### fw

#### observation 1 – because the resolution uses “ought”, which denotes moral obligation, justice must be considered the highest value in today's debate

#### In order to evaluate justice, we should use the criterion of the veil of ignorance.

#### Justice is a prerequisite to every other value

Burns 89 (Robert P. Burns, Professor of Law, Northwestern University School of Law, NORTHWESTERN UNIVERSITY LAW REVIEW , Fall 1988 / Winter 1989, p. 238)

Income maintenance policy must, of course, be concerned with ideals other than justice. Nonetheless, according to Rawls, "justice is the first virtue of social institutions" and its dictates have an absolute priority over other social goals: if they cannot be reconciled, then the requirements of justice must be met. Indeed, reconciliation could not, for Rawls, involve any compromise of the demands of justice.

#### observation 2 - to better understand the resolution, forwarding definitions important to the debate is key

#### Justice is defined as fairness, best measured through the veil of ignorance

Kilcullen 99 – *Ph.D., honorary fellow at Macquarie School of Social Sciences, Sydney, Australia* (R.J. Kilcullen, 3 Oct 1999, "RAWLS: THE ORIGINAL POSITION," POL264 Modern Political Theory, Macquarie University, <http://web.archive.org/web/20010305220127/http:/www.humanities.mq.edu.au/Ockham/y64l13.html)//kh>

John Rawls, professor of philosophy at Harvard, published a paper in the Philosophical Review for 1958 called 'Justice as Fairness', followed up by various other papers, and in 1971 a large book A Theory of Justice. Rawls disagrees with the Utilitarians over their way of spelling out the idea of the happiness of mankind generally. They say: Consider whether the act, rule or institution to be evaluated is best for the happiness of mankind generally. The difficulty is that often it will be both to the advantage of some people and to the disadvantage of others. The effect on the happiness of mankind generally has to be assessed by somehow balancing off the bad effects on some people against the good effects on others. There is no way of avoiding this. Some of the practical questions we have to decide do involve choice between possible courses of action all of which have good effects on some people and bad effects on others.

If a political or ethical theory can't give us any guidance on deciding questions like that then it is almost useless. Questions of distributive justice especially call for decisions between conflicting interests - if some get more others get less. So the effect on the happiness of mankind generally will be the resultant of good effects on some, bad effects on others.

Rawls's objection to Utilitarianism is that it puts no restrictions upon the subordination of some people's interests to those of others, except that the net outcome should be good. This would allow, any degree of subordination, provided the benefit to those advantaged was great enough. Rawls thinks that a theory of justice cannot let disadvantages to some be justified by advantages to others.

Let us imagine we are talking about a household. On a particular occasion the interest of a minority may be subordinated to that of a majority - they will watch the TV program most them want. But if the same people are outvoted every time their household will split up, or they will not decide each time separately by voting, but adopt some rule about taking turns.

This is the sort of situation Rawls had in mind in developing his theory. Imagine a group of people on equal terms, who don't decide each case separately, but decide on general rules which will then determine cases that arise. The rules can't be changed all the time - then they would be deciding the next case in the disguise of deciding on a rule. The rules are supposed to be permanent, and the same rules apply to all members of the group alike (no rule says that people whose name begins with K never have to do the washing up). And if the members are on equal terms, and there is no permanent coalition, no dominant faction, then no member of the group can slant or tailor the rules in their own favour. In a situation like that, Rawls says, the rules that would get accepted would be fair. On a particular occasion the rules would require some to give way to others (e.g. if it is someone's turn), but there would be no overall subordination of the interests of some to the interests of others. This is justice as fairness - the rules of justice are the rules which will get accepted in a group of people living together on equal terms, if they understand (a) that the rules are to apply for the indefinite future, (b) to every member of the group alike, and (c) if none of the members of the group can see any way of tailoring the rules to their own advantage (there is no dominant faction, etc).

Rawls doesn't suppose that the members of this group are in any degree concerned for the happiness of mankind, or for one another's happiness. In fact, in the earliest version he postulates that the members are self-interested. In proposing rules each of them is trying to secure his or her own interests; but given the circumstances we have supposed, there is no way any of them can on the whole subordinate others' interests to their own, so they have to settle for fairness - that is the best any of them can do. But their motive is not concern for fairness, but a concern for their own interests. In later expositions of the theory Rawls avoids saying that these people are selfish, he says that they have their own purposes (selfish or not), and that each is trying to do the best for his or her purposes without being concerned for the purposes of others. Anyway, when we are thinking about rules of justice, Rawls suggests, we are thinking about situations in which people are potentially in conflict, in which each presses claims on the others. Rawls says that these are 'the circumstances of justice', the circumstances to which rules of justice are relevant.

In later versions ('The Justification of Civil Disobedience', and A Theory of Justice), Rawls says that the rules of justice are chosen in an Original Position, behind a 'veil of ignorance' that conceals from the parties facts about themselves (sex, age, physical strength etc) that might be envisaged in attempts to tailor the rules to give some a systematic advantage. E.g. if behind the veil of ignorance we do not know our sex, then we will be wary of a proposed rule that dishwashing is women's work. Of course in real life we are not ignorant of these things: the point is that in reasoning about justice we must disregard some of what we know, put it out of our minds, pretend to ourselves that we don't know it. To ask what rules would people behind the veil of ignorance adopt is a way of asking what rules can be justified without reference to bargaining strengths and weaknesses.

Rawls says that people in the Original Position would adopt the following basic rules of justice:

First Principle: Each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberty for all. Second Principle:Social and economic inequalities are to be arranged so that they are both:

(a) to the greatest benefit of the least advantaged, consistent with the just savings principle, and (b) attached to offices and positions open to all under conditions of fair equality of opportunity.

First Priority Rule (The Priority of Liberty): The principles of justice are to be ranked in lexical order [i.e. one higher in the list is to be satisfied before the next is applied - as in a lexicon or dictionary all words beginning with A come before all those beginning with B] and therefore liberty can be restricted only for the sake of liberty.

There are two cases:

(a) a less extensive liberty must strengthen the total system of liberty shared by all; (b) a less than equal liberty must be acceptable to those with the lesser liberty.

Second Priority Rule (The Priority of Justice over Efficiency and Welfare): The second principle of justice is lexically prior to the principle of efficiency and to that of maximizing the sum of advantages; and fair opportunity is prior to the difference principle. There are two cases:

(a) an inequality of opportunity must enhance the opportunities of those with the lesser opportunity; (b) an excessive rate of saving must on balance mitigate the burden of those bearing this hardship.

General Conception:

All social primary goods - liberty and opportunity, income and wealth, and the bases of self-respect - are to be distributed equally unless an unequal distribution of any or all of these goods is to the advantage of the least favoured.

