? Frittering away your life savings on a red sports car is so last century. Instead, today’s man who is grappling with the limitations of his mortality spends $90 million on a rocket to launch a $100,000 electric car, helmed by a robot by the name of “Starman,” into space. “We want a new space race,” SpaceX founder Elon Musk said in a press conference shortly after the launch of his company’s Falcon Heavy rocket — and his Tesla Roadster — into space earlier in February. Like a child, he gleefully continued, “Space races are exciting.” And Musk isn’t the only billionaire looking to enter the space race. Amazon’s Jeff Bezos has his private aerospace company, Blue Origin, while Virgin’s Richard Branson, a prominent adventurer, created Virgin Galactic back in 2004. These men, particularly Musk, are not only heavily invested in who can get their rocket into space first, but in colonizing Mars. The desire to colonize — to have unquestioned, unchallenged and automatic access to something, to any type of body, and to use it at will — is a patriarchal one. Indeed, there is no ethical consideration among these billionaires about whether this should be done; rather, the conversation is when it will be done. Because, in the eyes of these intrepid explorers, this is the only way to save humanity. It is the same instinctual and cultural force that teaches men that everything — and everyone — in their line of vision is theirs for the taking. You know, just like walking up to a woman and grabbing her by the pussy. It’s there, so just grab it because you can. “I want to be clear, I think we should be a multi-planet species, not a single planet species on another planet,” Musk said at the 2015 Vanity Fair New Establishment Summit. “What kind of future do you want to have? Do you want to have a future where we are forever confined to one planet…or…one where we are on many planets?” This Columbusing attitude — a strident business acumen laced with an imperialist ethos — comes with an air of benevolence: Musk doesn’t just want to colonize Mars to satisfy his ego. No, he wants to colonize Mars to help his fellow humans. “I really think there are two fundamental paths [for humans]: One path is we stay on Earth forever, and some eventual extinction event wipes us out,” he said. In this way, colonizing Mars is a “collective life insurance policy.” Although considering the last 500 years of colonization on this planet alone, one could wonder whose lives, according to Musk and other rich white men like himself, are worth being insured. But again, this impulse to enter the “space race” isn’t simply the embodiment of the American spirit of invention or forward-thinking entrepreneurship. Neither is it driven by the kind of nationalist Cold War fervor that inspired the creation of America’s space program in the 1950s. Rather, the impulse to colonize — to colonize lands, to colonize peoples, and, now that we may soon be technologically capable of doing so, colonizing space — has its origins in gendered power structures. Entitlement to power, control, domination and ownership. The presumed right to use and abuse something and then walk away to conquer and colonize something new. The Friday before SpaceX’s launch, legendary astronaut Buzz Aldrin reiterated to me over lunch that it is imperative that we talk about space exploration in terms of “migration,” rather than using words like “colonize” or “settle” when talking about going to Mars. Through a feminist lens, Aldrin’s deliberate word choice revealed an important reality of the space race: This 21st century form of imperialism is the direct result of men giving up on the planet they have all but destroyed. As if history hasn’t proven that men go from one land to the next, drunk on megalomania and the privilege of indifference. The raping and pillaging of the Earth, and the environmental chaos that doing so has unleashed, are integral to the process of colonization. And the connection of the treatment of Mother Earth to women is more than symbolic: Study after study has shown that climate change globally affects women more than men. “Women in developing countries are particularly vulnerable to climate change because they are highly dependent on local natural resources for their livelihood,” a 2013 United Nations report noted. “Women charged with securing water, food and fuel for cooking and heating face the greatest challenges. Women experience unequal access to resources and decision-making processes, with limited mobility in rural areas.” This means that while men compete with each other over whose rocket is the biggest, fastest, and best, and send playthings off to become flashy space junk, women around the world are fighting to stay alive against violent assaults on their personhood — and their planet. As reported by Marc Bain for Quartz, in seven separate studies “researchers found evidence that people perceive consumers who behave in eco-friendly ways as ‘more feminine,’ and that those consumers “‘perceive themselves as more feminine.’ Not only, according to researchers, do women generally have a greater environmental conscience when it comes to the planet we currently live on, but the same researchers have found a connection between men’s insecurity about their masculinity and their lack of environmental conscience. Apparently, caring for the planet is perceived to be a “feminine” quality and concern; the psychology of toxic masculinity spills over into the unethical disregard for the environment. This masculine insecurity is everywhere in American culture and, increasingly, American politics. Trump himself has spoken about making sure our nuclear bomb is “bigger and more powerful and can often be found “bragging about building a “beautiful,” “great, great wall.” Right now, there is a robot dummy propped up in the driver’s seat of a red Tesla convertible, flying through space, away from the manmade garbage fires devouring Earth. Houston, we have a problem. And it’s the patriarchy.

#### The desire to colonize space is not neutral. Colonization will necessitate gendered violence.

Robbins 15

(Martin Robbins, researcher and science journalist @ the Guardian; (05-06-2015) “How can our future Mars colonies be free of sexism and racism?”; [https://www.theguardian.com/science/the-lay-scientist/2015/may/06/how-can-our-future-mars-colonies-be-free-of-sexism-and-racism //](https://www.theguardian.com/science/the-lay-scientist/2015/may/06/how-can-our-future-mars-colonies-be-free-of-sexism-and-racism%20//) GirlsDebate)

\*TW: mentions of sexual violence + bracketed for offensive language

To paraphrase Douglas Adams: “Space is white. You just won’t believe how vastly, hugely, mind-bogglingly white it is.” It’s also very male and European. Women in space-colony fiction have generally been presented as sexy […], whose main purpose is to provide [for] the male astronauts […]. This being necessary in order to “ensure the survival of the species”. If you think that attitude doesn’t exist in the real world, it’s worth recalling [the comments](http://www.nbcnews.com/id/6955149/ns/technology_and_science-space/t/does-mars-need-women-russians-say-no/#.VUep51xjJho) of Prof Anatoly Grigoryev, a doctor and key figure in the Russian space programme. “Women are fragile and delicate creatures; that is why men should lead the way to distant planets and carry women there in their strong hands.” No wonder Lee [says](http://blogs.scientificamerican.com/urban-scientist/2015/03/26/when-discussing-humanitys-next-move-to-space-the-language-we-use-matters/), “I see only a very narrow invitation to this lifeboat.” The problem with Lee’s argument is that she’s fighting against possibly the most pernicious space myth in existence, a myth far worse than moon landing conspiracy theories. It’s a myth almost universally believed, that sits at the core of liberal technocratic thought, and has been embedded in practically every other work of speculative fiction for the last half century. You can sum it up like this: “When we go into space, we will all magically become nice.” We see this in coverage of the space programme, with its endless propaganda about “cooperation” between nations, and promotion of the idea that clever people in tough situations produce the best humanity has to offer. It’s rampant in fiction, where shows like Star Trek assume that three centuries of civil rights progress will inevitably turn us all into morally-centered middle-class rationalists. And it’s there, unspoken and unchallenged, at the heart of our current aspirations for space. There’s no room for discussion about social justice or equality when it comes to planning our future Mars colonies because we all just assume that decent educated scientists and engineers – the “right kind” of people – won’t have any problem with that sort of thing. Except every available single scrap of historical experience tells us that this is an incredibly naive and dangerous assumption to make. Colonies and outposts are portrayed as lights in the darkness; hot spots of progress, ingenuity and adventure. That may be true to some extent, but they’ve also been places of crime, vigilante justice, tyrants, rape, pillaging, abuse and war. It’s true that when things get hard we can see the best in people, but oftentimes we see the worst too. Meet three volunteers on the shortlist to be among four people on the Mars One programme, the first manned space flight to Mars Guardian In fact we’ve already seen this in a Mars mission simulation that took place in 1999 and ended in chaos, as [summarised by Helen Lewis](http://www.newstatesman.com/2014/02/death-mars%5d) in New Statesman: “…the Russian captain forcibly kissed the only female crew member, a 32-year-old Canadian health specialist called Judith Lapierre. “We should try kissing, I haven’t been smoking for six months,” he reportedly told her. “Then we can kiss after the mission and compare it. Let’s do the experiment now.” Two of her Russian crew mates then had a fight so violent that it left blood splattered on the walls, prompting another member of the team, a Japanese man, to quit. Lapierre stayed only after the astronauts were allowed to put locks on their bedroom doors.” The first woman to be raped in space has probably already been born. And if that last sentence makes you howl with protest or insist that such a thing just wouldn’t happen, then I’d stop a second and ask yourself why.

