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#### Their representation of space as liberatory and transcendental while incorporating neutral threats to the people on ground reify systems of antiblack imperialism, carcerality, and international managerialism that allows for the state to distance its relationship to racial capitalism and continually engage in racial dispossession

Sage 14 [Daniel Sage is a professor at the Institute of Geography and Earth Science, University of Wales, Aberystwyth, UK, *How Outer Space Made America: Geography, Organization, and the Cosmic Sublime*, Ashgate 2014 //tjb recut apark 10/14/21]

In the preceding eight chapters I have argued that some of the unique qualities of outer space—vastness, Otherness, sublimity, timelessness, spacelessness—are just as integral to extra-terrestrial projections of US geopower, as its well-known capacity (Arendt, 1963; Cosgrove, 2001; Dickens and Ormrod, 2007; Dolman, 2001; Macdonald, 2007) to function as an Archimedean high point to monitor and control the surface, and atmosphere, of the Earth. **While the focus of my study has been the United States, and more specifically NASA, the implications of this cosmic projection of geopower—the American transcendental state—are global in reach, from enabling and shaping imperialistic ideologies** (Chapters 1-3 and 7) to **fuelling the extension of technocratic managerialism** (Chapter 4-6 and 8). What is more, messianic hope in America remains a global commodity, consumed, for example, through the internationally franchised Star Trek television episodes and films (Penley, 1997: 98-99), multinational ‘Space 2.0’ corporations, like SpaceX (Chapter 6), worldwide audiences to the addresses of American presidents (Chapter 6) and global tourist attractions like the National Air and Space Museum and Kennedy Space Center Visitor Complex (Chapter 7). **These global circulations suggest that while my empirical focus in this study has been on the extra-terrestrial assemblage of the American transcendental state, as viewed from within the borders of the US, the salience of my analysis is geo-political**. The development of the American transcendental state through space exploration must also be viewed as an integral component of a far older geopolitical project—the production of an American identity defined in terms of the transcendence of limits, whether technological, economic, spiritual or territorial, enabling the moral aggrandizement of the past, present and future of a horizontal strata of sovereign territory and its peoples (McDougall, 1997; Noble, 2002; Nye, 1994; O’Brien, 1988; Ricard, 1999; Stephanson, 1995). Over the last decade or so, a growing number of scholars, including geographers, have turned their attention to how messianic-exceptionalist visions of America as the ‘Promised Land’ of ‘Chosen People’ have inflected various imperialistic projects including: the pursuit of democracy through military intervention in the ‘global south’ (Anthony, 2008); the technocratic ‘greening’ of Western global capitalism (Singer, 2010); the building of a ‘culture of war’ in foreign policy (Marsella, 2011), the circumvention of international institutions (Agnew, 2006); and most prominently perhaps, George W. Bush’s ‘war on terror’ where invasions of Afghanistan and Iraq became justified as a ‘cosmic struggle between good and evil’ (Agnew, 2006: 183; see also Barkun, 2010; Dijink, 2006; Strum, 2010; Wallace, 2006). **All of this work indicates two points: first, the enduring Apocalyptic influence of dispensational pre-millennialism**1 **on both interventionist and isolationist currents within American (geo)politics** (Strum and Dittmer, 2010: 18); **and secondly, the rise of a religious cosmology that positions America at the moral, geographical, and spiritual, centre of the universe** (Strum, 2010: 150). My analysis of American spaceflight adds to this body of work on religion and geopolitics by drawing attention to five less discussed conduits of this pious vision of American geopower: (i) the secular—museums, family theme parks, systems management; (ii) the sublime—astronomical artwork, Moon landings and distant Nebula; (iii); the profane—Nazi slave labor camps, technocratic patriarchy, and dead astronauts; the technological (iv)—rocket production lines, O-rings, electrical wiring; and (v) the revolutionary—female astronauts, May 1968, and Richard Feynman. Analytically, these diverse registers suggest the utility of working with a broader, less explicitly spiritual, set of theoretical assumptions, to address the cosmological aspects of American geopolitics. This is why I mobilized the concept of the ‘American transcendental state’, rather than ‘deified nation’ (O’Brien, 1988: 41) within this study. **This deliberately hallucinogenic sounding term captures some sense that the messianic-exceptionalistic projection of American geopower is a more diffusive, experimental, fantasmic, embodied, and ostensibly secular, affair, than conveyed within much discursive analysis of the religious undercurrents inflecting American geopolitics** (for example Agnew, 2006; Dijink, 2006; Strum, 2010; Wallace, 2006). **I would like to suggest now that there is another benefit in bringing together these diverse practices under a broader analysis of the American transcendental state: their common geography becomes all the more obvious.** That is, all these practices involve thinking, doing or resisting, celestial transcendence as an apparatus of American geopower; hence they can all be rightly considered ‘vertical geopolitics’ (Elden, 2013; Graham, 2004; Graham and Hewitt, 2013). This label has developed to identify a body of work addressing how the circulation of American geopower involves more than two-dimensional geographies of area. **It currently includes analyses of; drone warfare** (Gregory, 2011); **aerial bombardment** (Graham, 2004); **police helicopters** (Adey, 2010); **satellite surveillance** (Macdonald, 2007) **and satellite drone navigation and targeting** (Gregory, 2011). Elden (2013: 40) explains that ‘vertical geopolitics’ is mostly focussed upon how state political technologies allow diverse populations to be measured, calculated, controlled and killed, ‘from above’, and occasionally ‘from below’ (for example Elden, 2013; Graham and Hewitt, 2013). By contrast, the vertical orientation I have adopted here, while related, is different. **Specifically, I have described how aspects of the projection of American identity, geopower, and territory, also involve a vertical spacelessness—a deterritorialization—a potential collapse into sublime, cosmic, insignificance; in short, rather than the ‘view from above’, the perspective I have traced has been a ‘view into the above’ (and back).** In part, therefore, my study can be considered a response to Elden’s (2013) recent question: ‘**How would our thinking of geo-power, geo-politics and geo-metrics work if we took the earth; the air and the subsoil; questions of land, terrain, territory; earth processes and understandings of the world as the central terms at stake, rather than a looser sense of the ‘global?**’ (p49) **I propose we add to this list celestial entities, including the Moon** (Chapter 3), **the Martian surface** (Chapter 6) **and the Eagle Nebula** (Chapter 7), **as well as God** (Agnew, 2006; Dittmer and Strum, 2010; Strum, 2013). Thus, perhaps we should be cautious of Elden’s (2013b) rather geocentric call ‘about how geopolitics might be thought as earth-politics rather than simply a synonym for global politics’ (p59). Instead, it might be more useful to bear in mind Deleuze and Guattari’s (1988: 101) argument that even absolute deterritorialization—something akin perhaps to the mathematical cosmic sublime of Kant (Nye, 1994: 7-8)—always involves reterritorialization(s). Recall how Charles Bonestell (Chapter 2), William Clancey (Chapter 6) and the National Air and Space Museum (Chapter 7), respectively, and persuasively, associated vistas of the Moon, Mars and the Eagle Nebula with the American West, and by extension locate America at the centre of God’s universe (Boime, 1991; Stephanson, 1995). This analysis of American spaceflight also sheds light on seldom acknowledged connections between religious and vertical geopolitics and technocracy. The relation between critical analysis of geopolitics (O Tuathail, 1996) and technocratic management (Alvesson, 1987), remains remarkably undeveloped. Arguably this lacuna says more about the disciplinary separation between critical security studies and organization studies (Grey, 2009) than the various intellectual cross- fertilizations between organization studies and human geography (Clegg and Kornberger, 2006; Dale and Burrell, 2008; Parker, 2013). Nevertheless, there are, as Grey (2009) maintains, clear resonances: Indeed it could said that, in the same way that the development of security studies in particular, and organization studies to an extent, was shaped by geo- politics of wars both hot and cold, so too many current and future directions be in part a reflection of developments in contemporary geo-politics (p31). **Some organizational practices are of course, very much on the ‘front line’ of practical geopolitics; that is, they comprise the ‘the foreign policy bureaucracy’** (Ó Tuathail and Dalby, 1998: 4) **through which geographical concepts are deployed to aid ‘conceptualization and decision making’ in ‘everyday foreign policy’** (O Tuathail, 1999: 110). **Examples here include the work of the US Air Force, the CIA (Central Intelligence Agency) and the UK’s Foreign and Common Wealth Office. There are also a host of other organizations that no doubt influence how practical geopolitics is produced, from security analysts like the RAND Corporation to global defense contractors like McDonnell Douglas.** However, analysis of the relationship between organizational and geopolitical practices remains embryonic. **For example, Anderson’s** (2011) **study of urban counter- insurgency and Gregory’s** (2011) **of drone warfare, do no more than merely infer that the rise of the ‘networked organization’ is reworking the projection of American geo-power.** Correspondingly, two organizational studies of the military only hint that, for example, masculine discipline (Godfrey et al., 2012) and team identities (Corona and Godart, 2010) shape and are themselves shaped by grand geopolitical narratives like the ‘war on terror’. **But the imbrication of geopolitical and organizational practice can also be more subtle and much less militaristic—concerning the anticipation and cultivation of geopower through shared national identities, that is ‘popular geopolitics’** (O Tuathail, 1999: 110). Here, the connection to organizational practices is no less significant, yet invisible in the literature. NASA offers a good example: from its inception, the space agency developed increasingly refined technocratic techniques that aligned people and machines to naturalize the pursuit of a popular geopolitics wedded to American geopower. Viewed in this way, imperialistic geopower and technocratic-managerialism are interwoven forces; hence the present study suggests the richness of more sustained critical analysis of organization and geopolitics. However, I am all too aware that in stressing the widespread application of this concept of the America transcendental state to understand American geopower— and, concomitantly, the fecundity of bringing together analyses of religion, verticality and now technocracy within critical geopolitics—I run the risk of constructing a totalizing, monstrous, edifice. **The reader might rightly ask at this juncture, paraphrasing Nietzsche, have you not gazed into the cosmic abyss of American geopower for too long; are you not also reifying American geopower in the cosmos rather than challenging it?