(The above comes from Theory of Justice, pp.302-3)

The 'lexical priority' of a consideration or value means that it is only between possible situations that all satisfy that rule that any choice is to be made in accordance with some other consideration or value. E.g. if of two possible arrangements one is more economically efficient (produces more from the available resources) but is unjust, whereas the other is just, then the just but less efficient must be chosen, because of the 'lexical' priority of justice over efficiency.

The second principle, part (a) ('to the greatest benefit of the least advantaged'), Rawls calls the difference principle

Of these the most distinctive is the Difference Principle. So let us think about the first. It is the principle that an inequality is unjust except insofar as it is a necessary means to improving the position of the worst-off members of society. Two points are noteworthy: (i) Rawls does not think that justice requires equality - there may be just inequalities, justified as incentives. This is one of the traditional justifications of social inequalities of the sort we are familiar with in modern commercial societies. From the left, it may seem that Rawls is producing a justification of what we have.

But a second noteworthy point: an inequality is unjust except insofar as it is a necessary means to improving the position of the worst off. This provides a standpoint for criticizing the existing social arrangements. It is not enough to say that inequalities provide incentives: it has to be shown that this degree of inequality is necessary to achieve as high a level of welfare for the lowest group. If it were the case (as I think it probably is) that the GNP would be no less if certain inequalities were reduced - if certain incentives were less strong - then by the difference principle those inequalities are unjust. So the fact that some inequality provides an incentive is not enough; it has to be shown that no less degree of inequality would do as much for the welfare of the worst-off.

### contention 1

#### contention 1 is exploitation

#### Space is the new spatial fix for capitalistkind – capitalism’s inherent expansionist nature means that space development perpetuates capitalism by allowing a new site for surplus capital and innovation to avoid terrestrial economic crises. Profit-first solutions ensures exhaustion and colonization of Blank Space.

Shammas and Holen 19 (Victor L. Shammas and Tomas B. Holen, 1-29-2019, "One giant leap for capitalistkind: private enterprise in outer space," Nature, <https://www.nature.com/articles/s41599-019-0218-9>)//kh

No longer terra nullius, space is now the new terra firma of capitalistkind: its naturalized terroir, its next necessary terrain. The logic of capitalism dictates that capital should seek to expand outwards into the vastness of space, a point recognized by a recent ethnography of NewSpace actors (Valentine, 2016, p. 1050). The operations of capitalistkind serve to resolve a series of (potential) crises of capitalism, revolving around the slow, steady decline of spatial fixes (see e.g., Harvey, 1985, p. 51–66) as they come crashing up against the quickly vanishing blank spaces remaining on earthly maps and declining (terrestrial) opportunities for profitable investment of surplus capital (Dickens and Ormrod, 2007a, p. 49–78).

A ‘spatial fix' involves the geographic modulation of capital accumulation, consisting in the outward expansion of capital onto new geographic terrains, or into new spaces, with the aim of filling a gap in the home terrains of capital. Jessop (2006, p. 149) notes that spatial fixes may involve a number of strategies, including the creation of new markets within the capitalist world, engaging in trade with non-capitalist economies, and exporting surplus capital to undeveloped or underdeveloped regions. The first two address the problem of insufficient demand and the latter option creates a productive (or valorizing) outlet for excess capital. Capitalism must regularly discover, develop, and appropriate such new spaces because of its inherent tendency to generate surplus capital, i.e., capital bereft of profitable purpose. In Harvey’s (2006, p. xviii) terms, a spatial fix revolves around ‘geographical expansions and restructuring…as a temporary solution to crises understood…in terms of the overaccumulation of capital'. It is a temporary solution because these newly appropriated spaces will in turn become exhausted of profitable potential and are likely to produce their own stocks of surplus capital; while ‘capital surpluses that otherwise stood to be devalued, could be absorbed through geographical expansions and spatio-temporal displacements' (Harvey, 2006, p. xviii), this outwards drive of capitalism is inherently limitless: there is no end point or final destination for capitalism. Instead, capitalism must continuously propel itself onwards in search of pristine sites of renewed capital accumulation. In this way, Harvey writes, society constantly ‘creates fresh productive powers elsewhere to absorb its overaccumulated capital' (Harvey, 1981, p. 8).

Historically, spatial fixes have played an important role in conserving the capitalist system. As Jessop (2006, p. 149) points out, ‘The export of surplus money capital, surplus commodities, and/or surplus labour-power outside the space(s) where they originate enabled capital to avoid, at least for a period, the threat of devaluation'. But these new spaces for capital are not necessarily limited to physical terrains, as with colonial expansion in the nineteenth century; as Greene and Joseph (2015) note, various digital spaces, such as the Internet, can also be considered as spatial fixes: the Web absorbs overaccumulated capital, heightens consumption of virtual and physical goods, and makes inexpensive, flexible sources of labor available to employers. Greene and Joseph offer the example of online high-speed frequency trading as a digital spatial fix that furthers the ‘annihilation of space by time' first noted by Marx in his Grundrisse (see Marx, 1973, p. 524).

Outer space serves at least two purposes in this regard. In the short-to medium-term, it allows for the export of surplus capital into emerging industries, such as satellite imaging and communication. These are significant sites of capital accumulation: global revenues in the worldwide satellite market in 2016 amounted to $260 billion (SIA, 2017, p. 4). Clearly, much of this activity is taking place ‘on the ground'; it is occurring in the ‘terrestrial economy'. But all that capital would have to find some other meaningful or productive outlet were it not for the expansion of capital into space. Second, outer space serves as an arena of technological innovation, which feeds back into the terrestrial economy, helping to avert crisis by pushing capital out of technological stagnation and innovation shortfalls.

In short, outer space serves as a spatial fix. It swallows up surplus capital, promising to deliver valuable resources, technological innovations, and communication services to capitalists back on Earth. This places outer space on the same level as traditional colonization, analyzed in Hegel’s Philosophy of Right, which Hegel thought of as a product of the ‘inner dialectic of civil society', which drives the market to ‘push beyond its own limits and seek markets, and so its necessary means of subsistence, in other lands which are either deficient in the goods it has overproduced, or else generally backward in creative industry, etc.' (Hegel, 2008, p. 222). In this regard, SpaceX and related ventures are not so very different from maritime colonialists and the trader-exploiters of the British East India Company. But there is something new at stake. As the Silicon Valley entrepreneur Peter Diamandis has gleefully noted: ‘There are twenty-trillion-dollar checks up there, waiting to be cashed!' (Seaney and Glendenning, 2016). Capitalistkind consists in the naturalization of capitalist consciousness and practice, the (false) universalization of a particular mode of political economy as inherent to the human condition, followed by the projection of this naturalized universality into space—capitalist humanity as a Fukuyamite ‘end of history', the end-point of (earthly) historical unfolding, but the starting point of humanity’s first serious advances in space.