### Solvency

#### Thus I affirm the resolution: the appropriation of outer space by private entitles is unjust. We should reject the norms of space law and adopt the position of a critical feminist international relations scholar to uproot the patriarchal norms that private companies are trying to carry over to space.

#### The OST is structurally flawed due to the gender imbalance in space law.

Steer, 21

(Cassandra Steer (Feb, 26, 2021) “The Province of all Humankind” – A Feminist Analysis of Space Law. In: de Zwart M., Henderson S. (eds) Commercial and Military Uses of Outer Space. Issues in Space. Springer, Singapore. Dr. Cassandra Steer is a Mission Specialist with the ANU Institute of Space (InSpace), and a Senior Lecturer at the ANU College of Law specialising in space law, space security and international law. Dr. Steer has more than a decade of international experience teaching at universities in Australia, Europe, North America and South America, and brings a comparative perspective to all her research and teaching. [https://doi.org/10.1007/978-981-15-8924-9\_12 //](https://doi.org/10.1007/978-981-15-8924-9_12%20//) GirlsDebate)

It is clear, therefore, that the pretenses of international law as being neutral, objective, and universal are false, and that space law is as much an expression of power dynamics as is any other area of law. There is no equality between countries, despite the notion of formal equality as a value underpinning international law, and the status quo is determined by interests of a small handful of countries which have managed to institutionalize the power they held at the close of the Second World War. There is no equal access to space, nor is there distribution of the benefits derived from space, despite this being a promise of the OST. Space is far from being the “province of all mankind”. Indeed, space is even further from being the province of all humankind. Access to, benefits from, and governance over space is the province of an elite few, and within those few there is a gender imbalance which mirrors the geographical imbalance. At the time that the OST was drafted, not only were there no women at the negotiating table, but under the U.S. programme, women were excluded from being able to become astronauts. To become an astronaut, one had to be a military test pilot, a profession from which women were banned (Koren, 2017). There was a strong lobbying campaign, led by highly qualified women pilots, to convince NASA and the White House to allow women to become astronauts (Klein, 2017), and a clandestine “Women in Space” program was bankrolled by the pioneering pilot Jackie Cochran (Weitekamp, 2004). In this program, a number of women were selected by Dr. Randolph Lovelace, a contractor to NASA who led the physical tests and training for astronauts, to undergo the exact same training as the men, because he suspected women would be better candidates for space travel, due to our generally lighter weights and lower need for oxygen. A higher percentage of women passed the tests than men, and many of the women performed better than the male trainee astronauts. However, despite the test results, the deeply engrained sexism of the time prevailed. Apparently Lovelace’s motives may have been focused on the need for women as secretaries and assistants in future long-term space habitations (Weitekamp, 2004). When “Women in Space” candidate Jerrie Cobb testified before a congressional subcommittee in 1962, she stated “we seek, only, a place in our nation’s space future without discrimination” (Klein, 2017), but astronaut John Glenn testified that creating a programme to train women astronauts would compromise the race to land on the Moon before the Soviets. Moreover, he argued “the men go off and fight the wars and fly the airplanes and come back and help design and build and test them. The fact that women are not in this field is a fact of our social order.” (Weitekamp, 2004; Klein, 2017). Ultimately the lobbying campaign failed, and the Women in Space program was shut down because NASA did not sponsor it. One year later, the first woman in space was a Soviet woman, Valentina Tereshkova, in March 1963. The Soviets had beaten the Americans in yet another milestone in the space race, ostensibly breaking the glass ceiling for women’s participation. However, she was not to be followed by another woman until 1982, when Svetlana Savitskaya flew on a mission to the Soviet Salyut Space Station. Upon her arrival, Savitskaya was handed an apron by her crewmates, who “joked” that she should get to work in the kitchen. Despite this rude welcome, she went on to perform a series of highly skilled engineering tasks for which she had been trained, including testing a tool for welding in space, and becoming the first woman to undertake a spacewalk (Lewis, 2018). Women are still vastly underrepresented in all STEM careers, and in the entire space sector generally, as well as at all international negotiating tables and in national law-making. It matters, then, a great deal, who has the power to determine the laws and norms applicable to human activity in space. If we are at all serious about the promises of the OST, then this power balance must shift. We must take into account the interests of many more players than just the most geopolitcally influential as we seek new space law and governance solutions to today’s and tomorrow’s space activities. It starts with making explicit that space is not at all “the province of all mankind”, let alone the province of all humanity.

#### Absent private companies, dystopian, militaristic visions would be replaced with educational, valiant ones. Space has the possibility to transform our society but must be vested from private hands.

Roberts 21

(Spencer Roberts is a science writer, musician, ecologist, and rooftop solar engineer from Colorado. <https://www.jacobinmag.com/2021/09/socialist-space-exploration-publicly-funded-nasa-education-futurism> , 9-8)

In 1961, Soviet cosmonaut Yuri Gagarin flew higher and orbited longer than Richard Branson and Jeff Bezos combined aboard Vostok 1, the world’s first piloted space flight. Upon his return to Earth, Gagarin became a global celebrity, traveling the world and recounting what it felt like to drift weightless and see the planet from above. For a brief moment, he transcended the boundaries of the Cold War, greeting cheering crowds in both Soviet and US-allied countries, capturing our collective fascination with the cosmos. The Vostok mission was meticulously planned and engineered, its cosmonauts trained for years. Its successor, Soyuz 1, was a different story. The 7K-OK spacecraft had been hastily constructed, its three unmanned flight tests all ending in failure. According to one account, Gagarin helped detail over two hundred structural concerns in a report urging the flight be called off. It’s rumored that he even tried to take his fellow cosmonaut Vladimir Komarov’s place piloting the doomed mission. In the end Komarov’s parachute failed to deploy and he burst into flames on reentry, plummeting at forty meters per second into the Earth. In aeronautics, the margin between triumph and tragedy is narrow. While hubris may have been Soyuz 1’s fatal flaw, the pursuit of profit has similarly incentivized corner cutting in the US space program. NASA, once the crown jewel of the public sector, has been slowly sold off to private contractors in the neoliberal era. Since 2020, NASA astronauts have ridden SpaceX Falcon 9 rockets into orbit, a model that has raised safety concerns among engineers and logged more failures since its debut in 2006 than the space shuttle did in thirty years. Recently, another NASA contractor, Virgin Galactic, was grounded for investigation by the Federal Aviation Administration after its pilots failed to notify the agency that its celebrated Unity flight was veering into commercial airspace. Mission objectives have changed as well. While perhaps always mythic, the once allegedly valiant aspirations of the space program have given way to openly touristic and militaristic goals. Corporations pursuing commercial space flight have received billions in public financing, and the US Space Force alone already has nearly three quarters the total budget of NASA. The true ethos of space exploration, however, is one of public works and education. Peering into the void of space inspires the deepest questions facing humanity: Who are we? Where do we come from? Where are we going? While a space program catering to the science fiction fantasies of billionaires is decidedly dystopian, conceptualizing space exploration as an educational mission to remotely probe the depths of the galaxy can help animate a more equitable vision of futurism.