** Indeed, throughout the preceding chapters I made reference to a rather singular sounding concept of the ‘American transcendental state’. But, as in the introduction, I must stress again here, that I took this decision for reasons of analytical clarity rather than to suggest I have revealed an independent, singular, definite and a priori reality (Law, 2006), some essence akin perhaps to what Agnew (2006: 184) refers to as ‘Americanism’. **Instead, within each chapter I have traced the progressive assemblage of the American transcendental state—that is, nothing less than the divinely sanctioned, exceptional, and messianic, right and duty, of America, and its leaders in its name** (Wallace, 2006: 225), **to command cosmic space and time by evoking forces of ‘good’ and ‘evil’, ‘us’ and ‘them’** (Agnew, 2006; Strum, 2010). But the immutability of this cosmic vision (Strum and Dittmer, 2010; Wallace, 2006) belies the transformative, fragmented, heterogeneous components that sustain it, across landscape artwork, through Kennedy’s Moon Speech, to the O-rings of Space Shuttle Challenger. Throughout this study I have suggested countless relations through which this vision is not only produced (Dijink, 2006; McDougall, 1997; Noble, 2002; Nye, 1994; Ricard, 1999; Stephanson, 1995; Wallace, 2006) but circulated, maintained, resisted, repaired, transformed, and experimented with. How then to conceptualize this heterogeneous, but obdurate, cosmic being? Latour’s actor-network theory (1987; 2005; 2012) is useful to an extent here; first, we can conceptualize the transcendental state as an ‘immutable mobile’ that ‘ends up traversing the universe’ by ‘pay[ing] for each transport with a transformation’ (Latour, 2013: 127); it is ‘not displacement without transformation but displacement through transformation (Latour, 2005: 223); second, the transcendental state can be understood as offering a prophetic, but partial, ‘panorama’ of the ‘world [cosmos] to be lived in’ (p189) which must then, in turn, be: ... carefully situated inside one of the many Omnimax theatres offering complete panoramas of society—and we now know that the more thrilling the impression, the more enclosed the room has to be. [American] Society is not the whole ‘in which’ everything is embedded, but what travels ‘through’ everything, calibrating connections and offering every entity it reaches some possibility of commensurability. (p242) **Read against Latour’s concepts of the ‘immutable mobile’ and the ‘localizable panorama’ it is easy to see why my analysis of American transcendental state has involved mapping circulations within as well as beyond our lives. And this is a political move too, because it suggests that opportunities to test and resist the American transcendental state are closer to hand than we might think**. As revealed in Chapter 8, a great deal of effort is required to keep the transcendental state circulating because the heterogeneous conduits it passes through—electrical wiring, teleconferences, flight readiness reviews, budget decisions and O-ring joints—are capricious and experimental; that is, affective. Other Chapters acknowledged similar fragility accompanying the assemblage of the transcendental state, including; the partially-owned Declaration of Independence (Chapter 1), the globally unifying Earthrise photograph of Apollo 8 (Chapter 3) and the rusting rockets on display in the gardens of the Kennedy Space Center Visitor Complex (Chapter 7). Now located within this chain of heterogeneous transformations, what strategies might aid us in purposefully transforming this now confined totality? **Or put differently, how might we engage outer space to resist this cosmic deification of America** (O Brien, 1988)**?** In concluding this study, I propose three techniques but no doubt there are many more. First, we can expose the void at the heart of this messianic-technocratic projection of geopower (Wallace, 2006). This approach was evidenced in Chapter 1 by Derrida’s (2002) deconstructive reading of Declaration of Independence. **Derrida** (2002) **emphasizes how signing the Declaration in God’s name entails no democratic ownership over America’s future, in outer space or elsewhere. Across the development of American spaceflight, the perils of messianic, free- floating, notions of ‘Progress’, ‘Exploration,’ ‘Frontier’ and ‘The Future’ are all too apparent, not least for NASA itself.** Lester and Robinson (2009) suggest the emergence of this critique within the American space policy community: We should accept that “exploration” is a multivalent term, with many meanings, some of which are contradictory, and all of which have historical precedent. For too long we have looked at the history of exploration selectively, seeking to find the antecedents which justify our own vision of exploration: as science, as human adventure, as geopolitical statement. This is a definitional fight which cannot be won. Space policy must acknowledge the multiple visions for space exploration, developing a clear-eyed metric of value which avoids the vagaries of lofty “exploration-speak”, If the merits of human exploration of the Moon and Mars are primarily symbolic and geopolitical, what are these goals worth in terms of federal funding? I am unconvinced by the economically instrumentalist conclusions made by Lester and Robinson (2009) about putting a value upon even NASA’s ‘softer’ geopower, but the general caution about harnessing nebulous messianic mythologies to advance American space exploration is valuable. Of course the problem is this tradition of finding our God in the cosmos is long-established as Olsson (2007) suggests via this retelling of the Babylonian creation epic, Enuma elish: Marduk is the Lord of lords ... Hail to the Chief! Fifty were his names, so numerous that if ever attacked he could always hide behind another alias. Never catchable as the specific this or that, always on the move as an ambiguous this and that ... Ungraspable multiplicity. ... In this mist-enveloped region of religion naming is the name of the game, an exercise in ontological transformations where earthly people appear as projections of heavenly gods, social relations as signs in the sky. ... a signified meaning searching for its own coordinates (Olsson, 2007: 23). Perhaps a more modest approach is required: we should simply resist the urge to name, and tame, the cosmos as a Whole, by naming a celestial Godhead in it that we claim for ourselves (Wallace, 2006) but cannot ever fully own. ‘Evil is the disaster of a truth when the desire to force the naming of the unnameable is unleashed . ... Evil is not disrespect for the name of the other, but rather the will to name at any price’ (Badiou, 2004: 115-6; original emphasis). Challenging the cosmic aggrandization of America might therefore imply some attempt to resist naming our God/Future/Progress in the cosmos. **Put simply, this all too easy act of cosmic de/reterroritalizaiton is too crude, too undemocratic, too costly.** A second, related, strategy which can be adopted to resist the American transcendental state was discussed within Chapter 3; this is the capacity to push transcendence to another plane or refuge—to follow one line of flight of cosmic deterritorialization and then re-territorialize the Earth in a panorama that starts with a common human experience, rather than those of any particular nation/ God/future. The aim of this strategy is to mobilize a cosmic imagination that can register something of the shared experience of being human. In Chapter 3 I discussed how the Earthrise photograph from NASA’s Apollo 8 mission have stimulated new cosmic imaginations—including ‘spaceship’ Earth (Cosgrove: 2001, 257-262; Henry and Taylor, 2009; Ward, 1964), Noetic science (Benjamin, 2003: 60-61), global political ecologies (Connolly, 2002)—that defied nationalistic appropriations by inferring a human transcendence. However, as the American author Kurt Vonnegut explains such a transcendental image of humanity, emptied of territorial divisions and difference, is not itself without risk: ‘Earth is such a pretty blue and pink and white pearl in the pictures NASA sent me. It looks so clean. You can’t see all the hungry, angry earthlings down there—and the smoke and sewage and trash and sophisticated weaponry’ (Vonnegut cited in Burrows, 1998: 423). Similarly, Deleuze and Guattari (1988) suggest we should always remain sceptical that de-territorialization is a progressive act on its own: ‘Never believe that a smooth space will suffice to save us’ (p500). A third strategy is to augment different affects amid the assemblage of the American transcendental state. **As described in Chapter 8, the American transcendental state depends upon the cultivation of confidence in technocracy allied to an affective becoming hopeful—a positive openness to the future as life enhancing—orientated around the transcendence of America in cosmic space and time.** But, as Anderson (2006), explains, becoming hopeful does not necessarily need to operate in this transcendental manner: hopefulness can also emerge not to ward off suffering, but through every day sorrows, through diminishment of the body’s potential to affect and be affected. Consider, for example, how Dotty Duke refused to discuss her fears and anxieties with her astronaut husband as she kept the ‘house in order and [took] out the garbage’ (Duke 1990—Chapter 5). Dotty Duke epitomizes a different kind of becoming hopeful—a capacity to remain open-ended about the future in a life enhancing manner through diminishment—devoid of discussion of a better future in Earth or in the cosmos; this is hope that challenges ‘the easy equation between transcendence and a future elsewhen or elsewhere in favor of an imminent transcendence from within vectors of diminishment’ (Anderson, 2006: 749; for more analysis of immanent transcendence related to Space see Smith, 2009: 211). Another affect which is useful in short-circuiting the hopeful assemblage of the transcendental state is boredom. Anderson (2004) describes boredom as the moment when the ‘“forgetting” intrinsic to habit has been momentarily incapacitated. It is the unravelling of habit, a sudden realization of the again’ (p743). **Boredom depresses the life enhancing capacity of ourselves to be open to the future, engendering stillness and slowness of thought-action in space- time, where, as Anderson (2004) puts it, the capacity to experience the ‘not yet’ (p749) is suspended. The evolution of American spaceflight might appear to some the antithesis of boredom, but, as Jorgensen (2009) suggests, the American humanization of outer space has gone hand in hand with endless repetition (of middle America):** **The August 1969 Life Special Issue, released to commemorate the landing, wants to produce sympathetic accounts of the astronauts. It is filled with glossy, high color photographs of the astronauts not only mastering outer space, but their domestic spaces as well.** Neil Armstrong bakes pizza, Buzz Aldrin jogs through the suburbs, and Mike Collins prunes his garden. **These images resonate with outer space itself, as the astronauts use tools in both terrestrial and extraterrestrial environments**. The spatula and shears the astronauts use to cook lamb curry and prune roses with resemble the objects they hold while walking the moon, these being a laser reflector, seismometer and solar wind sheet (p179). **There is no hopefulness on offer in Jorgensen’s (2009) reading of American spaceflight. Instead the boredom experienced in the cosmic repetition of middle America signals despair: ‘Apollo 11 represented an America that had become unhinged by its own technocracy, its middle class lifestyle, and television’** (p188). Jorgensen (2009) is not, of course, alone in identifying aspects of spaceflight repetitive, even boring. As the emergence of the Teacher in Space program demonstrated (see Chapter 8), NASA itself has historically attempted to introduce elements of excitement, even increased risk, to engage a global audience. Yet, of course, a balance has always had to be struck, as Parker (2009) explains of Apollo: ‘Everything was supposed to be boring, because boredom meant no surprises, and hence the possibility of the adventure in some sense rested on its denial’ (p326). **Although fleeting, boredom is surely an unavoidable ingredient in NASA’s technocratic confidence, but when focused and channeled, it does suspend hope in the cosmos as a better place, perhaps providing an opportunity for us to pause and register something of the sublime Otherness of Space, where we concurrently repeat and differ ourselves into infinity**: ‘Media representations of space travel turn the vastness of space into the similitude of domesticity, as human familiarity comes to stand in for the infinite. At the same time, the domestic attains the dimensions of the infinite, and in turn becomes strangely unfamiliar to the television viewer’ (Jorgensen, 2009: 179). These three techniques of cosmo-political intervention—refusal to name, human transcendence, and sensitivity to new affects—are all worthy of greater attention, especially when they can be connected up to, and interfere with, the assemblage of the American transcendental state. **Clearly not all of those involved directly in the development of spaceflight will want or be able to practise these techniques. Nevertheless even among this group these techniques are intended to offer greater receptivity to new cosmographical imaginations which move beyond the cosmic aggrandization of messianic-imperialistic-technocratic impulses.** If we have entered the Cosmic Age where all territorializing assemblages, all States, now derive vital energy from the Cosmos (Deleuze and Guattari (1988: 342), then the imperative becomes not to simply do cosmopolitics (Latour, 2005) but rather which cosmo-politics do we want to pursue? **My favoured vision of a Geography of Space is one where this question is endlessly asked but never answered with absolute confidence**.