#### Private space exploration fuels expansion of inequality

**Ward 19** (Peter Ward, master’s in business journalism from Columbia University Graduate School of Journalism, “The unintended consequences of privatising space”, Science Focus, 11/6/19, <https://www.sciencefocus.com/space/the-unintended-consequences-of-privatising-space/>) // el

The forces driving human expansion into space are changing. For decades, the world’s most fearsome superpowers chose space as the battleground on which to fight for scientific superiority. The United States and the USSR sprinted to the stars, spurred on by the nationalist bluster of the Cold War. Pride and paranoia fuelled the race, as two clashing political philosophies went head to head in a galactic face-off – the communist all-for-one spirit of the Soviets against the fearless frontier, r cowboys of the United States. When the Cold War cooled, and later the Soviet Union collapsed, the two countries began to cooperate. The end of international competition in the cosmos failed to take space exploration to new levels, however, and something of a lull took hold of humanity’s ambitions in the wider Universe. Space enthusiasts often express a bitter regret that after the Moon landing in 1969, progress stalled. By now we were supposed to have bases on the lunar surface, hotels orbiting the Earth, and colonies on Mars. The reality has been a lot less inspiring. Government-led agencies have achieved amazing things since the Moon landings, but none have captured the attention of the world in the same way. Some of those jaded space-lovers happened to be extremely wealthy and took it upon themselves to build a private space sector capable of re-energising the pursuit of our cosmic goals. Now, these companies have taken up the baton, and the likes of SpaceX, Blue Origin, Virgin Galactic, and many other companies are looking to make up lost ground in the mission to explore and ultimately colonise the Solar System. This presents the world with an interesting question. If space is a clean slate, abundant with opportunity and a sense the species can “reset” its mistakes, is the private sector and capitalism the best driving force to take us there? In 2009, when SpaceX celebrated its first successful launch, the company did something very simple that hadn’t been done before – it published its prices. This allowed a host of entrepreneurs to put together business plans and investment proposals which had real figures, and a clear path to profits. This was a landmark moment for the private space sector. Not only was the price to launch into space transparent, it was also dropping steadily. There are many industries in space, most of which have been operating for decades already. The most prominent is the satellite sector, which has been launching great hunks of metal into lower Earth orbit ever since the success of Sputnik in 1960. Boosted by cheaper launch prices and new microsatellite technology which has seen devices shrink to the size of a loaf of bread, companies are now launching more and more satellites into space, and that has consequences. The small area of space around our planet is becoming quite crowded, and the potential for damaging and expensive collisions has increased. This is just one area where the private sector is gaining ground and making a large impact. Space tourism – a concept only enjoyed by seven people so far – is about to make a resurgence, led by Virgin Galactic. And as the International Space Station approaches the end of its lifespan, it seems inevitable a private company will either take over operation of the most expensive public project ever or will launch their own versions. These are all activities relatively close to home, but they will have major repercussions – both good and bad – here on Earth. An increase in space tourism could spread the benefits of the overview effect, where astronauts see the world from outside its atmosphere, and appreciate its fragility and lack of borders. If more people were to view the world in such a way, the theory goes, they would appreciate the futility of war and the need to care more for a planet in dire need of better treatment. When the European Space Agency launches a mission into space, Mark McCaughrean explains the hurdles they have to leap to finally get it off the ground But space tourism companies need to make money, and it’s never going to be cheap to send anyone to space. In the worst-case scenario, the practice becomes another symptom of the world’s massive inequality problem, where the rich pay hundreds of thousands to go into space for a matter of minutes, while the millions on the surface struggle to feed themselves. In the 1990s, the Russians attempted to privatise the Mir space station, but before business took off, they brought the craft crashing down to Earth as the nation cooperated with America on the ISS. There are several companies now looking to establish the world’s first private space station. This would bring obvious benefits – it would open up space as a laboratory to anyone who could pay, and would theoretically bring down the costs of manufacturing in space. But space isn’t the bastion of free-floating freedom some think it is, and it’s ripe for exploitation by monopolies. A space station operator, for example, could decide which fibre optics manufacturer could use its facility and which could not. The fibre optics produced in a zero-gravity environment are much cleaner and more valuable than that produced on Earth, meaning that one company would have a massive advantage, and the space station would decide who had access to the best manufacturing conditions. That’s just one example of a potential monopoly, but if you go further into the future of space exploration, things only get more frightening. Imagine a colony on the Moon or Mars run by a corporation. That one company would control everything the colonists need to survive, from the water to the oxygen to the food. That’s a dangerous amount of power for any company, but it’s a very real scenario. So what stops a major corporation landing on the Moon and setting up a colony? One very old document. The Outer Space Treaty was signed in 1967 by all of the major space-faring nations, and explicitly states nobody can go to another planet or the Moon and claim that territory for their own. It’s a very important document, but it’s flawed. For one thing, the private space sector wasn’t around when the treaty was written so it’s not clear how some of the rules would be applied to private companies. And secondly, given the ambitions of many countries and corporations, there’s no way it’s going to last much longer. Anyone with a plan to land on the Moon or Mars and stay there is going to run into the Outer Space Treaty, and the smart money is on the wealthy and powerful winning out against an old loophole-ridden document. Politicians such as Ted Cruz in the United States have already called for changes to be made to the treaty, and given the increasing amounts of money private space companies spend on lobbying in the United States, more such attempts will follow. It’s imperative that the space community as a whole takes this issue on to ensure the needs of all, and not just the private sector, are taken into account should any alterations be made. The further we look into the future of humans in space, the more reality resembles science fiction. That’s why it’s difficult to make people take the issues which could potentially arise seriously. But now is the time to consider the problems that could arise from a commercially-led space race, and take the necessary small steps now to avoid potentially disastrous consequences in the future.