Space Exploration for the People How can space exploration serve society? Our first priority must be to decarbonize space flight. Without achieving this, the emissions that space flight generates are hardly justifiable given the state of our planet. Like the space blanket and cochlear implant, the applications of zero-carbon jet fuel would go far beyond the space program that developed it. Commercial aviation contributes an estimated 3.5 percent of effective radiative forcing — a figure that space tourism could skyrocket. Due to the weight of batteries and other logistical challenges, hydrogen fuel cells are considered one of the few viable pathways to decarbonizing long-distance flight. While some private space corporations have begun incorporating hydrogen, the fuel production is likely emissions-intensive and the technology remains proprietary. A publicly directed moonshot research program, coupled with tight restrictions on fossil-fueled rocket launches, could greatly accelerate the implementation of green hydrogen fuel cells in aviation and other difficult-to-decarbonize sectors. In addition to our atmosphere, we must respect the sanctity of orbital space, which we have littered with trash. The Defense Department’s Space Surveillance Network currently estimates there are more than twenty-seven thousand pieces of debris orbiting Earth. Yet even as their own ships run a gauntlet of garbage, billionaires are trashing space more than ever. While perhaps none match the vanity of the Tesla Roadster, competing commercial satellite networks like Musk’s Starlink and Bezos’ Project Kuiper actually pose a much greater collision threat and are also egregious sources of light pollution and electromagnetic interference. These redundant and dangerous monuments to the egos of oligarchs ought to be taken down from our skies along with other forms of space trash. Rather than granting billions in subsidies to enable this pollution, governments should instead collect the taxes that corporations like SpaceX, Blue Origin, and Virgin Galactic have evaded and use them to create public sector careers cleaning up their mess. To the extent that it is useful, publicly sponsored infrastructure in private hands should be nationalized and made accessible to all. The trade-offs between telecommunications infrastructure and preservation of dark skies highlight another core failure of NASA’s past: the lack of a planetary internationalism. In 2013, the Bolivian Space Agency and the China National Space Administration collaboratively launched the Túpac Katari 1 satellite (TKSat 1), demonstrating how easy it could be to close the space infrastructure gap between the Global North and South. The same year that the United States proposed to desecrate a Hawaiian sacred site for a telescope, Bolivia used space technology to bring internet and cell service for the first time to millions of Andean and Amazonian citizens. Since then, TKSat 1 has boosted education and development initiatives and even helped defend Bolivian democracy by relaying the transmissions of campesinos resisting the US-backed coup government in real time. Satellites can serve many other public interests, such as facilitating research that helps scientists monitor problems like climate change, deforestation, and forced labor. While today’s satellite infrastructure is used to commercialize communication and fuel mass surveillance, an international consensus to treat telecommunications and information access as public rights could instead provide free global broadband coverage with minimal infrastructure, balancing scientific advancement with our collective view of the stars. Finally, a socialist vision for space exploration could enable us to reach our full potential to venture into the unknown. History enshrines the intrepid explorers, but the true heroes of the space age are the workers at ground control. Yuri Gagarin made it home safely because of his command crews stationed from Baikonur to Khabarovsk. Apollo 13 famously called on Houston when they had a problem. Today, many of our brightest astrophysicists and aerospace engineers are swept up by military departments and weapons manufacturers. We should use their talents for science and education instead. That doesn’t mean, however, colonizing Mars. The Red Planet is a cosmic wonder, but a dreadful place for Earthlings. It has very little carbon dioxide, and no amount of terraforming will reinstate the magnetic dynamo that once deflected the solar winds now stripping away its depleted atmosphere. In fact, everything we have learned from researching Mars has reinforced the importance of protecting the fragile atmosphere of our home planet. While piloted space flights may be useful in some situations, we should place far more emphasis on collaboratively building robots like the ones that have taught us about our planetary neighbors. In today’s space race, these initiatives compete for funding. By prioritizing cooperation over colonization, however, we could pursue them all. We could attempt to retrieve raw materials for green energy infrastructure from decommissioned satellites and uninhabited asteroids instead of mines in the Global South. We could search the solar system for extraterrestrial life by flying rotorcrafts into the hydrocarbon-rich atmosphere of Titan and boring submarines into the icy subsurface ocean of Europa. We could strive for the first landing on Pluto, Eris, or even beyond — not to plant a flag, but seed a concept of what we can collectively achieve. Visions of Hopeful Futures In his final years of reflection on our Pale Blue Dot, astronomer Carl Sagan pondered, “Where are the cartographers of human purpose? Where are the visions of hopeful futures of technology as a tool for human betterment and not a gun on hair trigger pointed at our heads?” Sagan’s legacy — including the world’s first and only interstellar mission — offers a glimpse of this vision. We can choose to collaboratively probe into the depths of the cosmos, conveying collections of human knowledge, or to taxi billionaires to spend four minutes at the edge of space, indulging their fantasy of escaping the planet they’re poisoning with the very fuel propelling them. In either case, the financial, intellectual, and human costs will be borne by the public. Fortunately, if there’s one thing that space exploration has taught us, it’s that fate isn’t written in the stars. That happens down here on Earth.

#### Appropriation legitimizes the abusive treatment of nature by the patriarch which is juxtaposed onto feminized groups. Any attempt to “appropriate” space inevitably forces women to always be devalued, otherized, and erased

Plumwood 07

(Val Plumwood, philosopher and ecofeminist, BA University of Sydney, MA University of New England, PhD Australian National University; (11-08-2007) “Has democracy failed ecology? An Ecofeminist perspective”, Environmental Politics; <https://doi.org/10.1080/09644019508414231)//hwckd>

At the source of many of these exemptions and exclusions is a masculinist model of the citizen as independent (the 'man of property'), where the concept of independence incorporates various disavowed dependencies. Some of these denials are normalised in liberalism through the legitimation of forms of appropriation which deny the social Other by denying the dependence of property formation on collective forms of social life and infrastructure. These forms of appropriation also help constitute as less than full citizens specific groups of excluded Others whose contributory labour is denied and represented as background, as inessential and beneath recognition. For all these primary Others, there is a common pattern or 'logic' of oppression or exploitation which arises from their assimilation to the status of 'nature'.19 The primary Others who are exploited (that is, assumed but denied) in this master conception of property include, first of all, women, whose labour as 'nature' in the household is assumed but denied by the man of property as household head in his appropriation to himself of the wider social and economic rewards it makes possible [Waring, 1988; Okin, 1989]. Second, they include labouring, non-propertied citizens, and all those social Others whose contributions to production, and to the society and the infrastructure which makes this production and property possible, are assumed but denied in liberal forms of appropriation. Thirdly, these Others include the colonised, whose prior lands and prior and continuing labour are assumed but denied and appropriated in the formation and accumulation of the colonisers' property, often by assigning them the status of 'nature' [Shiva, 1994]. Fourthly, they include animals, nature and the earth itself, whose own prior agency and intentional organisation is denied and overridden in the foundation of property.20 The man of property assumes the contribution of nature in the form of a continuing support base for production, accumulation and renewal, but also denies it, not infrequently in even stronger terms than he denies these human Others, failing to recognise and allow, in his economic and cultural systems, for nature's reproduction and continuation.21 This denial establishes the basic ecological rationality characteristic of liberalism.22