#### The aff has picked their side of class struggle. Expansion of state jurisdiction allows the state to act in a renting relationship with companies and is a pre-condition of privatization.

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The state plays multiple roles in these processes and struggles. The (capi- talist) state has a fundamental and undeniably political role in the rent relation (Parenti 2015). This includes at least three functions. First, the state typically creates and institutes property rights and entitlements that allow rent to be extracted. For instance, it delimits concessions for mineral exploitation, delineates farmland for agricultural production, creates carbon credits, institutes ecosystem services, decrees planning and zoning laws, and so on. In this sense, it constitutes property as a social form, which is the pre-condition to its private appropriation and use: ‘the power of the state to limit private appropriation [is what] makes such an appropriation possible’ (Felli 2014, 271). Second, the state is a regulator. It sets and (in principle) enforces the distribution of titles, their conditions of use and so forth. For instance, it regulates the functioning of land development and creates frameworks to securitize mortgage debt. In “new” forms of rent-bearing ownership titles, the state establishes legal tools and markets to enable the trading of carbon credits and patents as well as to police infringement of various types of intel- lectual property. Third, and finally, the state can sometimes be itself or act like a landlord (Parenti 2015, 836). This is common in some economic sectors (e.g. mining) where the state is generally the de facto owner of the resource itself (Mommer 2002). The state is therefore fundamental to securing control over access to and use of property and associated value grabbing strategies. As a site of social struggle (Jessop 1990), the state is inseparable from the process of transforming socio-ecological property relations and establishing institutional and scalar arrangements that enable and uphold the capitalist process of accumulation (Parenti 2015). Similarly, de-coupling the rent economy’s cost onto and benefits from the public would not be possible without mobilizing the service of the state in the interest of the rentier class. In this way, the state finances the extra-economic infrastructure through which control over private property (through accumulation by dispossession) is organized and, in turn, maintains the appropriation and extraction of rents. Depending on class balances in different contexts, states thus facilitate and/or regulate “value grabbing.”

#### Models of space debris risk are totally incalculable and only contribute to an ideological smokescreen for neoconservative policies that produce imperial imaginations of a unified Earth that allow hegemons like the United States to secure itself in the face of threats to their dominance like debris.

Ormord, 12 (James, School of Applied Social Science, University of Brighton, “Beyond world risk society? A critique of Ulrich Beck’s world risk society thesis as a framework for understanding risk associated with human activity in outer space.” Environment and Planning D: Society and Space 2013, volume 31, pages 727 – 744)

Prior to the Iridium–Cosmos collision experts placed the odds of two objects larger than ten centimetres in diameter colliding in space at “millions, maybe even billions, to one” (Rincon, 2009). The chances of damage being sustained by operational objects as they collide with smaller objects are much higher, at 1–10%; this may be their single greatest threat (Rex, 1998; Williamson, 2006; Wright, 2009, page 6). A United Nations report in 1999 brought together a range of measurements and statistical models from different agencies in an attempt to draw up a risk assessment. These models “did not agree quantitatively because of differences in assumptions and starting conditions” (UN, 1999, page 25). But despite this, it concluded that collision risk in Low Earth Orbit (less than 2000 kilometres) was “not great”, and the collision risk in Geostationary Orbit was “correspondingly lower”. However, all were also agreed that the number of major collisions would rise exponentially if current trends continued. This is based on the understanding that because it takes a long time to disperse, debris created from one impact will go on to create more impacts in a ‘collision cascade’, referred to as the ‘Kessler Syndrome’ (Brearley, 2005; Williamson, 2006; Wright, 2009). In a 2006 report NASA referred to this situation as “supercritical” (Wright, 2009). Modelling this effect adds to the complexity of a risk assessment already understood to be limited by knowledge of current amounts of debris and of how spacecraft respond to impacts that “do not fall into categories normally known from solid-state physics” (Rex, 1998, page 100; UN, 1999). To these difficulties in modelling the physical risks to spacecraft should be added the impossibility of establishing the social and economic consequences of a collision cascade in Geostationary Orbit, which one author describes as a (limited) resource “necessary to human life” as “the space ... which allows contemporary communication practices to exist” (2) Geostationary Orbit exists at an altitude of 35 786 kilometres at which satellites appear stationary from Earth. See Collis (2009) for a useful discussion of its legal geography. (Collis, 2009, pages 55 and 49). Expert opinion has suggested a collision cascade “could take out world communications” (Ellis, 2009). Outer space was once considered inexhaustible. It is now being realised that the development of outer space has been unevenly concentrated in key regions (see MacDonald, 2007), with implications for thinking of outer space as a ‘common pool resource’. Debris might impede the use of space within a generation as the unintended consequences of human activity undermine its promise (Benko and Schrogl, 1997a). Earth’s orbit now has to be seen as a ‘fragile environment’ for human activity (Benko and Schrogl, 1997a; Williamson, 2006). A 1972 UN Convention established that the ‘launching state’ is liable for any damage caused by its activities or by nongovernmental entities operating under its jurisdiction. In terms of damage caused by debris in outer space, if fault can be established then financial reparation must be made to restore damage to people or property. There is therefore, in principle, a mechanism for establishing accountability. Lotta Viikari (2008) still holds out hope for the development of Environmental Impact Assessments and the extension of ‘polluter pays’ principles to space debris (page 20). This convention breaks down, however, in a ‘supercritical’ space environment in which it becomes increasingly difficult for a claims commission to establish cause, fault, and damages (Zhao, 2004). Due to the impossibility of establishing fault, no claims for compensation have ever been settled in regard to space debris (Kai-Uwe Schrogl, personal communication, October 2010). As international law only considers direct damage between states and their corporations, there is no incentive to protect the space environment itself (Brearley, 2005, page 26). As the shortcomings of the system of accountability have become increasingly apparent, measures to address the space debris issue have been agreed by international bodies. NASA guidelines having already been established following a commitment by President Reagan (in consultation with industry), the 1999 UN report detailed a number of possible strategies for dealing with the space debris issue. Firstly, space objects should avoid releasing debris as part of their normal operations, avoid on-orbit explosion (eg, by venting energy sources), and be disposed of at the end of their lifetimes, either by reducing their orbit so that they reenter the atmosphere more quickly or by moving them to a ‘disposal’ or ‘graveyard’ orbit further from the Earth, though neither is risk-free (Rex, 1998). Secondly, space object designers should protect them with adequate shielding and collision avoidance mechanisms. Many of these guidelines have since been reiterated in 2002 Inter-Agency Space Debris Coordination Committee guidelines and were eventually accepted by the UN in 2008. The possibility but incalculability of a future collision cascade is a prime example of late-modern risk. It is particularly interesting to note that the reports were also marked by the paradox of risk modelling in a reflexive society (Beck, 2009, page 136): scientists attempted to incorporate responses to their predictions into the predictions themselves, thus reducing the predicted risk on which these responses were supposedly based. But the degree of voluntary international cooperation in response to the issue of space debris appears to vindicate Beck’s optimism about a cosmopolitanism ‘from above’, shared with others such as David Held [and echoed in regard to space debris by David Wright (2009, page 10)]. There are, however, reasons to be sceptical. In an excellent paper on sovereignty in outer space, Jill Stuart (2009) contrasts Held’s (2002) cosmopolitan sovereignty with regime theories based on the Realpolitik of state confrontation [or Everett Dolman’s (2002) ‘Astropolitik’, on which see Fraser MacDonald (2007) for a critique]. Cosmopolitan sovereignty is based on a cosmopolitan consciousness both influencing and influenced by international cooperation in outer space (eg, the International Space Station). Stuart argues that the declining importance of the nation-state resonates with the ‘overview effect’ of viewing a borderless Earth from space (White, 1987). Despite her optimism, Stuart is aware that there are serious issues with Held’s cosmopolitanism, especially when applied to outer space. There is good reason to believe that the apparent cosmopolitanism of human activity in outer space is an ideological smokescreen behind which neoconservative policies are being pursued (see, for example, Caldicott, 2002). In his analysis of images of Earth taken from space, Denis Cosgrove (1994) identifies both a ‘One World’ discourse that views a globally connected world as the project of a modern Christian American imperialism, and a ‘Whole Earth’ vitalist environmentalism that sees Earth as fragile, isolated organic unity. “Each”, however, “effectively exemplifies the Apollonian urge to re-establish a transcendental, univocal, and universally valid vantage point from which to sketch a totalising discourse” (page 288). Both thus erase locality. Hans Magnus Enzensberger (1996) also tears apart the ‘spaceship Earth’ ideology reflected in White’s overview effect, arguing that the illusion of a unified Earth serves only to disguise inequalities of power. The lack of accountability for space debris actually polarises international interest in space debris mitigation. States such as the US that rely on the ‘space operating environment’ to exercise control over social order (see Dickens and Ormrod, 2009), and that have an economic interest in maintaining capital growth in outer space, have a long-term interest in mitigating against debris [although the US withholds high-quality data because of security concerns (Rincon, 2009)]. States with only a short-term interest in space, such as Indonesia, have not been willing to mitigate space debris (Benko and Schrogl, 1997a). Rational actor theory has been employed to argue both that the major spacefaring nations will be willing to mitigate space debris voluntarily (Brearley, 2005) and that international agreements are necessary (Viikari, 2008). Such theory reaches its limits here as it cannot cope with the differing political and economic interests within states and their temporal nature. Even when alliances and agreements hold, it must be questioned whether the current trajectory of space debris mitigation serves the interests of a global public. As Enzensberger (1996) observes, industrial measures to protect the environment either serve to concentrate capital in the hands of larger companies as smaller companies cannot finance their own mitigation systems, or they manifest themselves as costs to the public (page 26). Viikari (2008, page 24) suggests the former is also true of competing spacefaring states. Viikari nonetheless advocates a system wherein ‘environmental losers’ could receive other benefits. Neil Smith (2009) anticipates the development of outer space becoming the next stage in the extensive expansion of capitalism. He also makes clear, in relation to carbon trading on Earth, that a system such as Viikari proposes would neither protect the nearby space environment nor spread the benefits of space activity more equally (it merely represents ‘the vertical integration of nature into capital’). The costs borne by the public, meanwhile, include those associated with debris-monitoring and with state mission compliance with international guidelines. There has also been discussion of developing lasers, tethers, and slings to drag debris out of orbit (ESA, 2005), all of which introduce their own forms of risk. A contract to develop such technology would benefit one space technology company or another but the cost would be borne by the public, as recently demonstrated by NASA’s $1.9 million award to Star Technology and Research to develop the ElectroDynamic Debris Eliminator (Chang, 2012). Commercial sector compliance with voluntary codes of practice is understandably low as it can be extremely costly and organisations within the sector cannot be held responsible in the event of catastrophe. Nor does capital, as an abstract and fluid entity, have any interest in the long-term future of the space environment. Satellites fix capital for a decade, but their investors have no concern for the future beyond this. Whether or not guidelines are forced on commercial operators will depend on the relationship between states or suprastates and capital. While the costs of mitigation are seen to undermine commercial viability it is unlikely that procedures will become compulsory. This includes the possibility of a launch tax, which would fly in the face of legislative trends in US space policy. Compulsory measures are more likely, however, if major stakeholders in the space industry become the ones to profit from them. European company EADS Astrium has funded £1 million in research into the CubeSail project at the Surrey Space Centre in the UK. The CubeSail is intended to drag satellites out of orbit at the end of their lifetimes. EADS is a major state contractor as well as a commercial operator. France has recently made it law that satellites under its jurisdiction must be deorbited after twenty-five years. There are profits to be made by Astrium if other countries follow suit. The politics of space debris call into question Beck’s assertion that the old alliances between the state, capital, and science are over. In recent work, Beck (2005, page 138) makes clear that he believes the transnational logic of capital trumps the power of states. But this work lacks the attention to the complexity of relationships between neoliberal and neoconservative politics that characterises the work of David Harvey (2003). Harvey argues that states vacillate historically between protecting regional interests and opening borders. The creation of larger and larger alliances of states is one potential outcome of this process. It may be that international state alliances in one form or another take responsibility for space debris. But Harvey reminds us that, firstly, these ‘cosmopolitan’ agreements do not represent the public interest but exist to safeguard capital accumulation, and, secondly, that they are always prone to dissolution. None of the parties involved support the measure most certain to improve orbital pollution, which is to stop (or limit) the launch of objects into orbit (UN, 1999). Instead, the solutions being pursued only serve to deepen the contradiction between those who benefit from risk mitigation and those who bear the costs. As attention to the problem grows, the perceived impending catastrophe appears to demand an immediate technological solution that actually obscures the politics at work [see de Goede and Randalls (2009); see also Swyngedouw (2007) on catastrophism and climate change].