#### That exploitation makes social equality impossible

**Klein 21** (Lauren Klein, Spring contributor, “The billionaire space race showcases the failures of capitalism”, Spring, 7/23/21, <https://springmag.ca/the-billionaire-space-race-showcases-the-failures-of-capitalism>) // el

Discussions of space travel inevitably involve talk of dreams. Shortly after launching into space for the first time on July 11th, self-proclaimed “tie-hater, adventurer,” and billionaire Sir Richard Branson of the UK tweeted an inspirational sentiment about dreams: “To the next generation of dreamers: if we can do this, just imagine what you can do.” With videos of himself twirling and somersaulting in a spacecraft all over his social media pages, the whole stunt will undoubtedly serve as good publicity for Branson’s space tourism company, Virgin Galactic. Nine days later, Jeff Bezos followed Branson into space for a few brief moments. Incidentally, Bezos also cited a childhood dream as his motive for going to space and also happens to own a space tourism company called Blue Origin. Thanks to substantial funding from NASA, Elon Musk is also developing his own company, SpaceX, and aims to launch humans into space by 2024. Dreams of inequality For most of us on planet Earth, the ultimate dream is to survive increasingly volatile conditions on this planet. We are living in a year of wildfires in British Columbia, California, and Northwestern Ontario, as well as flooding in Western Europe and the New York Subway. Not to mention the global pandemic, which continues to rage in many countries due to continued vaccine inequality. Meanwhile in the United States, roughly 31 million people don’t have access to healthcare, 6 million faced eviction in June of 2021, and over 500,000 were recently estimated to be homeless. In 2020 alone over 400 people became billionaires worldwide. In this context of extreme wealth inequality, the dream of space travel starts to seem unbelievably indulgent. But Branson and Bezos’ voyages are only the beginning of a new industry. Space tourism is estimated to generate $8 billion in profits by 2030. It’s not a childhood dream that propels billionaires into space, it’s profit and a colonial desire to expand and conquer. In a phrase that recalls the language of the British Empire, it’s been said that space tourism is soon to become “the crowning jewel of capitalism.” Claiming innovation, progress, and the fulfillment of lofty childhood dreams, Branson, Bezos, and Musk are competing for profits in a new industry that is far more destructive than it is progressive. Contributing no new innovation, space tourism poses a serious threat to the environment and requires funds that could vastly improve the lives of people on earth. Big Fucking Rockets Elon Musk’s initial name for the rockets he hopes will one day establish a colony on Mars was Big Fucking Rockets, or BFRs. After rechristening them more decorously as ‘Starships’ and running more tests, Musk plans to reuse these rockets up to five times. He claims this will make them greener and more affordable. In competition with Branson, Bezos also claims that Blue Origin’s rockets are greener than Virgin Galactic’s. In reality, no rocket is even remotely “green.” Rockets produce 100 times more CO2 per passenger than airplanes. Moreover, CO2 and other gases emitted by rockets can linger in the stratosphere and mesosphere for two to three years, during which time they erode the ozone layer and contribute to heating. The only environmentally friendly approach to space travel would be to simply not travel to space. We don’t need greener rockets or any privatized space travel. The time left to halt climate change is dwindling rapidly and wasteful, destructive tech will only speed irreversible environmental destruction. These billionaires’ false claims of concern for the environment are almost as troubling as the emissions themselves. In 2006, Branson pledged 3 billion towards research on environmentally friendly fuels. For this, he received a United Nations Correspondents Association Citizen of the Year Award. Yet Virgin Galactic aims to eventually launch 400 space flights a year. 600 people have already made reservations for a brief tour of space at the price of $250,000. These hypocritical performances of concern for the environment only divert attention from Branson’s culpability in the climate crisis. Financial costs Not only is space travel not green, it is not remotely affordable either. Most space ventures cost at least several billion dollars. The Toronto Star argues that given their combined net worth of $400 billion, the space musketeers could pay for the entire world to be vaccinated and end homelessness in America while remaining billionaires. Instead, they further pollute the environment in showy displays of ostentatious wealth for a mere several minutes in space. The ultimate dream for most people is a stable life, including access to enough resources. And this is achievable. The Earth gives us everything we need and more. We should be spending as much of our resources as possible figuring out how to redistribute wealth and treat the environment with the respect it deserves. And to achieve this means not only taking on the billionaires, it means taking on the capitalist system which produces them.

#### Corporate space exploration is the harbinger of the latest stage of spectacle capitalism that justifies the flattening of humanity in favor of silly space-rock profits!!!

Shammas and Holen 19 (Victor L. Shammas and Tomas B. Holen, 1-29-2019, "One giant leap for capitalistkind: private enterprise in outer space," Nature, <https://www.nature.com/articles/s41599-019-0218-9>)//kh

In an interview, Beck was quizzed about the Humanity Star and asked by a reporter about the difficulties of generating profits in space (Tucker, 2018). To this Beck replied, ‘It has always been a government domain, but we’re witnessing the democratization of it…[I]t [is] turning into a commercially dominated domain'. Beck established an equivalence established between the dissolution of space as the rightful domain of states and the advent of profitmaking ventures as signs of ‘democratization'. In space, according to Beck’s logic, democratization involves the disappearance of the state and the rise of capital. The argument, of course, is impeccably post-statist: on this account, states are monolithic, conservative Leviathans beyond the reach of popular control; corporations, on the other hand, are in principle representatives of the everyman: in the age of the start-up, any humble citizen could in theory become an agent of disruption, a force for change, an explorer of space, and a potential member of the cadre of capitalistkind. Following this logic, the question for the entrepreneurs of NewSpace is how to monetize outer space, which means turning space into a space for capital; their question is how they can deplanetarize capital and universalize it, literally speaking, that is, turn the Universe into a universe for capital. In this light, Peter Beck’s distortion of democratic ideals appears eminently sensible, equating democratization with monetization, that is, capital liberated from its earthly tethers.

Emblematic of this capitalist turn in space was the founding of Moon Express in 2011, composed of a ‘team of prominent Silicon Valley entrepreneurs…shooting for the moon with a new private venture aimed at scouring the lunar surface for precious metals and rare metallic elements' (Hennigan, 2011). Following Google’s Lunar XPRIZE—an intertwining of Silicon Valley and NewSpace’s capitalistkind—which promised a $20 million prize for the first private company to land a spacecraft on the Moon, travel 500 meters, and transmit high-definition images back to Earth, all by March 2018,9 Moon Express claimed that it would be capable of landing on the lunar surface and earn the cash prize. Their stated goal was twofold: first, to mine rare resource like Helium-3 (a steadily dwindling scarce resources on Earth), gold, platinum group metals, and water, and, second, to carry out scientific work that would ‘help researchers develop human space colonies for future generations' (Ioannou, 2017). The ordering is telling: first profits, then humanity. These were the hollow, insubstantial promises of a venture-capitalized NewSpace enterprise: in early 2018, Google announced that none of the five teams competing for the Lunar XPRIZE, including Moon Express, would reach their stated objectives by the 31 March deadline and they were taking their money back (Grush, 2018). In this sense, it was typical for NewSpace in its formative years: a corporate field populated by (overly exuberant) private enterprises who promised more than they could deliver. But the belief in NewSpace is real enough. In a tome bursting with the optimism of NewSpace, Wohlforth and Hendrix claim that ‘the commercial spaceflight industry is transforming our sense of possibility. Using Silicon Valley’s money and innovative confidence, it will soon bring mass space products to the market' (2016, p. 7).