#### Critical feminist policy analysis captures the benefits of policy making but avoids the epistemological pitfalls of exclusion – it’s goldilocks

Shaw 04

(associate professor of Urban Education, Temple University**.** Kathleen, Journal of Higher Education, 1/1, “Using feminist critical policy analysis in the realm of higher education; the case of welfare reform as gendered educational policy.”, lexis)

The Benefits of Critical Feminist Policy Analysis By nearly all accounts in the mainstream media, welfare reform is portrayed as a resounding success. Bill Clinton, who signed the legislation in 1996, has pointed to it as one of his greatest achievements, and current President George W. Bush is touting it as an American success story, eagerly embracing the "success" of the work-first ideology by attempting to increase the work requirements to forty hours a week. If such a bill is passed, forty states are likely to further cut access to postsecondary education and training to avoid financial penalties (Center for Law and Social Policy, 2002). Virtually no one is questioning this analysis of welfare reform, in large part because the only outcome that has received any real attention is the reduction in welfare rolls, which have dropped by as much as 60% in some states (Applied Research Center, 2001). When measured by this seemingly objective outcome, welfare reform can indeed be viewed as a success. Yet the picture is quite different when welfare reform is analyzed through the lens of feminist critical policy analysis. Economic self-sufficiency, rather than moving off the welfare rolls, is a more appropriate policy goal for poor women, and obtaining adequate educationand training is the surest route to long-term economic stability. Ifwelfare reform is measured against this standard, its success is surely called into question, since access to postsecondary education hasdropped dramatically, 1/4 of former welfare recipients live in poverty, and the poorest women became poorer following welfare reform (Sherman, 1998). Women who receive welfare are not, by and large, able topursue education and training, and those who do have a tenuous hold on the educational process. Moreover, the type of education availableto welfare recipients is short-term and nontransferable, a fact thatrenders it far less useful than more traditional forms of education. Using feminist critical policy analysis, I have engaged in an exercise to illustrate how policy formation and implementation can be understood as a series of disconnects between policymakers and mainstream analysts and the individuals whose lives are most affected by the policy. Utilizing welfare reform as a case study of broad social policy and its effects on access to higher education, this analytical lenshas clearly revealed the ways in which various elements of policy can create particularly onerous barriers to education and training for poor women. Elements of formal policy clearly create enormous barriers to education. Limits on the amount and type of education available,an emphasis on rapid employment, lifetime limits on the receipt of welfare, and lack of access to child care create barriers to educationso high that most women receiving welfare cannot overcome them. Yet equally important is the policy implementation process. The informal elements of policy in action, such as the ways in which case-workers, states and educational institutions respond to the policy with specific practices, can also erect enormous barriers to education. When combined, then, formal policy and informal elements of welfare policy implementation create a web of obstructions to education. In large part, these barriers are exacerbated because policymakers and implementers are blind to the unique context of the lives of poor, single mothers. And many of these barriers are simply not visible when welfare reform is examined using more conventional modes of policy analysis. This article utilizes welfare reform as a case study in employing feminist critical policy analysis to policy that affects access to postsecondary education. As I hope my analysis has illustrated, this methodological and analytical tool provides a potential corrective to more traditional analyses of policy in general, and higher education policy in particular. This framework is self-consciously anchored by questions of whether particular policies will empower and democratize women

(Kahne, 1994). As such, it is an analytical perspective that allows policy researchers to place gender at the center of analyses, and it allows as well the development of democratizing solutions to current policy conundrums (Marshall, 1999). As the field of higher education continues to exhibit an increasedinterest in issues of power, representation, and social justice, feminist critical policy analysis can be utilized as an important tool with which to analyze emerging educational policies. This approach to policy analysis encourages us to understand the broader context in which policy is developed and enacted and to understand as well the particularities of the lives of those most affected by policy. Thus, forexample, an examination of financial aid policy utilizing feminist critical policy analysis might focus on whether such policies disadvantage women, whose attendance patterns or ability to pay tuition may differ from those of men because of familial or childcare responsibilities. Similarly, this lens can be used to determine whether articulation agreements between two- and four-year institutions may be biased against particular areas of study in which women are frequently overrepresented; and the movement towards workforce development, contract training, and other nondegree-granting programs could be examined through the experiences of women to determine whether such programs present particular difficulties or benefits for women. Too, broader social policy can also be examined through a criticallens to develop a better understanding of how such policies may affect access to higher education generally, and for women in particular.Recent or potential changes in family leave and marital law, health care and insurance policies, and economic development policies may well be seen as unrelated to access to higher education, and as gender-neutral public policy. But, as this analysis of welfare reform has hopefully illustrated, such seemingly straightforward policies become much more complicated when examined from the perspective of women's lives. Moreover, because such policies affect important aspects of women's lives, they can affect the ability and willingness of women to pursue postsecondary education in a myriad of ways. Ultimately, policy analysis that poses as "neutral" in any sense of that word is not only inadequate in developing a full understandingof educational policy. In addition, it can also obscure and dismiss as unimportant the differential effects of such policies on our most vulnerable populations. For these reasons, it is important that the field of policy analysis employ methods and theories that move beyond seemingly "neutral" analyses to directly address issues of power, status, and context.

### Framing

#### The logic of privatization is intrinsically flawed. Nature is reduced to a playground subject to continuous conquest by the patriarch which naturalizes masculine violence and ownership over feminized groups. Voting aff rejects these assumptions and promotes a new understanding of appropriation.

Mansfield 07

(Becky Mansfield, prof @ Ohio State University, specializes in political ecology; (07-13-2007) “Privatization: Property and the Remaking of Nature–Society Relations Introduction to the Special Issue”; https://www.researchgate.net/publication/229721065\_Privatization\_Property\_and\_the\_Remaking\_of\_Nature-Society\_Relations\_Introduction\_to\_the\_Special\_Issue)//hwckd

Freedom and inequality are not allowed in the same discursive plane, nor can other kinds of freedoms—including economic, political, and social freedoms—be articulated in this plane. What is increasingly clear is that the neoliberal conception of property is faulty not just for its failure to take into account inequality, but also for its misunderstanding of how property itself works. Legal scholarship, in particular, yields several useful insights on what property is and how it works. First, property is not a thing (the object being controlled) but a so- cial relation (Cohen 1927; Macpherson 1978). It is a social arrangement that allows one certain rights to certain objects, and these social arrange- ments can change. As Carol Rose notes, it is not so much the declaration of property (“this is mine”) that matters, but the decision by other people to acknowledge that declaration (“I agree to act as though that is yours”) (Rose 1994). Therefore, any “freedom” is one that is given by others, and is not inherent in the property itself. Prudham’s essay in this issue on patents for genetically modified organisms not only illustrates the necessity of an entity claiming property to get others to acknowledge that claim, but shows that acquiring that acknowledgement is difficult and not assured. Not only have Monsanto’s claims to GMO canola and Harvard’s claims to the genetically modified “oncomouse” been chal- lenged in courts in both the US and Canada, but the Canadian Supreme Court ultimately denied Harvard’s patent on the oncomouse, thus calling into question the ability to own intellectual property in organisms (even while it upheld the patent on GMO canola). The enclosure of intellectual property in general, and intellectual property in genes and organisms in particular, is still contested, and just what such property ultimately will entail is an open question. Second, as a social relation, property need not be defined in terms of individual control. Despite the neoliberal insistence on individual ownership, there exist other kinds of property, including state and col- lective (or communal) (Macpherson 1978). In the neoliberal view, these other forms of property and their particular social relations are rendered contradictory and largely invisible. When they are recognized, they are treated as the problem, as in the “tragedy of the commons”. Develop- ing a typology of forms of property is one of the core contributions of the common property literature, which undermines the tragedy of the commons approach by emphasizing that common property is not the same thing as no property (or “open access”) and therefore there is no necessary tragedy (eg Berkes et al 1989). This typology does concede the neoliberal perspective that property of some kind is essential for environmental protection (Mansfield 2004a), yet it is also one means to counter neoliberal platitudes about the necessity of privatization. Thus, for St Martin (this issue), the share system of labor in New England fisheries is premised on the distinction between private and common property. St Martin presents the now familiar story of attempts to erode common property through privatization schemes (in this case in the form of individual transferable quotas) that would lead to the entrenchment of capitalist economic activity. What St Martin’s analysis shows, how- ever, is that opposition to privatization can occur not because people want to avoid wage labor through subsistence use of the commons—the classic story—but because alternative forms of property support alter- native, non-capitalist labor relations. Diversity of property contributes to diversity of economic relations. Third, even private property does not conform to its representation within economic theory. In the most simple sense, ownership does not entail full rights to do anything