#### Accumulation, appropriation, and extraction all occur through racial dispossession – racialized populations are fractured and territorialized to form the state of hyper-exploitation for financial capital

Wang 18, Jackie, black studies scholar, poet, multimedia artist, and PhD candidate in the Department of African and African American Studies at Harvard, “Carceral Capitalism”, <http://criticaltheoryindex.org/assets/CarceralCapitalism---Wang-Jackie.pdf>, Accessed 10/30/21 VD

Racial Capitalism and Settler Colonialism Given the dual character of capitalist accumulation identified by both Rosa Luxemburg and David Harvey, what new understanding of capitalism would be generated by focusing on dispossession and expropriation over .work and production? Contemporary political theorists as well as critical ethnic studies, black studies, and Native studies scholars and activists analyze how racial slavery and seeder colonialism provide the material and territorial foundation for U.S. and Canadian sovereignty. Rather than casting slavery and Native genocide as temporally circumscribed events chat inaugurated the birth of capitalism in the New World ("primitive accumulation"), they show how the racial logics produced by these processes persist to this day: In order to recuperate the frame of political economy, a focus on the dialectic of racial slavery and settler colonialism leads to important revisions of Karl Marx's theory of primitive accumulation. In particular, Marx designates the transition from feudal to capitalist social relations as a violent process of primitive accumulation whereby "conquest, enslavement, robbery, murder, in short, force, play the greatest part." For Marx, chis results in the expropriation of the worker, the proletariat, who becomes the privileged subject of capitalist revolution. [f we consider primitive accumulation 35 a persistent structure rather than event, both Afro-pessimism and settler colonial studies destabilize normative conceptions of capitalism through the conceptual displacements of the proletariat. As Coulthard demonstrates, in considering Indigenous peoples in relation to primitive accumulation, "it appears that the history and experience of dispossession, not proletarianization, has been the dominant background structure shaping the character of the historical relationship between Indigenous peoples and the Canadian state." It is thus dispossession of land through genocidal elimination, relocation, and theft that animates Indigenous resistance and anticapitalism and "less around our emergent status 35 'rightless proletarians.'" If we extend the frame of primitive accumulation to the question of slavery, it is the dispossession of the slave's body rather than the proletarianization of labor that both precedes and exceeds the frame of settler colonial and global modernity. 13 As lyko Day notes, Native dispossession occurs through the expropriation of land, while black dispossession is characterized by enslavement and bodily dispossession. Although both racial logics buttress white accumulation and are defined by a "genocidal limit concept" that constitutes these subjects as disposable, Day notes that "the racial content of Indigenous peoples is the mirror opposite of blackness. From the beginning, an eliminatory project was driven to reduce Native populations through genocidal wars and later through statistical elimination through blood quantum and assimilationist policies. For slaves, an opposite logic of exclusion was driven to increase, not eliminate, the population of slaves."14 A debate has ensued in critical ethnic studies about which axis of dispossession is capitalism's condition of possibility: the expropriation of Native land or chattel slavery? Was the U.S. made possible primarily by unbridled access to black labor, or through territorial conquest? Is the global racial order defined-as Day writes-primarily by the indigenous-settler binary or the black-nonblack binary? At stake in this debate is the question of which axis of dispossession is the "base" from which the "superstructures" of economy, national sovereignty, or even subjectivity itself emerge. Those who argue that settler colonialism is central have sometimes made the claim that even black Americans participate in settler colonialism and indigenous displacement by continuing to live on stolen land, while those who center slavery and antiblackness have sometimes viewed Native Americans as perpetrators of anriblackness insofar as some uibes have historically owned slaves and seek state recognition by making land-based claims to sovereignty-a claim that relies on a political grammar that black Americans do not have access to, as slaves were rem from their native lands when they were transported co the Americas (see Jared Sexton's "The Vel of Slavery"). Although weighing in on this debate is beyond rhe scope of this essay, I generally agree with Day's assertion that to treat this set of issues as a zero-sum game obfuscates the complexity of these processes. With that said, it is important to note that this book deals primarily with the antiblack dimensions of prisons, police, and racial capitalism, though I acknowledge that analyses of settler colonialism are equally vital to understanding the operations of racial capitalism and how race is produced through multiple expropriative logics. Gendered Expropriation Though this book focuses primarily on black racialization in a contemporary context, it is worth noting that expropriation reproduces multiple categories of difference--including the man-woman gender binary. Although categories of difference were not invented by capitalism, expropriative processes assign particular meanings to categories of difference. "Woman" is reproduced as inferior through the unwaged theft of her labor, while the esteem of the category of "man" is propped up by the valorization of his labor. Even when women are in the professional workforce, they are still vulnerable to expropriation when they are given or take on work beyond their formal duties-whether it's washing the dishes at the office, mentoring students, or doing thankless administrative work while male colleagues gee the "dysfunctional genius" pass. But above all, gendered expropriation occurs through the extraction of care labor, emotional labor, as well as domestic and reproductive labor all of which is enabled by the enforcement of a rigid gender binary. This system is propped up by gender socialization, which compels women to psychologically internalize a feeling of responsibility for others. Although, at a glance, ic might seem that the expropriation of women's labor happens primarily through housewifeitization, the marriage contract, and the assignment of child-care duties to women, in the current epoch-characterized by an aging baby boomer population and a shortage of geriatric health-care workers-women are increasingly filling this void by taking care of sick parents, family members, and loved ones. It is hardly surprising that two-thirds of those who care for chose with Alzheimer's disease are women, even as women are the primary victims of this disease. Given thac women's lives are often interrupted by both childcare duties and caring for ailing family members, it's also hardly surprising that women accumulate many fewer assets and arc more likely to retire into poverty than their male counterparts. A recent report found that the European Union gender pension gap was 40 percent, which far exceeds the gender pay gap of 16 percent. Overall, gender is a material relation that, among other things, bilks women of their futures. The aged woman who has toiled by caring for others is left with little by the end of her life. Though gender distinctions are maintained through expropriative processes, they also have consequences beyond the economic and material realm. While it could be said that disposability is the logic that corresponds to racialized expropriation, gendered subjectivation has as its corollary rapeability. It also goes without saying that these expropriative logics are not mutually exclusive, as nonwhite women and gender-nonconforming people may be subject to a different set of expropriative logics than white women. Racalized Expropriation Although I do not claim that expropriation should be defined exclusively as racialization (again, because different expropriative logics reproduce multiple categories of difference), this book deals primarily with the antiblack racial order that is produced by late-capitalist accumulation. Michael C. Dawson and Nancy Fraser are two contemporary political theorists who have defined expropriation as a racializing process in capitalist societies. In "Hidden in Plain Sight," Dawson takes Fraser to task for not acknowledging racialized expropriation as one of the "background domains" of capitalist society. Understanding the logic of expropriation, in his view, is necessary for understanding which modes of resistance are needed at this historical juncture. His article begins with a meditation on the question: Should activists and movements such as Black Lives Matter focus on racialized state violence (police shootings, mass incarceration, and so forth), or should they focus on racialized inequality cawed by expropriation and exploitation? What is the relationship between the first logic-characterized by disposability-and the second logic-characterized by exploitability and expropriability? Rather than describing these logics as distinct forms of antiblack racism, he analyzes them as two dimensions of a dynamic process whereby capitalist expropriation generates the racial order by fracturing the population into superior and inferior humans: Understanding the foundation of capitalism requires a consideration of "the hidden abode of race": the ontological distinction between superior and inferior humans-codified as race-that was necessary for slavery, colonialism, the theft of lands in the Americas, and genocide. This racial separation is manifested in the division between full humans who possess the right to sell their labor and compete within markets, and chose that are disposable, discriminated against, and ultimately either eliminated or superexploited.15 Black racialization, then, is the mark that renders subjects as suitable for-on the one hand-hyperexploitation and expropriation, and, on the other hand, annihilation. Before the neoliberal era, the racial order was propped up by the state, and racial distinctions were enforced through legal codification, Jim Crow segregation, and other formal arrangements. In a contemporary context, though the legal regime undergirding the racial order has been dismantled, race has maintained its dual character, which consists of "not only a probabilistic assignment of relative economic value but also an index of differential vulnerability to state violence." 16 In other words, vulnerability to hyperexploitation and expropriation in the economic domain and vulnerability to premature death in the political and social domains. My essay on the Ferguson Police Department and the city's program of municipal plunder is an attempt to make visible the hidden backdrop of Mike Brown's execution: the widespread racialized expropriation of black residents carried out by the criminal justice arm of the state. It is not just that Mike Brown's murder happened alongside the looting of residents at the behest of the police and the city's financial manager, but that racial legacies that have marked black residents as lootable are intimately tied to police officers' treatment of black people as killable. The two logics reinforce and are bound up with each other. In her response co Dawson's analysis of racialization as expropriation, Fraser develops Dawson's claims by looking at the interplay between economic expropriation and "politically enforced status distinctions." 17 Not only does accumulation in a capitalist society occur along the two axes of exploitation and expropriation, but one makes the other possible in that the "racialized subjection of those whom capital expropriates is a condition of possibility for the freedom of those whom it exploits." 18 In other words, the "front story" of free workers who are contracted by capitalists to sell their labor-power for a wage is enabled by, and depends on, expropriation that takes place outside this contractual arrangement. Fraser further extends Dawson's analysis by offering a historical account of the various regimes of racialization. In her analysis of the "proletarianization" of black Americans as they migrated from the South to industrial centers in the North and Midwest during the first half of the twentieth century, she points out that even in the context of industrial "exploitation," the segmented labor market was organized such that a "confiscatory premium was placed on black labor." Black industrial workers were paid less than their white counterparts. In some sense, the racialized gap in earnings can be thought of as the portion that was expropriated from black workers. It is not as though the black laborers who joined the ranks of the industrial proletariat were newly subjected to exploitation rather than expropriation, but that these two methods of accumulation were operating in tandem. In the "present regime of racialized accumulation"- which she refers to as "financialized capitalism"-Fraser notes that there has been a loosening of the binary that has historically separated who should be subjected to expropriation from who should be subjected to exploitation, and that during the present period, debt is regularly deployed as a method of dispossession: Much large-scale industrial exploitation now occurs outside the historic core, in the BRICS countries of the semi-periphery. And expropriation has become ubiquitous, afflicting not only its traditional subjects but also those who were previously shielded by their status as citizenworkers. In these developments, debt plays a major role, as global financial institutions pressure states to collude with investors in extracting value from defenseless populations. 19 While I agree with Fraser's claim that the "sharp divide" berween "expropriab le subjects and exploitable citizen-workers" has been replaced by a "contin uum" (albeit a continuum chat remains racialized), I would add that the existence of poor whites who have fallen out of the middle class or have been affected by the opiate crisis at the present juncture represents not racial progress for black Americans, but the generalization of expropriability as a condition in the face of an accumulation crisis. In other words, immiseration for all rather than a growing respect for black Americans. Fraser rightly points out that "expropriation becomes tempting in periods of crisis."20 Sometimes the methods of accumulation that were once reserved exclusively for racialized subjects bleed over and are used on those with privileged status markings. If expropriation and exploitation now occur on a continuum, then it has been made possible, in part, by late capitalism's current modus operandi: the probabilistic ranking of subjects according to risk, sometimes indexed by a person's credit score. As I will demonstrate in the coming sections, this method is not a race-neutral way of gleaning information about a subject's personal integrity, credibility, or financial responsibility. It is merely an index of already-existing inequality and a way to distinguish between which people should be expropriated from and which should be merely exploited.