The trope of humanity plays a key role in the rhetoric of the adherents of NewSpace. To fulfill the objectives of NewSpace, including profit maximization and the exploitation of celestial bodies, the symbolic figure of a shared humanity serves a useful purpose, camouflaging the conquest of space by capitalism with a dream of humanity boldly venturing forth into the dark unknown, thereby also providing the legitimacy and enthusiasm needed to support bolster the legitimacy of NewSpace. So long as the stargazers and SpaceX watchers are permitted their fill of ‘collective effervescence', to use Durkheim’s (1995, p. 228) concept, capitalist entrepreneurs will be able to pursue their business interests more or less as they please. The spectacle of outer space is crucial in this regard.

Crucially, however, and despite this spectacle, SpaceX’s technology might not necessarily be more sophisticated than its competitors or predecessors. Some industry insiders have rebuffed some of the more the spectacular claims of NewSpace’s proponents, arguing that launch vehicle reusability requires a (perhaps prohibitively) expensive refurbishing of the rocket engines involved in launches: ‘The economics will depend on how many times a booster can be flown, and how much the individual expense will be to refurbish the booster…each time' (Chang, 2017). Reusability may be a technological dead-end because of the inherently stressful effects of a rocket launch on the launch vehicle’s components, with extreme limitations on reusability beyond second-use as well as added risks of malfunctions that customers and insurers are likely to wish to avoid. Furthermore, the Falcon Heavy still has not matched the power and payload capacity of NASA’s Saturn V, a product of 1960s militaryindustrial engineering and Fordist state spending programs. What SpaceX and other NewSpace corporations do with great ingenuity, however, is to manage the spectacle of outer space, producing outpourings of public fervor, aided by a widespread adherence to the ‘Californian Ideology' (Barbrook and Cameron, 1996), or post-statist techno-utopianism, in many postindustrialized societies.

The very centrality of these maneuvers has initiated a new phase in the history of capitalist relations, that of ‘charismatic accumulation'—certainly not in the sense of any ‘objective' or inherent charismatic authority, but with a form of illusion, to speak with Bourdieu, vested in the members of capitalistkind by their uncanny ability to spin mythologizing self-narratives. This has always been part of the capitalist game, from Henry Ford and onwards, but the charismatic mission gains a special potency in the grandiose designs of NewSpace’s entrepreneurs. Every SpaceX launch is a quasi-religious spectacle, observed by millions capable of producing a real sense of wonder in a condition of (legitimizing) collective effervescence.

Outer space necessarily reduces inter-human difference to a common denominator or a shared species-being. An important leitmotiv in many Hollywood science fiction movies, including Arrival (2016), is that a first encounter with an alien species of intelligent beings tends to flatten all human difference (including ethnoracial and national categories), thereby restoring humankind to its proper universality (see also Novoa, 2016). Ambassadors of Earth as a whole, not representatives of particular nations, step forth to meet alien emissaries. But even in the absence of such an encounter, the search for habitable domains (or rather, profitable locales) beyond Earth will necessarily forge a shared conception of the human condition, initiated with the Pale Blue Dot photograph in 1990. Typical of this sentiment are the words of the astronomer Carl Sagan, who famously observed of this photograph: ‘On it everyone you love, everyone you know, everyone you ever heard of, every human being who ever was, lived out their lives'.

This naïvely humanistic vision has been one of the dominant tropes in the discourse on space since the 1950s, and it remains strong today, as with the claims of the United Nations Office for Outer Space Affairs (UNOOSA) that their task is to ‘uphold the vision of a more equitable future for all humankind through shared achievements in space'. This representational tendency mobilizes humanism to generate enthusiasm about space-related activities. But such representations are increasingly being recuperated by capitalist enterprise, so that it is not humankind but its modulation by space capitalists that will launch into the dark unknown. It is not humankind but capitalistkind that ventures forth. In early 2018, NASA was set to request $150 million in its 2019 budget to ‘enable the development and maturation of commercial entities and capabilities which will ensure that commercial successors to the ISS…are operational when they are needed', only one of many signs that space is becoming a space for capitalism. According to one estimate, the value of just one single asteroid would be more than $20 trillion in rare earth and platinum-group metals (Lewis, 1996), a precious prize indeed for profit-hungry corporations.10 Even the UNOOSA spoke vociferously in favor of the commercialization of space, appealing variously to the ‘industry and private sector' and elevating the ‘space economy' to a central pillar in its Space2030 Agenda (including the ‘use of resources that create and provide value and benefits to the world population in the course of exploring, understanding and utilizing space'), even as the UN agency falls back on a humanistic, almost social-democratic vision of the equitable distribution of benefits (and profits) from space mining, exploration, and colonization (UNOOSA, 2018).

**Capitalism is unsustainable and causes existential environmental obliteration, global structural violence, and imperial expansion.**

**Robinson 18** (William, Prof. of Sociology, Global and International Studies, and Latin American Studies, @ UC-Santa Barbara, “Accumulation Crisis and Global Police State,” 2018, <https://journals.sagepub.com/doi/10.1177/0896920518757054>)

Each major episode of crisis in the world capitalist system has presented the potential for systemic change. Each has involved the breakdown of state legitimacy, escalating class and social struggles, and military conflicts, leading to a restructuring of the system, including new institutional arrangements, class relations, and accumulation activities that eventually result in a restabilization of the system and renewed capitalist expansion. The current crisis shares aspects of earlier system-wide structural crises, such as of the 1880s, the 1930s or the 1970s. But there are six interrelated dimensions to the current crisis that I believe sets it apart from these earlier ones and suggests that a simple restructuring of the system will not lead to its restabilization – that is, our very survival now requires a revolution against global capitalism (Robinson, 2014). These six dimensions, in broad strokes, present a “big picture” context in which a global police state is emerging.

First, the system is fast reaching the ecological limits of its reproduction. We have already passed tipping points in climate change, the nitrogen cycle, and diversity loss. For the first time ever, human conduct is intersecting with and fundamentally altering the earth system in such a way that threatens to bring about a sixth mass extinction (see, e.g., Foster et al., 2011; Moore, 2015). These ecological dimensions of global crisis have been brought to the forefront of the global agenda by the worldwide environmental justice movement. Communities around the world have come under escalating repression as they face off against transnational corporate plunder of their environment. While capitalism cannot be held solely responsible for the ecological crisis, it is difficult to imagine that the environmental catastrophe can be resolved within the capitalist system given capital’s implacable impulse to accumulate and its accelerated commodification of nature.