with that which is owned, but instead involves individual strands of rights (eg to use or transfer) that need not go together (think of the simple example of a leased house) and that in practice often conflict (Cohen 1927; Hohfield 1913; Waldron 1988). This basic insight about ways that property rights can conflict recently has yielded a more profound criticism of the concept of private property. As I discuss further in my essay in this issue, legal scholars have begun to theorize private property not solely in terms of entitlement and freedom, but simultaneously in terms of obligation and responsibility (Singer 2000; Underkuffler 2003). US case law shows that while the ownership model of property is rhetorically dominant, there always have been other more social models of property that exist in practice. Beyond this legal realm, empirical research is revealing a huge diversity of ways that people have conceptualized and practiced even private property relations both today and in the past (Islamoglu 2004; Verdery and Humphrey 2004). The geographer Nick Blomley has put this diverse conception of private property to work in his research, describing, for example, multiple ways that activists have been able to use property language to make a public claim on private (and privatized) spaces (Blomley 2004a, 2000b). Efforts such as these begin to break apart the category of private property from the inside, challenging it not for what it leaves out, but for not being forthright about the complex relations it embodies. The essays in this issue push these ideas about complexity of property in a number of directions. One way of thinking about this complexity and what it means is by linking it to the diverse economies approach (Gibson- Graham 2006; Leyshon 2005). From a diverse economies perspective, capitalism is never as complete as it seems because there are always al- ready alternatives that are neither completely capitalist nor completely outside capitalism. Similarly, the complexity of property shows that pri- vatization is never as complete as it seems. In a deconstructive mode, this complexity shows that privatization (and by extension neoliberal- ism) contains within it that which it denies—and as such cannot be what it appears or what proponents assert. Drawing explicitly on this perspec- tive, St Martin shows that New England fisheries are an already existing form of non-capitalism in which labor has not been fully proletarian- ized. While this non-capitalist economic activity would be undermined by privatization in the form of transferable quotas, he shows that such activity has been able to survive not just at the periphery but even in what is supposed to be the heart of capitalist relations. Prudham, too, alludes to this diversity by arguing that privatization and commodifi- cation are never complete; while the privatization of genetic material and organisms is an attempt to privatize life, this process will never be finished. Attempts to privatize nature are premised on a fictional no- tion of nature as a unique object that can be atomized into bits to be owned. If external and autonomous nature, as such, does not exist (but is always nature—society), then this simple definition of property cannot hold. In Robertson’s essay on the work that market proponents must do to define both the object of property and its price, he makes a similar ar- gument about the incompleteness of neoliberal marketization. Property and markets are always more than they seem, and these other elements are actively obscured by neoliberal proponents. In these ways, acknowl- edging the complexity of property shows that alternatives to it already exist; it is never complete.

#### Metrics and justifications for policies matter just as much as the ends – moves to resolve the aff by using masculine risk calculus are antithetical to the ethical demands of the plan. The role of the ballot is to interrogate the gendered nature of IR – vote for the side that best promotes feminist scholarship and deconstructs the patriarchy

Verloo 05

(Mieke, Senior Lecturer in Political Sciences and Gender Studies at Radboud University Nijmegen and Research Director of an EU-funded comparative research facility, “Displacement and Empowerment: Reflections on the Concept and Practice of the Council of Europe Approach to Gender Mainstreaming and Gender Equality”, Social Politics: International Studies in Gender, State and Society 12.3 (2005) 344-365)

Some studies that focus on assessing the success of gender mainstreaming practices at the level of the European Union point to a similar phenomenon of "adding other goals," as happened in the Message to the Committee of Ministers to Steering Committees of the Council of Europe on Gender Mainstreaming. In Hafner-Burton and Pollack's analysis (2000) of five areas (structural funds, employment and social affairs, development, competition and science, research and development), the accent is on explaining cross-sectional variety within the European Commission in the start and the implementation of gender mainstreaming. They show how important it has been that political opportunities in Europe have widened and increased over the course of the last decade, for instance as a result of the entrance of the Nordic countries. They also show how important lobbying and modernization have been, for instance the lobbying of WISE (the European organization for women's studies) in the case of gender mainstreaming in science, research, and development. In assessing the success of gender mainstreaming, they refer to classical power mechanisms that are at the heart of social movement theory: political opportunities and mobilizing. In the context of this article, the most interesting part of their analysis is their use of the concept of strategical framing, another power mechanism conceptualized in social movement theory. Strategical framing is a dynamic concept that enables us to see how different actors adapt existing policy frames to pursue their prospective goals. Strategical framing is defined as attempting to construct a fit between existing frames, or networks of meaning, and the frames of a change agent. Hafner-Burton and Pollack show that gender mainstreaming is "sold" as an effective means to the ends pursued by the European Commission, rather than as an overt challenge to those ends. They argue that the gender mainstreaming efforts, because of this strategical framing, might turn into an integrationist approach, integrating women and gender issues into specific regular policies rather than rethinking the fundamental aims of the European Union from a gender perspective. Especially since the European Union is one of the most successful implementers of gender mainstreaming so far, this threatens the transformative potential