#### Neoliberal capitalism will produce extinction – the system reproduces crises that depoliticize the left, undermine futural thought, and postpone its demise – the impacts are environmental collapse, endless war, and the rise of fascism

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The problem may be summarized as follows. Capitalism has indeed created the conditions for general prosperity and therefore for its own supersession. But it has also blocked, and continues to block, any hope of realizing this transformation. We cannot wait for capitalism to transform on its own, but we also cannot hope to progress by appealing to some radical Outside or by fashioning ourselves as militants faithful to some “event” that (as Badiou has it) would mark a radical and complete break with the given “situation” of capitalism. Accelerationism rather demands a movement against and outside capitalism—but on the basis of tendencies and technologies that are intrinsic to capitalism. Audre Lord famously argued that “the master’s tools will never dismantle the master’s house.” But what if the master’s tools are the only ones available? Accelerationism grapples with this dilemma. What is the appeal of accelerationism today? It can be understood as a response to the particular social and political situation in which we currently seem to be trapped: that of a long-term, slow-motion catastrophe. Global warming, and environmental pollution and degradation, threaten to undermine our whole mode of life. And this mode of life is itself increasingly stressful and precarious, due to the depredations of neoliberal capitalism. As Fredric Jameson puts it, the world today is characterized by “heightened polarization, increasing unemployment, [and] the ever more desperate search for new investments and new markets.” These are all general features of capitalism identified by Marx, but in neoliberal society we encounter them in a particularly pure and virulent form. I want to be as specific as possible in my use of the term “neoliberalism” in order to describe this situation. I define neoliberalism as a specific mode of capitalist production (Marx), and form of governmentality (Foucault), that is characterized by the following specific factors: 1. The dominating influence of financial institutions, which facilitate transfers of wealth from everybody else to the already extremely wealthy (the “One Percent” or even the top one hundredth of one percent). 2. The privatization and commodification of what used to be common or public goods (resources like water and green space, as well as public services like education, communication, sewage and garbage disposal, and transportation). 3. The extraction, by banks and other large corporations, of a surplus from all social activities: not only from production (as in the classical Marxist model of capitalism) but from circulation and consumption as well. Capital accumulation proceeds not only by direct exploitation but also by rent-seeking, by debt collection, and by outright expropriation (“primitive accumulation”). 4. The subjection of all aspects of life to the so-called discipline of the market. This is equivalent, in more traditional Marxist terms, to the “real subsumption” by capital of all aspects of life: leisure as well as labor. Even our sleep is now organized in accordance with the imperatives of production and capital accumulation. 5. The redefinition of human beings as private owners of their own “human capital.” Each person is thereby, as Michel Foucault puts it, forced to become “an entrepreneur of himself.” In such circumstances, we are continually obliged to market ourselves, to “brand” ourselves, to maximize the return on our “investment” in ourselves. There is never enough: like the Red Queen, we always need to keep running, just to stay in the same place. Precarity is the fundamental condition of our lives. All of these processes work on a global scale; they extend far beyond the level of immediate individual experience. My life is precarious, at every moment, but I cannot apprehend the forces that make it so. I know how little money is left from my last paycheck, but I cannot grasp, in concrete terms, how “the economy” works. I directly experience the daily weather, but I do not directly experience the climate. Global warming and worldwide financial networks are examples of what the ecological theorist Timothy Morton calls hyperobjects. They are phenomena that actually exist but that “stretch our ideas of time and space, since they far outlast most human time scales, or they’re massively distributed in terrestrial space and so are unavailable to immediate experience.” Hyperobjects affect everything that we do, but we cannot point to them in specific instances. The chains of causality are far too complicated and intermeshed for us to follow. In order to make sense of our condition, we are forced to deal with difficult abstractions. We have to rely upon data that are gathered in massive quantities by scientific instruments and then collated through mathematical and statistical formulas but that are not directly accessible to our senses. We find ourselves, as Mark Hansen puts it, entangled “within networks of media technologies that operate predominantly, if not almost entirely, outside the scope of human modes of awareness (consciousness, attention, sense perception, etc.).” We cannot imagine such circumstances in any direct or naturalistic way, but only through the extrapolating lens of science fiction. Subject to these conditions, we live under relentless environmental and financial assault. We continually find ourselves in what might well be called a state of crisis. However, this involves a paradox. A crisis—whether economic, ecological, or political—is a turning point, a sudden rupture, a sharp and immediate moment of reckoning. But for us today, crisis has become a chronic and seemingly permanent condition. We live, oxymoronically, in a state of perpetual, but never resolved, convulsion and contradiction. Crises never come to a culmination; instead, they are endlessly and indefinitely deferred. For instance, after the economic collapse of 2008, the big banks were bailed out by the United States government. This allowed them to resume the very practices—the creation of arcane financial instruments, in order to enable relentless rent-seeking—that led to the breakdown of the economic system in the first place. The functioning of the system is restored, but only in such a way as to guarantee the renewal of the same crisis, on a greater scale, further down the road. Marx rightly noted that crises are endemic to capitalism. But far from threatening the system as Marx hoped, today these crises actually help it to renew itself. As David Harvey puts it, it is precisely “through the destruction of the achievements of preceding eras by way of war, the devaluation of assets, the degradation of productive capacity, abandonment and other forms of ‘creative destruction’” that capitalism creates “a new basis for profit-making and surplus absorption.” What lurks behind this analysis is the frustrating sense of an impasse. Among its other accomplishments, neoliberal capitalism has also robbed us of the future. For it turns everything into an eternal present. The highest values of our society—as preached in the business schools—are novelty, innovation, and creativity. And yet these always only result in more of the same. How often have we been told that a minor software update “changes everything”? Our society seems to function, as Ernst Bloch once put it, in a state of “sheer aimless infinity and incessant changeability; where everything ought to be constantly new, everything remains just as it was.” This is because, in our current state of affairs, the future exists only in order to be colonized and made into an investment opportunity. John Maynard Keynes sought to distinguish between risk and genuine uncertainty. Risk is calculable in terms of probability, but genuine uncertainty is not. Uncertain events are irreducible to probabilistic analysis, because “there is no scientific basis on which to form any calculable probability whatever.” Keynes’s discussion of uncertainty has strong affinities with Quentin Meillassoux’s account of hyperchaos. For Meillassoux, there is no “totality of cases,” no closed set of all possible states of the universe. Therefore, there is no way to assign fixed probabilities to these states. This is not just an empirical matter of insufficient information; uncertainty exists in principle. For Meillassoux and Keynes alike, there comes a point where “we simply do not know.” But today, Keynes’s distinction is entirely ignored. The Black-Scholes Formula and the Efficient Market Hypothesis both conceive the future entirely in probabilistic terms. In these theories, as in the actual financial trading that is guided by them (or at least rationalized by them), the genuine unknowability of the future is transformed into a matter of calculable, manageable risk. True novelty is excluded, because all possible outcomes have already been calculated and paid for in terms of the present. While this belief in the calculability of the future is delusional, it nonetheless determines the way that financial markets actually work. We might therefore say that speculative finance is the inverse—and the complement—of the “affirmative speculation” that takes place in science fiction. Financial speculation seeks to capture, and shut down, the very same extreme potentialities that science fiction explores. Science fiction is the narration of open, unaccountable futures; derivatives trading claims to have accounted for, and discounted, all these futures already. The “market”—nearly deified in neoliberal doctrine—thus works preemptively, as a global practice of what Richard Grusin calls premediation. It seeks to deplete the future in advance. Its relentless functioning makes it nearly impossible for us to conceive of any alternative to the global capitalist world order. Such is the condition that Mark Fisher calls capitalist realism. As Fisher puts it, channeling both Jameson and Žižek, “it’s easier to imagine the end of the world than the end of capitalism.”