Second, the level of global social polarization and inequality is unprecedented. The richest one percent of humanity in 2016 controlled over half of the world’s wealth and 20 percent controlled 95 percent of that wealth, while the remaining 80 percent had to make do with just five percent (Oxfam, 2017). These escalating inequalities fuel capitalism’s chronic problem of overaccumulation: the TCC cannot find productive outlets to unload the enormous amounts of surplus it has accumulated, leading to chronic stagnation in the world economy (see next section). Such extreme levels of social polarization present a challenge of social control to dominant groups. As Trumpism in the United States as well as the rise of far-right and neo-fascist movements in Europe so well illustrate, cooptation also involves the manipulation of fear and insecurity among the downwardly mobile so that social anxiety is channeled towards scapegoated communities. This psychosocial mechanism of displacing mass anxieties is not new, but it appears to be increasing around the world in the face of the structural destabilization of capitalist globalization. Extreme inequality requires extreme violence and repression that lend themselves to projects of 21st century fascism.

Third, the sheer magnitude of the means of violence and social control is unprecedented, as well as the magnitude and concentrated control over the means of global communication and the production and circulation of symbols, images, and knowledge. Computerized wars, drone warfare, robot soldiers, bunker-buster bombs, a new generation of nuclear weapons, satellite surveillance, cyberwar, spatial control technology, and so forth, have changed the face of warfare, and more generally, of systems of social control and repression. We have arrived at the panoptical surveillance society, a point brought home by Edward Snowden’s revelations in 2013, and the age of thought control by those who control global flows of communication and symbolic production. If global capitalist crisis leads to a new world war the destruction would simply be unprecedented.

Fourth, we are reaching limits to the extensive expansion of capitalism, in the sense that there are no longer any new territories of significance to integrate into world capitalism and new spaces to commodify are drying up. The capitalist system is by its nature expansionary. In each earlier structural crisis, the system went through a new round of extensive expansion – from waves of colonial conquest in earlier centuries, to the integration in the late 20th and early 21st centuries of the former socialist countries, China, India and other areas that had been marginally outside the system. There are no longer any new territories to integrate into world capitalism. At the same time, the privatization of education, health, utilities, basic services, and public lands is turning those spaces in global society that were outside of capital’s control into “spaces of capital,” so that intensive expansion is reaching depths never before seen. What is there left to commodify? Where can the system now expand? New spaces have to be violently cracked open and the peoples in these spaces must be repressed by the global police state.

### contention 2

#### contention 2 is the environment

#### commercial space tourism vehicles cause massive pollution

**Heilweil** 21 (Rebecca Heilweil, reporter for Open Sourced covering emerging technologies artificial intelligence and logistics, “How bad is space tourism for the environment? And other space travel questions, answered”, Recode Vox, 7/25/21, <https://www.vox.com/recode/22589197/space-travel-tourism-bezos-branson-rockets-blue-origin-virgin-galactic-spacex#:~:text=The%20emissions%20of%20a%20flight,space%20tourism%20becomes%20more%20popular>.) // el

5. What impact will commercial space travel have on the environment? The emissions of a flight to space can be worse than those of a typical airplane flight because just a few people hop aboard one of these flights, so the emissions per passenger are much higher. That pollution could become much worse if space tourism becomes more popular. Virgin Galactic alone eventually aims to launch 400 of these flights annually. “The carbon footprint of launching yourself into space in one of these rockets is incredibly high, close to about 100 times higher than if you took a long-haul flight,” Eloise Marais, a physical geography professor at the University College London, told Recode. “It’s incredibly problematic if we want to be environmentally conscious and consider our carbon footprint.” These flights’ effects on the environment will differ depending on factors like the fuel they use, the energy required to manufacture that fuel, and where they’re headed — and all these factors make it difficult to model their environmental impact. For instance, Jeff Bezos has argued that the liquid hydrogen and oxygen fuel Blue Origin uses is less damaging to the environment than the other space competitors (technically, his flight didn’t release carbon dioxide), but experts told Recode it could still have significant environmental effects. There are also other risks we need to keep studying, including the release of soot that could hurt the stratosphere and the ozone. A study from 2010 found that the soot released by 1,000 space tourism flights could warm Antarctica by nearly 1 degree Celsius. “There are some risks that are unknown,” Paul Peeters, a tourism sustainability professor at the Breda University of Applied Sciences, told Recode. “We should do much more work to assess those risks and make sure that they do not occur or to alleviate them somehow — before you start this space tourism business.” Overall, he thinks the environmental costs are reason enough not to take such a trip.

#### That hurts marginalized communities disproportionately

**United Nations 17** (United Nations, Department of Economic & Social Affairs, “Climate Change and Social Inequality”, 10/17, <https://www.un.org/esa/desa/papers/2017/wp152_2017.pdf>) // el