of gender mainstreaming, they say. [End Page 358] Mary Braithwaite's work on gender mainstreaming in the structural funds (1999) corroborates these findings. She finds that because of the absence of precise objectives on reducing gender inequalities, gender is easily located within and has been subjected to other goals, such as employment creation, economic growth, or poverty reduction. This is not to say that these are abject goals, just to stress that they are not synonymous with gender equality. Braithwaite concludes that gender equity suffers from the dominance of efficiency and effectiveness in gender mainstreaming practices in the structural funds. Strategical Framing and Power The studies presented point out that "success," in the sense of starting a process of gender mainstreaming, seems to be connected to the "stretching" of the goal of gender equality, to strategical framing, and they also show that the actual goal of gender mainstreaming is not articulated clearly. In the last section of this article, I will therefore take a closer look at framing processes, at the politics of framing. What happens in processes of strategical framing? Why would it be that integration rather than transformation is the inevitable result of strategical framing processes? Strategical framing refers to a process of linking a feminist goal, such as gender equality, to some major goal of an organization that should engage or is engaging in gender mainstreaming, thereby securing the allegiance of these organizations to gender mainstreaming. In technical terms, this means that until now strategical framing in gender mainstreaming practices has usually involved framing bridging or frame extension6 (Benford and Snow 2000). The strategies chosen do not challenge the other, mainstream goals of policy makers, but provide for a link by "stretching" the gender equality goal. This means that the dual agenda that is mostly present in gender mainstreaming (of the feminist goal and some other goal) is presented as the possibility of a win-win situation. In such conceptualizations, power seems to evaporate; it is put between brackets. Gender mainstreaming is presented as a harmonious process, certainly in the Council of Europe report. The state is also mostly conceptualized as "friendly," probably connected to the fact that Sweden and the Netherlands have been among its pioneers, countries that to some extent have been "friendly" states in the past. Yet, if gender inequality is about power and privileges, then gender mainstreaming should be about abolishing privileges, and if gender mainstreaming is about eliminating gender bias in policy making, then the state should be problematized. Why then is a process of abolishing privileges and gender bias conceptualized as harmony? The answer provided in the studies discussed earlier is that it helps in organizing acceptance of gender mainstreaming, by making it less [End Page 359] threatening. The consequence of this avoidance of struggle is the exclusion of opposing voices, including radical feminist voices. The "Beyond Armchair Feminism" volume of Organization (2000) is one of the few studies analyzing the bad results of such a dual agenda: the disappearance of a gender focus altogether. Coleman and Rippin (2000) conclude, after having tried such a process of harmonious change, that there needs to be more challenge and less agreement in such change processes, even if trust is a crucial component. The presentation of harmony, used to help smooth the process of change, is counterproductive in the end. In Hearn's (2000) reflection on the project, not only organizations are gendered (in the Acker 1990 definition), but also models of organizational or societal change are gendered, as well as embodying other forms of social division and domination. Following this analysis, change processes and hence gender mainstreaming processes and activities should be conceptualized as necessarily riddled with power, subject to mechanisms of power, and best understood in terms of power. Looking at processes of strategical framing as connected to power relations through a Foucauldian lens shows the logic of the dual agenda as a mix of enabling and constraining processes. The main enabling part is the opening generated by the bridging of frames. Yet, in this logic that juxtaposes two sets of goals, some options are repressed. Exposing the "organization" goal as not neutral, but already gendered, or positioning the "feminist" goal as an organization goal in its own right, will be difficult. As organizations tend to have a self-image of gender neutrality, the gender bias in their existing goals will not easily be recognized. And as both goals will hardly ever be backed by equal power resources, the feminist goal will be watered down much more, or much more easily than the organization goal. Moreover, in the process of convincing organizations or people to start a process of gender mainstreaming, there will already be a tendency to select more "acceptable" feminist goals. Also, the feminists or femocrats involved in these efforts will necessarily have some kind of acceptance by the (gender-biased) organization, leading to further selection and exclusion of radical or marginalized voices. The logic of the dual agenda therefore leads first to an opening for a feminist agenda, and then to a narrowing down of the feminist focus and feminist voices, to eventually losing the focus on gender and gender equality altogether. This logic functions through mechanisms of power. Both goals are not equally powerful, as they have unequal support and resources within the regular organizations that are the relevant context of gender mainstreaming. Especially when gender mainstreaming is conceptualized in a technocratic way, less external pressure or mobilization of feminist groups is to be expected. [End Page 360] Moreover, this inequality of support and resources hinders a clear articulation of a feminist goal, or the expression of particular feminist goals that are seen as more radical, while such radical goals would be needed in view of the watering-down mechanisms. Mainstream liberal feminism hence has an advantage, while a goal that is articulated as a need to displace gender will meet resistance. Finally, within feminism there are hegemonic processes as well that are not recognized and that lead to the exclusion of certain feminist voices.

#### Reject their existential threats – drive to prevent extinction is a form of masculine survivalism where gendered bodies become the unwilling tools to sustain humanity. You should refuse their obsession with patriarchal reproduction.

Mitchell 15

(Audra Mitchell, Audra Mitchell is a settler scholar who lives and works on the Ancestral and treaty lands of the Neutral (Attawandaron), Haudenosaunee and Mississaugas of the New Credit (please see Honouring the Land). She currently holds the the Canada Research Chair in Global Political Ecology at Wilfrid Laurier University. From 2015-18 she held the CIGI Chair in Global Governance and Ethics at the Balsillie School of International Affairs Audra is an Associate Professor at Wilfrid Laurier University, Canada, 8-3-2015, "Gendering extinction," Worldly, <https://worldlyir.wordpress.com/2015/08/03/gendering-extinction/>, JKS)

The reproduction of survival/ the survival of reproduction

Extinction is almost always understood against the horizon of survival and the imperative to sustain it – at least for life forms deemed to be of value to humans. In many cases, this imperative takes the form of deliberate strategies for enforcing existence. Donna Haraway’s influential book When Species Meet devotes considerable attention to the logics, practices and politics of Species Survival Plans. These plans monitor and enforce reproduction amongst ‘endangered’ species, not least by collecting data on populations, genetic profiles and genetic materials to enable selective breeding. This strategy assumes that all organisms can, should, and can be made to exercise their reproductive capacities in order to resist extinction, and it actively mobilizes members of ‘endangered species’ into this project. In so doing, it helps to entrench norms regarding gender, sexuality and reproductive labour that are deeply entrenched in modern, Western human cultures. Attention to these programmes highlights an important way in which extinction is gendered in dominant scientific and policy frameworks. Specifically, strategic breeding programmes share in the belief that reproduction is an imperative for those capable of reproducing if ‘the species’ is at risk’. This belief is directly related to Western norms of the reproductive imperative for women. Indeed, Haraway points out that it is precisely “‘woman’s’ putative self-defining responsibility to ‘the species’ as this singular and typological female is reduced to her reproductive function”. In a similar sense, within SSPs and other strategies of enforced survival, entire life forms are reduced to their reproductive capacities. Moreover, programmes of enforced survival can, in the context of sexual reproduction, disproportionately burden female organisms with the task of avoiding extinction. This logic is particularly fraught in discussions of the possibility of human extinction, in which female fertility (captured in the standard policy language of ‘births per woman’) is framed simultaneously as a threat to survival, and the only hope for escaping extinction (see, for instance, Alan Weisman’s comments on this). In these ways, the securitization of survival entrenches the intersectional categories of gender, species and race discussed above. Dominant discourses of extinction and conservation also entrench and privilege sexual reproduction, in ways that entrench heteronormative assumptions and norms. This is reflected in the way that the subjects of extinction and conservation are framed. The standard object of conservation is the biological ‘species’, a term which is defined by the ability of organisms to reproduce sexually. As Myra Hird has pointed out, this conception of ‘species’ makes it appear as if sexual reproduction is the ‘best’ means of sustaining the existence of a life form. However, Hird’s work demonstrates that Earthly life forms actually engage in myriad forms of reproduction, from the free exchange of DNA between bacteria to the hermaphroditic practices of some fish. The upshot of these arguments is that Earthly life is sustained through a huge variety of reproductive activities that do not conform to biological understandings of life processes or species. Crucially, Hird argues that there is no necessary hierarchy between forms of reproduction. In Darwinian terms, all species that manage to survive are equally successful. However, by conflating survival with sexual reproduction, existing discourses of extinction embed hetero-normative frameworks that devalue other forms of reproduction. They also reduce reproduction to the imperative to survive, ignoring the myriad cultural, political, aesthetic, sensual and other dimensions of reproduction.

#### Realism assumes the perspective of a neutral, rational calculator divorced from the gendered nature of nationalism and international relations – their account of state behavior is ahistorical and props up hegemonic masculinities.