#### Neoliberalism strips language of its critical possibility and produces race neutrality – this reifies whiteness and lets white people think they are free of responsibility – thus the ROB and ROJ is to endorse tactics racial capitalism

**Giroux 03,** Henry, American and Canadian scholar and cultural critic, Communication Education, “Spectacles of Race and Pedagogies of Denial: Anti-Black Racist Pedagogy Under the Reign of Neoliberalism”, <https://www.tandfonline.com/doi/abs/10.1080/0363452032000156190?journalCode=rced20>, Accessed 6/28/21 VD

Under the reign of neoliberalism in the United States, society is largely defined through the privileging of market relations, deregulation, privatization, and consumerism. Central to neoliberalism is the assumption that profit making be construed as the essence of democracy, thus providing a rationale for a handful of private interests to control as much of social life as possible to maximize their financial investments. Strictly aligning freedom with a narrow notion of individual interest, neoliberalism works hard to privatize all aspects of the public good and simultaneously narrow the role of the state as both a gatekeeper for capital and a policing force for maintaining social order and racial control. Unrestricted by social legislation or government regulation, market relations as they define the economy are viewed as a paradigm for democracy itself. Central to neoliberal philosophy is the claim that the development of all aspects of society should be left to the wisdom of the market. Similarly, neoliberal warriors argue that democratic values be subordinated to economic considerations, social issues be translated as private dilemmas, part-time labor replace full-time work, trade unions be weakened, and everybody be treated as a customer. Within this market-driven perspective, the exchange of capital takes precedence over social justice, the making of socially responsible citizens, and the building of democratic communities. There is no language here for recognizing antidemocratic forms of power, developing nonmarket values, or fighting against substantive injustices in a society founded on deep inequalities, particularly those based on race and class. Hence, it is not surprising that under neoliberalism, language is often stripped of its critical and social possibilities as it becomes increasingly difficult to imagine a social order in which all problems are not personal, social issues provide the conditions for understanding private considerations, critical reflection becomes the essence of politics, and matters of equity and justice become crucial to developing a democratic society. It is under the reign of neoliberalism that the changing vocabulary about race and racial justice has to be understood and engaged. As freedom is increasingly abstracted from the power of individuals and groups to participate actively in shaping society, it is reduced to the right of the individual to be free from social constraints. In this view, freedom is no longer linked to a collective effort on the part of individuals to create a democratic society. Instead, freedom becomes an exercise in self-development rather than social responsibility, reducing politics to either the celebration of consumerism or a privileging of a market-based notion of agency and choice that appear quite indifferent to how power, equity, and justice offer the enabling conditions for real individual and collective choices to be both made and acted upon. Under such circumstances, neoliberalism undermines those public spaces where noncommercial values and crucial social issues can be discussed, debated, and engaged. As public space is privatized, power is disconnected from social obligations, and it becomes more difficult for isolated individuals living in consumption-oriented spaces to construct an ethically engaged and power-sensitive language capable of accommodating the principles of ethics and racial justice as a common good rather than as a private affair. According to Bauman (1998), the elimination of public space and the subordination of democratic values to commercial interests narrow the discursive possibilities for supporting notions of the public good and create the conditions for “the suspicion against others, the intolerance of difference, the resentment of strangers, and the demands to separate and banish them, as well as the hysterical, paranoiac concern with ‘law and order”’ (p. 47). Positioned within the emergence of neoliberalism as the dominant economic and political philosophy of our times, neoracism can be understood as part of a broader attack against not only difference but also the value of public memory, public goods, and democracy itself. The new racism both represents a shift in how race is defined and is symptomatic of the breakdown of a political culture in which individual freedom and solidarity maintain an uneasy equilibrium in the service of racial, social, and economic justice. Individual freedom is now disconnected from any sense of civic responsibility or justice, focusing instead on investor profits, consumer confidence, the downsizing of governments to police precincts, and a deregulated social order in which the winner takes all. Freedom is no longer about either making the powerful responsible for their actions or providing the essential political, economic, and social conditions for everyday people to intervene in and shape their future. Under the reign of neoliberalism, freedom is less about the act of intervention than it is about the process of withdrawing from the social and enacting one’s sense of agency as an almost exclusively private endeavor. Freedom now cancels out civic courage and social responsibility while it simultaneously translates public issues and collective problems into tales of failed character, bad luck, or simply indifference. As Amy Elizabeth Ansell (1997) points out: The disproportionate failure of people of color to achieve social mobility speaks nothing of the justice of present social arrangements, according to the New Right worldview, but rather reflects the lack of merit or ability of people of color themselves. In this way, attention is deflected away from the reality of institutional racism and towards, for example, the “culture of poverty”, the “drug culture”, or the lack of black self-development. (p. 111) Appeals to freedom, operating under the sway of market forces, offer no signposts theoretically or politically for engaging racism, an ethical and political issue that undermines the very basis of a substantive democracy. Freedom in this discourse collapses into self-interest and as such is more inclined to organize any sense of community around shared fears, insecurities, and an intolerance of those “others” who are marginalized by class and color. But freedom reduced to the ethos of self-preservation and brutal self-interests makes it difficult for individuals to recognize the forms that racism often take when draped in either the language of denial, freedom or individual rights. In what follows, I want to explore two prominent forms of the new racism, color blindness and neoliberal racism and their connection to the New Right, corporate power, and neoliberal ideologies. Unlike the old racism, which defined racial differences in terms of fixed biological categories organized hierarchically, the new racism operates in various guises proclaiming among other things race neutrality, asserting culture as a marker of racial difference, or marking race as a private matter. Unlike the crude racism with its biological referents and pseudoscientific legitimations, buttressing its appeal to white racial superiority, the new racism cynically recodes itself within the vocabulary of the civil rights movement, invoking the language of Martin Luther King, Jr. to argue that individuals should be judged by the “content of their character” and not by the color of their skin. Amy Elizabeth Ansell (1997), a keen commentator on the new racism, notes both the recent shifts in racialized discourse away from more rabid and overt forms of racism and its appropriation particularly by the New Right in the United States and Britain: The new racism actively disavows racist intent and is cleansed of extremist intolerance, thus reinforcing the New Right’s attempt to distance itself from racist organizations such as the John Birch Society in the United States and the National Front in Britain. It is a form of racism that utilizes themes related to culture and nation as a replacement for the now discredited biological referents of the old racism. It is concerned less with notions of racial superiority in the narrow sense than with the alleged “threat” people of color pose—either because of their mere presence or because of their demand for “special privileges”—to economic, socio-political, and cultural vitality of the dominant (white) society. It is, in short, a new form of racism that operates with the category of “race”. It is a new form of exclusionary politics that operates indirectly and in stealth via the rhetorical inclusion of people of color and the sanitized nature of its racist appeal. (pp. 20––21) What is crucial about the new racism is that it demands an updated analysis of how racist practices work through the changing nature of language and other modes of representation. One of the most sanitized and yet pervasive forms of the new racism is evident in the language of color-blindness. Within this approach, it is argued that racial conflict and discrimination is a thing of the past and that race has no bearing on an individual’s or group’s location or standing in contemporary American society. Color blindness does not deny the existence of race but denies the claim that race is responsible for alleged injustices that reproduce group inequalities, privilege Whites, and negatively impacts on economic mobility, the possession of social resources, and the acquisition of political power. Put differently, inherent in the logic of color blindness is the central assumption that race has no valence as a marker of identity or power when factored into the social vocabulary of everyday life and the capacity for exercising individual and social agency. As Charles Gallagher (2003) observes, “Within the color-blind perspective it is not race per se which determines upward mobility but how much an individual chooses to pay attention to race that determines one’s fate. Within this perspective race is only as important as you allow it to be” (Gallagher, 2003, p. 12). As Jeff, one of Gallagher’s interviewees, puts it, race is simply another choice: “you know, there’s music, rap music is no longer, it’s not a black thing anymore … when it first came out it was black music, but now it’s just music. It’s another choice, just like country music can be considered like white hick music, you know it’s just a choice” (Gallagher, 2003, p. 11). Hence, in an era “free” of racism, race becomes a matter of taste, lifestyle, or heritage but has nothing to do with politics, legal rights, educational access, or economic opportunities. Veiled by a denial of how racial histories accrue political, economic, and cultural weight to the social power of whiteness, color blindness deletes the relationship between racial differences and power, and in doing so reinforces whiteness as the arbiter of value for judging difference against a normative notion of homogeneity (Goldberg, 2002, takes up this issue brilliantly, especially in pp. 200––238). For advocates of color blindness, race as a political signifier is conveniently denied or seen as something to be overcome, allowing Whites to ignore racism as a corrosive force for expanding the dynamics of ideological and structural inequality throughout society (Marable, 1998, p. 29). Color blindness is a convenient ideology for enabling Whites to ignore the degree to which race is tangled up with asymmetrical relations of power, functioning as a potent force for patterns of exclusion and discrimination, including, but not limited to, housing, mortgage loans, health care, schools, and the criminal justice system. If one effect of color blindness’s functions is to deny racial hierarchies, another consequence is that it offers Whites the belief not only that America is now a level playing field, but that the success that Whites enjoy relative to minorities of color is largely due to individual determination, a strong work ethic, high moral values, and a sound investment in education. Not only does color blindness offer up a highly racialized (though paraded as race-transcendent) notion of agency, but it also provides an ideological space free of guilt, self-reflection, and political responsibility, despite the fact that Blacks have a disadvantage in almost all areas of social life: housing, jobs, education, income levels, mortgage lending, and basic everyday services (see Bonilla-Silva, 2001, for specific figures in all areas of life, especially the chapter “White Supremacy in the Post-Civil Rights Era”). In a society marked by profound racial and class inequalities, it is difficult to believe that character and merit—as color blindness advocates would have us believe—are the prime determinants for social and economic mobility and a decent standard of living. The relegation of racism and its effects in the larger society to the realm of private beliefs, values, and behavior do little to explain a range of overwhelming realities, such as soaring black unemployment, decaying cities, and segregated schools. Paul Street (2002) puts the issue forcibly in a series of questions that register the primacy of, and interconnections among, politics, social issues, and race.