4 Effects of inequality on exposure to climate change hazards In general, exposure tends to be determined primarily by the location of dwelling and work. Given the location, however the exposure is influenced by the nature of work and tasks performed for livelihood. Both economic and political channels of influence of inequality play a role in determining the location and livelihood. 4.1 Greater exposure to flood, erosion, salinity, mudslides, etc. According to Neumann et al. (2015), a significant part of the population in developing regions now live in “low-elevation coastal zone” and 100-year flood plains, and their number is increasing in both absolute terms and as proportion of the population (Table 1). In general, coastal and near-shore habitats and their ecosystems are more exposed to the Table 1 Population living in low-elevation coastal zones and 100-year flood plains in developing countries Population Low elevation 100-year flood plain Region 2000 2030 2000 2030 2000 2030 Africa 811 1562 54 109 13 24 Asia 3697 4845 461 640 137 200 Latin America & Caribbean 521 702 32 40 6 8 Total 5029 7109 547 789 156 232 Least Developed Countries 645 1325 93 136 World 6101 8626 625 939 189 282 Source: B. Neuman et al., 2015, tables 4 and 5 (scenario B). Scenario B is based on projections from UN population data at the “low end” of global population growth, meaning global population is expected to be 7.8 billion by 2030. It also assumes inclusive social, political and economic governance. In other words, the most generous of the four scenarios examined in the paper – the other three have higher estimates. CLIMATE CHANGE AND SOCIAL INEQUALITY 1 3 effects of climate change (Barbier, 2015). Generally, it is the disadvantaged groups, who find themselves compelled to live in these areas, because they cannot afford to live in safer areas. A large percentage of the populations of low elevation coastal zones are rural – 84 per cent in Africa, 80 per cent in Asia, 71 per cent in Latin America and the Caribbean and 93 per cent in the least developed countries (Neuman et al., 2015). As is known, the incidence of poverty is greater in rural areas than in urban areas. It is also instructive that more people now live in deltas, which are frequently subject to flooding of both types – coastal flooding due to sea level rise and river flooding due to higher precipitation (Table 2). Researchers find that more of the people living in the precarious parts of the deltas belong to the disadvantaged groups (Lou et. al 2015 and Brouwer et al. 2007). In addition to flooding and erosion, the people living in coastal areas and in deltas also suffer from salinity intrusion (Dasgupta et al., 2014 and Rabbani et al. 2013). Shameem et al. (2014) estimate that 70 per cent of farmers in some coastal areas partially or fully ceased farming due to high levels of salinity. Due to their concentration in coastal areas and deltas, the disadvantaged groups are thus more exposed to salinity intrusion caused by climate change. However, greater exposure of the disadvantaged groups to climate hazards is not limited to rural areas only. Even among urban populations, it is the disadvantaged groups that are particularly exposed to climate hazards. An example of this can be observed in Dhaka, Bangladesh, where Braun and ABheure (2011) find that slum dwellers are more likely to live in areas prone to natural hazards. In general, many slums are located in low-lying spots of urban areas that are at high risk of flooding. Similarly, in many \*table\* Latin American countries disadvantaged groups are found to set up their dwellings along risky hill slopes in urban areas, exposing them to mudslides that are becoming more frequent due to climate change (Painter, 2007). 4.2 Greater exposure to drought, heatwaves, water scarcity, etc. About 40 percent of the Earth’s land surface and 29 percent of the world’s population live in arid, semi-arid, and dry sub-humid aridity zones, which are facing additional challenges due to climate change (Table 3). There is a larger concentration of disadvantaged groups of people (such as pastoralists and ethnic minorities) in these areas (WRI, 1997). Two thirds of the global population are estimated to live under conditions where water is severely scarce for at least one month of the year (Mekonnen and Hoekstra, 2016). This exposure is expected to increase with climate change. For example, the number of people exposed to droughts could rise by between 9 and 17 per cent by 2030 under scenarios where emissions growth rates aren’t reduced (Winsemius, et al., 2015). Drought exposure is also higher in rural than in urban areas (43 per cent versus 32 per cent, respectively). Given larger concentration of the people under the poverty line living in rural areas, this implies greater exposure to draught for the disadvantaged groups of people. Cross-country data also point to greater exposure of the disadvantaged groups to water scarcity. In countries with lower human development indexes (HDI), this exposure is much greater (50 per cent) than in countries with higher HDI (14 per cent) (Christenson, et al., 2014). Given the higher rates of households engaged in agricultural production in rural areas and in low income countries, the rates of exposure of disadvantaged groups to droughts is likely to increase further with climate change. 4.3 Effect of inequality on exposure via the political channel Often the compulsion to live in areas that are more exposed to the adverse effects of climate change is of politico-administrative nature, reflecting the political channel of causality noted in Section 3. For example, Mutter (2015) notes that both economic and administrative restrictions led to the concentration of large numbers of disadvantaged people in the Irawaddy Delta that was hard hit by the cyclone Nargis in 2008. Often economic and political factors interact and combine to influence the location decision and exposure to climate hazard. For example, economic and racial factors combined in creating the large concentration of low-income African American people in the low-lying districts of New Orleans before hurricane Katrina (Mutter 2015). 4.4 Greater exposure of disadvantaged groups via occupation and type of tasks Given the location, an important role in determining the exposure to climate hazards belongs to occupation and type of tasks performed. For example, whether somebody works outdoors and the degree to which a person’s tasks depends on weather and climate are important determinants of exposure. Needless to say, inequality plays an important role in the choice or allocation of occupation and type of tasks performed. Apart from income and asset inequality, gender and other types of inequality play an important role in this regard. For example, rural women’s lower asset positions as well as land tenure Table 3 Dry lands populations (estimations as of 1995) Region Population (million) Dry lands population (million) Africa 720 326 Americas & Caribbean 1093 182 Asia 3451 1475 Developing Regions 4533 1983 World 5702 2130 Sources: WRI, 1997. CLIMATE CHANGE AND SOCIAL INEQUALITY 1 5 arrangements and social restrictions limit the land available to them. This leads women farmers to work on more marginal land which is exposed to greater climate related hazards (Perez, et al., 2015). Also, social norms in many places require the women to collect water and firewood, often compelling them to travel long distances and confront hazardous situations in places where these are scarce. Consequently, they face greater exposure to adverse effects of climate change. 5 Effects of inequality on susceptibility to damages caused by climate change Given the same level of exposure, the disadvantaged groups are generally more susceptible to damage from climate hazards. As noted above, of the people living in the same floodplain, those with houses constructed of flimsy materials are more susceptible to damage from flood than those with houses made of sturdy materials. Similarly, in an arid area, people having air conditioning are less susceptible to health damages from excessive heat than those who do not have such facilities. The livelihoods that the disadvantaged groups find compelled to pursue may also increase their susceptibility to damage from climate hazards. Wodon et al. (2014), for example, report that the poorest households in five MENA countries – Algeria, Egypt, Morocco, Syria, and Yemen – experienced higher losses of income, crops, livestock and fish caught due to climate related changes than did the rich households. Lost income reported for the lowest income households was more than double the rate for the richest (46.4% vs 20.7%). Similarly, Gentle et al. (2014) find that low income households in the middle hills region of Nepal are more susceptible to damages from climate hazards than the wealthy households. Hill and Mejia-Mantilla (2015) show that low income farmers in Uganda lost greater shares of income from limited rainfall than the average farmer because of their limited options for changing crop patterns, limited ability to apply water saving technology, and limited access to agricultural extension services and water storage sources (UNDP, 2006). Patankar (2015) shows that low income families in Mumbai required repeated repairs to their homes to secure them against 2005 flood damage, and the cumulative cost often proved to be much greater as proportion of their income than it was the case for the rich. Sometimes, the disadvantaged groups suffer more