Sjoberg 12 Sjoberg, Laura (2012). Gender, structure, and war: what Waltz couldn't see. International Theory, 4(1), 1–38. doi:10.1017/S175297191100025X SM

This theme in feminist theorizing in IR suggests that there might be something to the idea that international structures are theorized as genderneutral because men take their perspectives to represent the human. Feminists have characterized conventional knowledge in IR as problematic because it is constructed only by those in a position of privilege, which affords them only distorted views of the world.14 As such, it has been a crucial part of the feminist project in IR to ‘not only add women but also ask how gender – a structural feature of social life – has been rendered invisible’ by working to ‘distinguish ‘‘reality’’ from the world as men know it’ (Peterson and True 1998, 23). Often, in disciplinary knowledges, ‘gender’ is seen as a proxy for ‘women’ because ‘women’ are perceived to have gender, where men are not. Another element of a gendered international system structure would be that, when it is acknowledged that gender plays a role in global politics, 14 Scheman 1993; Garry and Pearsall 1996; Harding 1998. There is a sociology to what is understood as central to the discipline, where what counts as ‘IR’ matches what men do more than it matches what women do at least in part because the perspectives of male scholars have defined the boundaries of the discipline (Sjoberg 2008). 16 LAURA SJOBERG it is often discussed as a corruption of a gender-neutral system rather than a product of a gendered system. For example, work like that of Inglehart and Norris (2002) and Hudson et al. (2009)15 argues that it is states that treat their women the worst that corrupt not only the gender order but the potential for interstate peace, cooperation, and development. This logic is replicated in many discussions of gender in the policy world as well. For example, ‘gender mainstreaming’ agendas (see True and Mintrom 2001; Shepherd 2008) engage in a process of integrating gender concerns into the structures that already exist in governments and organizations. The scenario derived from Acker’s theorizing suggests that when gender subordination is characterized as the exception, rather than the rule, in international political interactions, gender is difficult to see because the masculine is at once assumed and invisible. The recurrent focus in feminist work on the need to ask IR theory ‘where are the women?’ (Enloe 1983) and ‘where is gender?’ (Bell and O’Rourke 2007) suggests that it is plausible that gender is difficult to see in IR because the masculine dominates our visions of the international system. It is important to note that the masculine here involves and implicates, but is not reducible to, men. Waltz ‘tests’ his idea of structure primarily by its predictive power and its indirect manifestations (1986, 72). He argues that, since the anarchical nature of the international system is invisible and thus cannot be directly verified or proven, it must be verified by its manifestations and implications (Waltz 1986, 73). This verification, to Waltz, comes by examining unit function, distribution of capabilities across units, and political processes of unit interaction. The remainder of this section considers whether there is evidence in those three observable parts of global politics that the international system may be gender-hierarchical. Unit function: does state identity have gendered components? In Waltz’s account, ‘a system is composed of a structure and of interacting units’ where ‘the structure is the system-wide component that makes it possible to think about the system as a whole’ and ‘the arrangement of units is a property of the system’ (1986, 70, 71). Waltz sees the system as an anarchy, which by definition specifies that units have the same function. Still, Waltz gives a sense of what would be different if the system was a hierarchy, since ‘hierarchy entails relations of super- and subordination among a system’s parts, and that implies their differentiation’ (1986, 87). Calling states ‘like units’ in Waltz’s terms is ‘to say that each state is like all other states in being an autonomous political unit’ (Waltz 1986, 89). Waltz sees states as performing fundamentally similar tasks in similar ways, and argues that the differences between states are in capabilities not in function or task (1986, 91). This section explores two arguments about gender and the function of the units of the international system. First, it argues that gender can be seen as constituting unit ‘function’ in the international system, whether the units are ‘like’ or differentiated. Second, it proposes that gender hierarchy actually differentiates unit function in the international system. The argument that gender constitutes the function of all units in the international system is supported by the degree to which states define their identities (and therefore the tasks of domestic and foreign policy) in gendered ways. A growing literature on ontological security (e.g. Mitzen 2006; Steele 2008) characterizes state identity in terms of ‘sense of self,’ a language that has long been used in feminist accounts of nation and nationalism. Feminists who have worked on nationalism have argued that national identity and gender are inextricably linked, and that ‘all nationalism are gendered, all nationalisms are invented, and all are dangerous’ (McClintock 1993).16 Feminists have shown that gendered imagery is salient in the construction national identities, particularly when, often, women are the essence of, the symbols of, and the reproduction of state and/or national identity (Yuval-Davis 1997; Wilcox 2009). A number of examples illustrate the link between national identity and gender. Feminist studies have demonstrated that gender has been essential to defining state identity in Korea (Moon 1997), modernizing Malaysia (Chin 1998), Bengal (Sen 1993), Indonesia (Sunindyo 1998), Northern Ireland (Porter 1998), South Africa (Meintjes 1998), Lebanon (Schulze 1998), Armenia (Tachjian 2009), and a number of other states. For example, Niva has noted that, during the First Gulf War, the United States’ identity was understood as a ‘tough but tender’ masculinity where it was expected that the United States military would courageously defeat the Iraqi military, but would at the same time rescue the feminine state of Kuwait from the hypermasculine clutches of the Iraqi state (1998). On the other hand, responding to the United States’ and United Nations’ threats of military intervention in Kuwait, Saddam Hussein’s Iraq consistently used gendered references to hypermasculine understandings of state identity (Sjoberg 2006b). Gendered nationalisms, however, do not just arise in conflict situations. Bannerji has noted that Canadian national identities are constructed through ‘race,’ class, gender, and other relations of power, where subordinate classes and ‘races’ are feminized in relation to the dominant image of Canadian identity, not only within the Canadian state but also in Canada’s external projection of nationalist identity (2000, 173). Taylor’s analysis of the ‘Dirty War’ in Argentina characterizes identity in the conflict as ‘predicated on the internalization of a rigid hierarchy’ of gender and argues that ‘the struggle, as each group aimed to humiliate, humble, and feminize its other, was about gender’ (1997, 92, 34). A brief look at one example recently used in the literature might further illustrate the point. In his book, Ontological Security in International Relations, Steele (2008) notes that honor and shame shape states’ selfperception of their identities. Contrary to the realist logic that state prioritizes prudence and survival over honor and justice, Steele sees honor as a universal part of state self-identity, where states look for honor even sacrificing physical integrity. To illustrate the role of honor in state selfidentity, Steele uses the example of the Belgian choice to fight a losing war against the Germans in 1914 rather than allow Germany access to Belgian territory and avoid the casualties and terror involved in their inevitable defeat. Steele notes that honor was implicated in Belgium’s response to Germany’s ultimatum, given that most policy statements stressed their need to ‘fight for the honor of the flag’ and ‘avenge Belgian honor’ (Steele 2008, 112). Feminist analysis suggests that we cannot understand the role of honor in state self-identity without reference to both masculine and feminine conceptions of honor in the state (Jowkar 1986). Masculine conceptions of honor vary between chivalric and protection-oriented and aggressive and prideful, while feminine conceptions of honor often focus on the purity and innocence of the territory of the state and/or the women and children inside (see Elshtain 1985). Through gender lenses, the Belgian discussion of national honor in 1914 was one where the leaders’ (masculine) honor was tied to not giving in to, and even resisting, the would-be violators of the territory’s (feminine) honor, which was tied to purity. The ‘honor’ of the Belgian government then was tied to unwillingness to sacrifice the ‘honor’ of the innocent, neutral, vulnerable, and untouchable identity and position of Belgium vis a vis its neighboring Germany. It is no coincidence that the following attack was referred to as the ‘Rape of Belgium’ (Niarchos 1995). In the ‘Rape of Belgium’ narrative, the German invasion spoiled the feminine elements of Belgian state identity, and emasculated Belgian leaders as protectors of its feminized territory. Survival or prudence cannot account for Belgium’s actions in 1914; in fact, as Steele pointed out, Belgium acted contrary to both. Honor can explain the Gender, structure, and war 19 behavior, but neither the form nor function of that honor is clear without accounting for the gendered elements of Belgian state identity. The story about gendered state identity can also be read onto Germany (as a hypermasculine aggressor) and Britain (as a chivalrous protector). While some might see the influence of gender on state or national identity as a ‘second-image’ or unit-level explanation,17 Waltz explains that a factor is structural if it is not influencing state identity (and therefore state function) in states individually, but instead influencing the identities (and therefore functions) of states generally. In other words, forces that define one state’s identity or five states’ identities are secondimage; forces that influence all states identities are third-image. Feminist scholars have shown that ‘nationalism is naturalized, and legitimated, through gender discourses that naturalized the domination of one group over another through the disparagement of the feminine’ (Peterson 1999). These gender hierarchies are always present even if specific genders and their orders in hierarchies are fungible. In other words, it is not particular nationalisms that are gendered (and some nationalisms that are not), it is that gender hierarchy as a structural feature of global politics defines the properties and functions of the system’s constituent units, including their national identities. All nationalisms being gendered does not mean that all nationalisms are the same, however. The mechanism through which gender hierarchy can be seen to influence national identity and state function is through the link between any given state’s national identity and the ‘hegemonic masculinity,’ or particular ideal-typical gender that is on top of the gender hierarchy that state ‘units’ are situated in at any given time and place (Hooper 1998, 34). The argument that states’ structures and functions are often defined by masculinities (see Peterson 1992) is not based on the observation that states are (mostly) governed by men. Instead, as Connell explains, ‘the state organizational practices are structured in relation to the reproductive arena’ (1995, 73). Some states’ hegemonic masculinities are aggressive and projected, others are tough but tender, and still others are stoic and reserved. All hegemonic masculinities relate to a feminized other, but they do so in different ways: some encourage violating it, some define themselves in 20 LAURA SJOBERG opposition to it, some understand it as treasured and to be protected, and some mix elements of all of the above. The gendered nature of national identities influences the function of states, particularly in the areas of warmaking and war-fighting, but also in terms of citizenship, economic organization, diplomatic relations, and involvement in international organizations.18 For example, feminists have catalogued throughout the history of the modern state system a relationship between military service, masculinity, and full citizenship (either de jure or de facto) in states (Moscovici 2000). Though the relationship between gender and nationalism generally (and genders and nationalisms specifically) influences the function of units whether they are like units (in anarchy) or not like units (indicative of a hierarchical system in Waltz’s terms), evidence of different gendered nationalisms suggests that gender hierarchy in global politics differentiates between functions of units in the system rather than dictating that all units function similarly. Units in the system (even defined in the narrow realist terms where only states count as units) do have many similar functions in terms of governance, education, health care, and the like. But especially in their external relations, states also have a number of differentiated functions. Some states were/are colonizers, some states were colonized and still deal with remaining markers of colonization. Some states are aggressors, while other states are the victims of aggression. Some states are protectors, while other states require protection. Some states provide peacekeeping troops, international humanitarian aid, and other public goods, while other states do not serve those functions, depending on state identity (e.g. Savery 2007). Some states serve to facilitate international cooperation while others act as cogs in cooperation’s wheels. Some states see their masculinity as affirmed in the interstate equivalent of rape and pillage, while other states see it in chivalry, honor, and a sense of the genteel. While Waltz might classify these differences as merely capabilities gaps, different state functions in the community of states do not map one-toone onto capabilities. Instead, I propose that they map onto the ways that gender shapes state identities and functions. As Peterson (2010) notes, ‘not only subjects but also concepts, desires, tastes, styles, ways of knowing y can be [masculinized or] feminized,’ such that states’ ontological security is related to their gendered identities. For example, a number of feminist analyses of the United States during the first Gulf War identify its policy choices and military strategies as consonant with a new, post-Cold War ‘tough-but-tender’ image of the United States’ masculinity, which maintained the Cold War-era projection of strength, but added an element of sensitivity and a chivalric conception of protecting the weak (e.g. Niva 1998; Sjoberg 2006a). Seemingly inconsonant functions for the US military as at once an attack force and a tool for protection then make sense, because the state does function differently based on its self-perception of identity, which might be seen as (at least in part) a product of structural gender hierarchy in the international arena.