#### The aff’s theorization of race is white eugenics and allows for the real and psychic extermination of blackness to prioritize “threats” to the white body – this flips their try or die calculus

Preston 17, John, Bath Spa University, “Rethinking Existential Threats and Education”, Competence Based Education and Training (CBET) and the End of Human Learning, <https://www.researchgate.net/publication/316728254_Rethinking_Existential_Threats_and_Education>, Accessed 12/5/21 VD

Various contemporary educational theories consider the equity and social justice implications of different forms of education with regard to race. The work of Sleeter and Grant (2007) makes the ethical and pragmatic case for multicultural social justice as a key value of education. This has been followed in contemporary work that attempts to consider the various dimensions of social justice. For example, Bhopal and Shain (2014), consider the twin axis of recognition and redistribution as goals of education. Other work examines the role of social distancing from the ‘Other’ by white students as a dynamic process in which Black, Asian and Minority Ethnic (BAME) and working-class students are disadvantaged. In many ways denial of social justice in terms of lack of resources, recognition or access to social space can be considered to be a form of dehumanisation. However, whilst work on social justice and education might consider the lack of humanity in these systems of oppression (applying concepts such as ‘bare life’, Lewis 2006; or ‘othering’ Lebowitz 2016) they do not consider directly existential threats. Threats to humanity on the basis of difference may arise from totalitarianism as much as through war and threats to the environment. The various genocides which have taken place throughout human history have often had a racial, or ethnic, cleansing purpose to them. They have been eugenic threats that are based upon spurious ideas of genetic and moral superiority. Writers on race from Fanon to Du Bois have considered that the threat posed to racial groups may be existential and that there is a short step from psychic, to real extermination. The negation of individuals through economic, social and psychological processes allows for their physical extermination. Du Bois (2014) deals explicitly with existential threat in his short story ‘The Comet’ where humanity is almost wiped out by a threat from space, leaving only a small number of people to carry on. As one of the survivors of the comet is an African American, this leads Du Bois to consider the state of race relations in the USA. The implication of the story is that the existential threat of the comet (which allows the African American character to live in a world entirely free of racial prejudice) allows release from the existential threat of eugenic attitudes. Building on Du Bois, in other work (Preston 2012), I have considered the ways in which preparation for threats, including existential threats such as pandemics and nuclear war, has been in many ways eugenic in that it prioritises the survival of some more than others based upon criteria which include race and ethnicity (Preston 2012). Preparing for disasters and emergencies often prioritises the interests of white people above those of other ethnic minorities. One reason for this is tacit intentionality which means that policymakers and practitioners do not consider human diversity in considering how people may respond to disaster. Policy is often biased as policymakers expect that people will be ‘like me’ which (at least in the UK and USA) means they will often be white, middle-class, educated, English-speaking men. In planning for threats, there will be various ways in which such biases are included. For example, they may not consider publishing advice in a number of languages, the resources necessary to survive a disaster, the mobility of people and the attitudes of emergency responders. This is unwitting prejudice in that by not considering diversity they are actually making it less likely for BAME people to survive, or protect themselves against, the disaster. Although these biases may lead to a gradient in terms of survival by different groups in a disaster, they do not appear to relate to existential threat. However, existential threat can be interpreted in a different way in perspectives from critical whiteness studies and CRT. In critical whiteness studies, whiteness is taken to be not a racial identity, but rather a system of power and oppression (Leonardo 2009). Whiteness was created as an identity not simply as a mode of social classification but as a way of exploiting and controlling others. There are obviously periods in history where this was objectively the case. During slavery in the USA, for example, whiteness was used as a means to distinguish between those people who had the right to own property (whites) and those who could not (Africans), Moreover, whiteness was the obverse of property in that only Africans could ‘be’ assets or property. Enslaved Africans were therefore treated as property and did not have access to the basic rights which would constitute humanity in American society (such as access to education, the right to own property, the right to decide who they should have relationships with). There are obviously parallels between this experience and holocaust when Jewish people (and other individuals) were dehumanised by the Nazis and denied access to basic resources. During imperialism there was also a period whereby other races were categorised to be less worthy than white people and this provided the justification for colonial control, exploitation and often extermination. Advocates of whiteness studies go further than this and consider that whiteness is not merely a past system of oppression, but a continuing system of white supremacy (Leonardo 2009). The economy and society is comprised in such a way that white people will usually benefit, and BAME people will usually not. This is not only an economic and social system but also a psychological system whereby existence as a full human depends upon one’s racial categorisation. This idea has its roots in the work of Fanon (1986) who wrote that black identity was shaped by the white gaze, but also contemporary writers also consider the notion of whiteness as ‘death’, a categorisation that is rooted in past oppression and extermination, whose remnants exist to this day. This perspective on race and existence leads us to consider what is meant by life, and whether we are not currently living to our full potential (as Marxists would also propose) when existential threat is actually amongst us. For Marxists this would be the expansion of the ‘social universe’ of capitalism that flows between and through us, ‘capitalising humanity’. For critical whiteness studies, this existential threat would be one of whiteness and the negation of existence for a racially classified group of people. In order to make this idea of constant existential threat more tangible (although the term is not used) critical race theorists use what are known as ‘counter-stories’ to consider how racial dynamics might develop in the future, or to highlight inequalities in the present (Delgado 1996). Derrick Bell (1992) who is considered to be the founder of CRT, uses a much cited counter-story ‘The Space Traders’ to consider the ways in which black people’s lives are classed as being not equal to those of whites in the USA. In ‘The Space Traders’ a race of aliens offer the USA a trade: all of America’s black citizens in return for unlimited, environmentally friendly, energy and technology. After some debate, the American people vote on the proposal and decide to give up all of America’s black citizens to the space traders in return for the futuristic technical goods. Of course, Bell is proposing an analogy between slavery in the past and the present situation of black people in the USA, and perhaps even suggesting that such a thing might happen again. On another level, though, there is also the idea that the existence of black people in America is categorised at a different level of metaphysical worth to that of white people. That life could be traded so cheaply, even plausibly (in the thought experiment) makes us pause for thought in terms of how we classify existential threat. Although the relationship between CRT and black existentialism may not always seem obvious we can see that there is a nihilistic streak in the work of Bell (1992) with regard to the prospects for survival. In addition, the drawing on the work of Fanon by authors who use CRT as part of their work which shows the perpetual violence encountered by people of colour in education as well as the enduring influence of Du Bois on CRT (Delgado and Stefancic 2001) shows the close connection between the two theories. What links CRT and black existentialism is a basic concern with existence and the meaning of human life under constant threat that can be thought to underpin any concern with social justice. From CRT and black existentialism, we therefore see that existential threat is one of negation through economic, social and political systems and there are degrees of graduation between these forms of existential threats and actual genocide or extermination. The links between these points and CBET might be considered as obtuse but, as we shall see in the next chapter, systems of education can play a role in forms of negation. Obviously, there are social justice implications in the way in which people are treated in terms of race and ethnicity in education. The ‘triaging’ by race and ethnicity of access to education courses, the ways in which certain groups are rationed access to educational routes and the fragility of links between education and the labour market for BAME groups are all part of marginalisation, in which vocational education plays a large part. As part of this process, and probably not coincidentally, these groups are also more likely to find themselves in vocational, CBET courses. However, social justice is not the whole story, and there is a more profound form of equality associated with the right to existence. It is this that CBET threatens through the reduction of the subject to a digital organism as I will show in the next chapter.

#### Reject the aff in favor of *revolutionary intercommunalism* – affirm the international movement against carceral capitalism and its technocratic managerialism

**Newton 04** (Huey Percy Newton was an African-American revolutionary, most known for co-founding the Black Panther Party with Bobby Seale. Together, Newton and Seale created the party's manifesto, the ten-point program.), “Revolutionary Intercommunalism & The Right of Nations to Self-Determination”, 2004, pg. 31-33 NT recut apark 10/13/21

We say that the world today is a dispersed collection of communities. A community is different from a nation.. A community is a small unit with a comprehensive collection of institutions that exist to serve a small group of people. And we say further that **the struggle in the world today is between the 32 small circle that administers and profits from the empire of the United States and the peoples of the world who want to determine their own destinies.** We call this situation intercommunalism. We are now in the age of **reactionary intercommunalism**, in which a ruling circle, a small group of people, control all other people by using their technology. At the same time, we say that this technology can solve most of the material contradictions people face, that the material conditions exist that would allow the people of the world to **develop a culture that is essentially human** and would nurture those things that would allow the people to resolve contradictions in a way that would not cause the mutual slaughter of all of us. **The development of such a culture would be revolutionary intercommunalism.** Some communities have begun doing this. They liberated their territories and have established provisional governments. We recognize them, and say that these governments represent the people of China, North Korea, the people in the liberated zones of South Vietnam, and the people in North Vietnam. We believe their examples should be followed so that the order of the day would not be reactionary intercommunalism (empire) but revolutionary intercommunalism. The people of the world, that is, must seize power from the small ruling circle and expropriate the expropriators, pull them down from their pinnacle and make them equals, and distribute the fruits of our labor, that have been denied us, in some equitable way. We know that the machinery to accomplish these tasks exists and we want access to it. 33 Imperialism has laid the foundation for world communism, and imperialism itself has grown to the point of reactionary intercommunalism because the **world is now integrated into one community**. The communications revolution, combined with the expansive domination of the American empire, has created the "global village." The peoples of all cultures are under siege by the same forces and they all have access to the same technologies. There are only differences in degree between what's happening to the Blacks here and what’s happening to all of the people in the world, including Africans. **Their needs are the same and their energy is the same.** And the contradictions they suffer will only be resolved when the people establish a revolutionary intercommunalism where they share all the wealth that they produce and live in one world. The stage of history is set for such a transformation: the technological and administrative base of socialism exists. When the people seize the means of production and all social institutions, then there will be a qualitative leap and a change in the organization of society. It will take time to resolve the contradictions of racism and all kinds of chauvinism; but because the people will control their own social institutions, **they will be free to re-create themselves and to establish communism**, a stage of human development in which human values will shape the structures of society. At this time the world will be ready for a still higher level, of which we can now know nothing.

### Case

#### Kessler is so unlikely, we don’t even need to remove debris

**Mosher** **’19** [Dave; September 3rd; Journalist with more than a decade of experience reporting and writing stories about space, science, and technology; Business Insider, “Satellite collisions may trigger a space-junk disaster that could end human access to orbit. Here’s How,” <https://www.usafa.edu/app/uploads/Space_and_Defense_2_3.pdf>; GR]

The Kessler syndrome plays center-stage in the movie "Gravity," in which an accidental space collision endangers a crew aboard a large space station. But Gossner said that type of a runaway space-junk catastrophe is unlikely. "Right now I don't think we're close to that," he said. "I'm not saying we couldn't get there, and I'm not saying we don't need to be smart and manage the problem. But I don't see it ever becoming, anytime soon, an unmanageable problem." There is no current system to remove old satellites or sweep up bits of debris in order to prevent a Kessler event. Instead, space debris is monitored from Earth, and new rules require satellites in low-Earth orbit be deorbited after 25 years so they don't wind up adding more space junk. "Our current plan is to manage the problem and not let it get that far," Gossner said. "I don't think that we're even close to needing to actively remove stuff. There's lots of research being done on that, and maybe some day that will happen, but I think that — at this point, and in my humble opinion — an unnecessary expense." A major part of the effort to prevent a Kessler event is the Space Surveillance Network (SSN). The project, led by the US military, uses 30 different systems around the world to identify, track, and share information about objects in space. Many objects are tracked day and night via a networkof radar observatories around the globe. Optical telescopes on the ground also keep an eye out, but they aren't always run by the government. "The commercial sector is actually putting up lots and lots of telescopes," Gossner said. The government pays for their debris-tracking services. Gossner said one major debris-tracking company is called Exoanalytic. It uses about 150 small telescopes set up around the globe to detect, track, and report space debris to the SSN. Telescopes in space track debris, too. Far less is known about them because they're likely top-secret military satellites. Objects detected by the government and companies get added to a catalog of space debris and checked against the orbits of other known bits of space junk. New orbits are calculated with supercomputers to see if there's a chance of any collisions. Diana McKissock, a flight lead with the US Air Force's 18th Space Control Squadron, helps track space debris for the SSN. She said the surveillance network issues warnings to NASA, satellite companies, and other groups with spacecraft, based on two levels of emergency: basic and advanced. The SSN issues a basic emergency report to the public three days ahead of a 1-in-10,000 chance of a collision. It then provides multiple updates per day until the risk of a collision passes. To qualify for such reporting, a rogue object must come within a certain distance of another object. In low-Earth orbit, that distance must be less than 1 kilometer (0.62 mile); farther out in deep space, where the precision of orbits is less reliable, the distance is less than 5 kilometers (3.1 miles). Advanced emergency reports help satellite providers see possible collisions much more than three days ahead. "In 2017, we provided data for 308,984 events, of which only 655 were emergency-reportable," McKissock told Business Insider in an email. Of those, 579 events were in low-Earth orbit (where it's relatively crowded with satellites).