climate damage even with less exposure. For example, low income households in Honduras reported considerably higher asset loss (31 per cent) due to Hurricane Mitch than did the non-poor (11 per cent), even in areas where the former had less exposure to this hurricane than the latter (Carter, et al., 2007). The disadvantaged groups are more susceptible to climate damages in part because of the lack of diversification of their assets. For example, the urban poor tend to have their savings in the form of housing stock, which is vulnerable to floods (Moser, 2007). Similarly, the rural poor often have their savings in the form of livestock, which is susceptible to droughts (Nkedianye, et al., 2011). Their situation contrasts with that of the wealthier households, who can diversify their assets, both spatially and financially and are therefore less susceptible to damage caused by climate hazards.5 One of the important ways in which inequality increases susceptibility of the disadvantaged groups to damages caused by climate change is through it health effects. Hallegatte, et al. (2016) find that the people living in poverty are more susceptible to the diseases that many climate hazards help to spread, including malaria and water borne diseases causing diarrhoea. This may be due to several reasons. For example, disadvantaged people may not have access to piped water sources, forcing them to drink water 5 The greater levels of damage as well as the more limited diversification of savings and assets feed into greater inequality of assets as a result of climate hazards. Greater susceptibility of the disadvantaged groups can therefore lead to widening of future inequality, as children of the poor families are left with diminished future capacities. 1 6 DESA WORKING PAPER NO. 152 containing pathogens during floods. Indeed, there were reports of greater incidence of diseases among residents of low-income slums in Mumbai in the wake of monsoon floods (Hallegatte, et al., 2016). Similarly, disadvantaged people suffer more adverse health effects from heatwaves and high temperatures, because they cannot afford heat alleviating amenities, including air conditioning. The greater susceptibility to health effects frequently undermines the income and asset position of disadvantaged groups in both short run and long run. In the short run, they suffer from loss of productivity, employment and income. In the long run, they suffer from loss of human capital (from lost school days, the development of chronic conditions such as stunting, and from general health and growth impacts, even future morbidity and higher mortality) (Somanathan, et al., 2014; Li, et al., 2016; Zivin and Neidell, 2014). 5.1 Gender and age inequality and susceptibility Gender and age play an important role in determining the susceptibility to damage caused by adverse effects of climate change. As noted above, the fact that women in many countries are tasked with collecting water and firewood means that they are more susceptible to damages from climate hazards (Egeru, et al., 2014 and IPCC 2014, p. 796).6 Sherwood (2013) finds that prolonged drought created poverty traps for women in Gituamba, Kenya. Using household surveys and village focus group studies conducted across nine countries in Africa, Perez et al. (2015) find that there are a number of issues affecting women that make them more susceptible to impacts of climate change than men.7 6 IPCC (2014, p. 796) notes that climate hazards increase and heighten existing gender inequalities. This happens because in many cases the women have to perform tasks that are more exposed to climate (such as fetching water from afar or gathering fuelwood from forests). 7 Among such issues are: limited control of land (in terms of both quantity and quality of land); less secure tenure; less access to common property resources; less cash to obtain goods or services; and less access to formally registered, Both the young and the old prove to be more susceptible to damage caused by climate hazards than the adults. This is not surprising, given their relative fragility. For example, IPCC reports that flood related mortality in Nepal among girls was twice as high as for women (13.3 per 1000 girls). The mortality was also higher for boys than for men (IPCC, 2014, p. 807-808). Hallegatte, et al. (2016) reports greater incidence in ailments among children following floods in Ho Chi Minh City. Heatwaves have notable effects on the elderly, particularly as they are already more likely to suffer from chronic illnesses, such as coronary heart disease or respiratory diseases that can be exacerbated by heat (Hutton, 2008). Elderly people are also more susceptible to greater health effects from floods and are less able to relocate in the event of disasters (Hutton, 2008). Elderly residents of Limpopo, South Africa lacked access to labour, necessary to construct their houses to withstand flooding. Consequently, their dwellings suffered greater damage (Khandlhela and May, 2006). These differential impacts apply across a variety of disadvantaged groups. For example, it was found in Vietnam that the elderly, widows, and disabled people – in addition to single mothers and women-headed households with small children – were most susceptible to damages caused both by floods and storms and by slow-onset events such as recurrent droughts (IPCC, 2014, p. 808-809). Similarly, Macchi et al. (2014) note that lower caste families, women and other marginal groups in the Himalayan villages in northwest India and Nepal are more susceptible to climate related effects. 5.2 Ethnic and racial inequalities and susceptibility The degree of susceptibility often depends on ethnicity and race. For example, the minority farmers, who make up the bulk of the population in the Irrawaddy delta in Myanmar, were more susceptible to damages due to lack of effective warning systems public and private external organisations that foster agriculture and livestock production. CLIMATE CHANGE AND SOCIAL INEQUALITY 1 7 and infrastructure and therefore suffered the most in terms of lost lives, incomes and assets as a result of the cyclone Nargis in 2008 (Mutter, 2015). IPCC (2014) notes the important role of social positions of different groups in determining the impact of climate change. For example, in many places in Latin America, Afro-Latinos and indigenous groups were found to suffer from disproportionate climate effects. (IPCC, 2014, p. 810). Moreover, differential effect of climate change with respect to race is found in both developing and developed countries, although in both cases low income status is also intertwined with race and ethnicity status. Effects on health were noted as an important concern regarding impacts of climate change on indigenous populations in Latin America. Climate hazards allow diseases to spread in areas where they could not previously thrive, leading to increases in rates of respiratory and diarrhoeal diseases. It has also exacerbated nutritional issues, which has further feedback effects on health outcomes for these populations (Kronik and Verner, 2010). There are also differences in susceptibility of different population groups, depending on whether they are engaged in agricultural activities or they are pastoralists. This refers both to the types of climate related effects, such as changes in rainfall that may affect crops or forage for grazing animals in different ways, and to the different lifestyles of the two groups. For example, on the one hand, pastoralists’ housing maybe temporary or less sturdy, meaning that they are more exposed to the elements. On the other hand, their way of life may limit their susceptibility because of their ability to relocate if local conditions are not conducive to their lifestyle. 5.3 Indirect market based effects of inequality on susceptibility The disadvantaged groups often prove more susceptible via the market and price changes. In the rural areas, the disadvantaged households generally do not own much land and thus are net buyers of food. Consequently, they suffer more from food price increase caused by climate hazards. By contrast, the wealthy households, owning surplus crop available for sale, may even benefit from the food price increase. In the cities, the disadvantaged groups obviously suffer due to rise in food prices, and since expenditure on food comprises a much larger share of their budget than it is the case for the rich, they suffer disproportionately more (Ivanic, et al., 2012). According to Hallegatte et al. (2016, p. 56), the poorest households in the developing world spend between 40 and 60 per cent of their income on food and beverages, compared to less than 25 per cent of wealthier households. 6 Effects of inequality on the ability to cope and recover Coping and recovery are the third channel through which the “inequality-climate change vicious cycle” works. Inequality implies less resources for the disadvantaged groups to undertake coping and recovery measures. These resources can generally take four forms: (i) households’ own (private) resources, (ii) community resources, (iii) resources provided by various non-government organisations (NGOs), including religious and philanthropic organizations and philanthropic activities of private companies, foundations, etc., and (iv) public resources provided by the government, including local governments. Disadvantaged groups are likely to be lacking in some, if not all, of these resources. As a result, their relative situation worsens further.