#### A feminist analysis of private space appropriation is necessary to avoid a white-masculine blueprint for space colonization.

Jones 18

(Emily Jones, 10-17-18, “A Posthuman Feminist Approach to Mars,” https://ilg2.org/2018/10/17/a-posthuman-feminist-approach-to-mars/#more-22694)

Feminists must found a constitution for Mars, notes Keina Yoshida in her fascinating recent [post](https://ilg2.org/2018/10/04/a-constitution-for-mars-a-call-for-founding-feminists/). If we leave Mars to the founding fathers it will become the domain of the super wealthy elite white men of techno-mediated capitalism––the Musks, the Zuckerbergs and the Trumps. Human space exploration will follow the same, masculine, humanist blueprint of domination on Earth and Mars will be exploited for its natural resources, just like Earth. Yoshida thus asks: … what then would a founding feminist constitution look like? How would it guarantee foundation against what bell hooks has termed the ‘white supremacist capitalist patriarchy’? Is it a democracy to come? Whose work should we draw upon to inform this constitution? … Who will protect their rights in Mars? Yoshida answers her own question: “The feminists.” Feminists are indeed ideally positioned to be able to tackle this issue. Environmental protection is core here but the problem does not lie with these founding fathers alone but with the entire foundations of dominant thought. Feminist gender theorists are central to challenging these dominant accounts of knowledge. Feminist posthumanism is one frame through which these challenges can be made.[[1]](https://ilg2.org/2018/10/17/a-posthuman-feminist-approach-to-mars/" \l "_ftn1) We are living in posthuman times; from technological mediation to machines with subjectivity to space exploration, the centrality of the human and the question over what, exactly, the human *is*, is being called into question. However, definitions of posthumanism differ vastly. As Yoshida notes, space exploration has become a hobby for the super elite transhumanists. The transhuman project is a post-*human* project, in that it seeks to use science and technology to create the more-than-human or the techno-scientifically enhanced human. Transhumanism, however, is certainly neither a critical nor a feminist posthuman project. Seeking to complete the humanist, enlightenment aims of making man into God, giving him superhuman abilities and finally “defeating” death––humanity’s supposed (according to the transhumanists) ultimate “weakness”––these transhuman elite space explorers will exploit Mars precisely because they see themselves (themselves being mostly white, mostly male) as both central and superior to all, including the universe itself. However, there are many forms of posthumanism. In contrast to the transhuman project, critical feminist posthumanism, as Rosi Braidotti and Maria Hlavajova note, lies between the convergence of “post-humanism on the one hand and post-anthropocentrism on the other.” Humanism has centred a particular form of white, rational, individual, male human, this human having also been embedded into the liberal structure of the law via, for example, the “reasonable person” (see Ngaire Naffine’s work). On the other hand, anthropocentrism has centred the human above all nonhuman others, including nonhuman animals, machinic subjects and the environment. Critical feminist posthumanism works to dismantle both these hierarchies.