#### 99% is impossible to track and makes accidents inevitable

Oppenheim 15 (Jesse Oppenheim, B.A., Kenyon College (2008); J.D., Brooklyn Law School (Expected 2013); Notes and Comments Editor of the Brooklyn Journal of International Law (2012–2013). "Danger at 700,000 Feet: Why the United States Needs to Develop a Kinetic Anti-Satellite Missile Technology Test-Ban Treaty," Brook. J. Int'l L. (2015). https://brooklynworks.brooklaw.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com/&amp;httpsredir=1&amp;article=1060&amp;context=bjil)

Debris can also be divided into three size groups: (1) “large” objects with a diameter over ten centimeters, (2) “medium” objects with a diameter between ten centimeters and one millimeter, and (3) “small” objects less than one millimeter in diameter . . . . Smaller debris is far more numerous: tens of millions of “medium”-sized pieces of debris float in space while trillions of “small” pieces wash across the orbits like waves of sand. Medium and small fragmentation debris is particularly dangerous because this debris typically travels much faster than large debris and can be shot in any direction by the explosive force of a collision. An individual piece of debris may reach speeds up to fifteen kilometers per second (54,000 kilometers per hour). At this speed, a fragment the size of a bullet could torpedo a space station or destroy a satellite. A much smaller fragment would easily pierce an astronaut’s suit. Even small particles traveling at a relatively low speed can over time degrade the surfaces of spacecraft components. Disturbingly, ninety-nine percent of all orbital debris is composed of this deadlier class of debris with a diameter under ten centimeters. Mark J. Sundahl, Unidentified Orbital Debris: The Case for A Market-Share Liability Regime, 24 HASTINGS INT’L & COMP. L. REV. 125, 128–29 (2000) (internal citations omitted). 15. Jonathan Amos, Space Debris: Time to clean up the sky, BBC NEWS (Sept. 2, 2011, 7:55 AM), http://www.bbc.co.uk/news/science-environment14763668. 16. Id. However, the United States and Russia “do not track debris smaller than ten centimeters in diameter. Therefore, the vast majority of space debris, which is composed of fragments less than ten centimeters in diameter, has been left ‘unidentified.’” Sundahl, supra note 14, at 133, citing Technical Report on Space Debris, Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space, U.N. Doc. A/AC.105/720 at 5. Fewer than 5 percent of the man-made objects being tracked are operational satellites, the remainder is debris. Lieutenant Colonel Joseph S. Imburgia, Space Debris and Its Threat to National Security: A Proposal for A Binding International Agreement to Clean Up the Junk, 44 VAND. J. TRANSNAT’L L. 589, 594 (2011), quoting SPACE SECURITY 2010, at 31 (Cesar Jaramillo et al., eds. 2010).

#### Sat attacks don’t cause nuke war

Zarybnisky 18 [Eric J. Zarybnisky, MA in National Security Studies from the Naval War College, PhD in Operations Research from the MIT Sloan School of Management, Lt Col, USAF. Celestial Deterrence: Deterring Aggression in the Global Commons of Space. March 28, 2018. <https://apps.dtic.mil/dtic/tr/fulltext/u2/1062004.pdf>]

PREVENTING AGGRESSION IN SPACE

While deterrence and the Cold War are strongly linked in the public’s mind through the nuclear standoff between the United States and the Soviet Union, the fundamentals of deterrence date back millennia and deterrence remains relevant. Thucydides alludes to the concept of deterrence in his telling of the Peloponnesian War when he describes rivals seeking advantages, such as recruiting allies, to dissuade an adversary from starting or expanding a conflict.6F 6 Aggression in space was successfully avoided during the Cold War because both sides viewed an attack on military satellites as highly escalatory, and such an action would likely result in general nuclear war.7F 7 In today’s more nuanced world, attacking satellites, including military satellites, does not necessarily result in nuclear war. For instance, foreign countries have used highpowered lasers against American intelligence-gathering satellites8F 8 and the United States has been reluctant to respond, let alone retaliate with nuclear weapons. This shift in policy is a result of the broader use of gray zone operations, to which countries struggle to respond while limiting escalation. Beginning with the fundamentals of deterrence illuminates how it applies to prevention of aggression in space

#### Military sats are hardened to resist debris

Richard Stenger 2, Reporter for CNN, “Scientist: Space Weapons Pose Debris Threat”, CNN Space, 5/3/2002, http://www.cnn.com/2002/TECH/space/05/03/orbit.debris/index.html

The use of weapons in space could leave so much debris in orbit that low-flying satellites could not safely operate, according to a prominent astrophysicist. But military and other officials dismissed the claim as overblown.

The Pentagon's missile defense program envisions the possibility that powerful lasers or other weapons in orbit could help protect against enemy missile attacks.

Joel Primack of the University of California, Santa Cruz, contends that such high-tech defenses could transform low-Earth orbits into a wasteland for decades or longer.

"Even one war in space will [encase] the entire planet in a shell of whizzing debris that will thereafter make space near the Earth highly hazardous for peaceful as well as military purposes," Primack wrote in a report presented weeks ago to an international conference on science and spirituality.

However, one of the foremost experts on space junk, Donald Kessler, has mixed thoughts about the issues raised by Primack.

"Everything he says in (his report) has truth in it, but it's exaggerated," the retired NASA scientist said. "What he is talking about is technically correct, but from a practical or economic standpoint, it is not likely to happen."

Kessler conducted groundbreaking research in the 1970s on the threat of orbital debris to satellites. His mathematical predictions that collisions would cascade into more and more collisions became known as the Kessler effect.

He was one of the first people to sound the alarm about space junk. In fact, Kessler and others think there is enough junk now to pose significant risks to spacecraft in low-Earth orbits, a contention supported by returning space shuttles, which often have dings and window cracks.

Other space dignitaries lend support to Primack, a Stanford University-trained particle physicist who helped develop the theory that dark matter helps structure the universe.

Sydney Van Den Bergh, a physicist with the National Research Council of Canada, said he raised similar concerns years ago at an international conference on space law.

And in April, astronaut Sally Ride, the first U.S. woman in space, gave a speech in which she said that anti-satellite weapons would be "disastrous."

She said debris created by their use could damage satellites traveling in low-Earth orbits, a particularly popular zone of real estate between 150 and 400 miles high that includes the space shuttle, the international space station and reconnaissance satellites.

U.S. Air Force officials said such fears are unwarranted. Lt. Col. Rick Lehner, spokesman for the Ballistic Missile Defense Organization at the Pentagon, said that the budget request for space-based programs was minimal compared with other parts of the proposed missile defense system.

"The current missile defense program is not space-based. There's some low-level research going on with space-based lasers and other space-based defenses, but the emphasis now and for many years to come is ground-based, air-based and possibly sea-based missile defense systems," he said.

Still, Primack argues that even a low-tech prelude to a high-tech space battle could prove catastrophic. An enemy could deliver giant loads of rock or metal pellets into space.

"No actual space war even has to be fought," Primack said. "Any country that felt threatened by America's starting to place lasers or other weapons in space would only have to launch the equivalent of gravel to destroy the sophisticated weaponry."

Such mini-missiles could do serious damage, going at speeds as high as 17,000 mph (27,000 km/h), 10 times faster than a rifle bullet. A marble at that speed could hit a satellite with as much force as a one-ton safe dropped three stories.

As they pulverize existing space junk and satellites, they would create even more debris and set off a chain reaction that eventually renders the orbital zone unusable, Primack said.

That scenario would likely never succeed or even happen in the first place, other space experts said.

Military satellites are hardened to resist impacts from debris already in space and future orbiters will likely become even more protected as the technology improves, said Michael Kucharek, spokesperson for the U.S. Air Force Space Command. The Colorado-based outpost tracks almost 10,000 thousands of pieces of space junk four inches (10 cm) in diameter or larger.

Moreover, such an attack would be technologically and economically daunting.

"Very few nations could do that today. Even If you were to put tens of thousands of particles out there, it would pale in comparison to what is already out there," said Nick Johnson of NASA's Orbital Debris Program Office, which monitors the threat of small space debris to spacecraft.

"We've looked at so-called chain reaction scenarios and it would require an exceptionally large number of particles," Johnson said.

#### Farmers don’t need satellites—ground and aerial sensors solve.

Byrum 17—(Senior R&D and Strategic Marketing Executive in Life Sciences – Global Product Development, Innovation, and Delivery at Syngenta). Joseph Byrum. “How Remote Sensing Powers Precision Agriculture”, Ag Funder News, 3/14/2017, <https://agfundernews.com/remote-sensing-powers-precision-agriculture.html>.

Remote sensing devices take measurements throughout a field over time so that the grower can analyze conditions based on the data and take action that will have a positive influence on the harvest outcome. For instance, sensors can serve as an early warning system allowing a grower to intervene, early on, to counter disease before it has had a chance to spread widely. They can also perform a simple plant count, evaluate plant health, estimate yield, assess crop loss, manage irrigation, detect weeds, identify crop stress and map a field. A variety of sensors is available to perform one or more of these tasks. Which one will a grower need? It all depends. A small-scale vegetable farmer will have different needs than a commercial grain farmer managing multiple fields. Sensor Platforms Sensors can be grouped according to their enabling technology — ground sensors, aerial sensors and satellite sensors. Ground sensors are handheld, mounted on tractors and combines, or free-standing in a field. Common uses for these include evaluating nutrient levels for more specific chemical and nutrient application, measuring weather, or the moisture content of the soil. Aerial sensors have become far more affordable with the advent of drone technology that places the bird’s-eye view of a field within reach of most farmers. They are also attached to airplanes, another relatively cheap option. The systems are capable of capturing high-resolution images and data slowly enough, at low altitude, to enable thorough analysis. Typical uses include plant population count, weed detection, yield estimates, measuring chlorophyll content and evaluating soil salinity. The downside of aerial platforms is that wind and cloud cover can limit their use. Satellite sensors provide coverage of vast land areas and are especially useful for monitoring crops status, calculating losses from severe weather events and conducting yield assessments. Initially, such systems were tailored to the needs of the military and government, not agriculture. So the main downside, aside from cost, was that these systems were tasked in advance — usually months — to look at a specific area at a certain time. Worst of all, cloud cover could ruin that expensive purchase. Now many governments have opened up satellite imaging databases to the public, providing an important and accessible resource for understanding crop conditions.