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#### The call to space fuels strategies of technocratic managerialism that reify imperialism---transcendence of limits enables imperialistic violence through intervention, war, circumvention of norms, preemption, and tactics of control

Daniel Sage 16, Senior Lecturer in Human Resource Management and Organizational Behavior at Loughborough University, Ph.D. in Political and Cultural Geographies from Loughborough University, 4/29/16, How Outer Space Made America: Geography, Organization and the Cosmic Sublime, p. 153-156

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 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 crossfertilizations 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 geopolitics 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 counterinsurgency 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.

**That risk framework makes global catastrophe inevitable – the inherent unsustainability of the system can only be dealt with through an attempt to map out uncertainties that makes them inevitable**

**Featherstone 17.** Mark, Senior Lecturer in Sociology at Keele University. “Planet Utopia: Utopia, Dystopia, and Globalisation.” Series: Routledge studies in social and political thought. February 17, 2017.

This is exactly what Baudrillard (2012) means when he writes of ecstatic communication, which communicates nothing but the fact of communication itself, and Serres (1983) reflects upon when he explains that all technical systems point towards entropy, noise, and the black depths of the universe. What this means is that the absolute security of the market, the realisation of Platonic form in the financial utopia that led Ben Bernanke and others to speak of the great moderation, is also Badiou’s (2006) void, the black screen, the moment the numbers no longer seem to add up or make sense. For mathematician Benoit Mandelbrot (2004) the connection between these two moments, the point of total securitisation and the black screen of nonsense, runs through the accumulation of an endless number of small events that come together to create a systemic tipping point. In his view these small deviations occur because the logic of financial securitisation is fundamentally flawed. In his work on the unpredictability of markets he asks, for example, what happens when the trade in derivatives and options starts to feed back into the valuation of stocks and shares to such an extent that price becomes absolutely distorted? What happens when it becomes clear that probability is incapable of predicting the future because it is based on calculations premised on the fantasy that what has happened in the past will continue to happen in the future? Thus Mandelbrot’s (2004) point is that probability theory is ineffective in a highly complex system because there are too many variables and too many interactions to be able to base prediction about the future in an assessment of the past. In this way his fractal theory, which he names in reference to the Greek fractus that means ‘to break’, presents a picture of systemic uncertainty, unpredictability, and potential collapse that contradicts the standard picture of cybernetic economy where calculation and the ability to hedge against fluctuation enables the maintenance of stability and order. By contrast to this utopian image of the stable economy that makes money and never breaks down, Mandelbrot (2004) argues that the global financial system is like any other complex system—it is organised around roughness that it is not possible to smooth out in the long run simply because it is rough in itself. What this means is that in contrast to the utopian capitalists, from Smith (1982, 1999) through Hayek (2012) to Friedman (2002), who take instability in microscopic cases because they believe this turbulence will eventually smooth out in the expansion of economic activity across space and time, Mandelbrot (2004) suggests that this never happens because roughness is a systemic property that stretches from the micro through to the macroscopic and cosmological view. In other words, the economy is, like every other complex system, rough and turbulent, and the idea of stability in the long run is a fantasy premised on a belief in the future that will eventually see instability even out towards some kind of equilibrium. In order to illustrate his thesis, Mandelbrot (2004) explains the condition of the global economy through the metaphor of the three states of matter—solids, liquids, and gases—and says that the complexity of the contemporary economy means that its properties are comparable to those of gases, where molecular organisation is highly unpredictable. Beyond Bauman’s (2000) vision of liquid modernity, then, Mandelbrot’s (2004) global economy is gaseous in the sense that its movements are uncertain and resistant to management over the long term. This is why, for Mandelbrot, the foundations of financial theory are fantastical. For example, he explains that Fama’s EMH cannot rely on the idea of the absolute transparency and universality of information to structure price, because it is impossible for information to possess the clarity the efficient market theory requires when there are so many variables on the table and these expand through endless global interactions across space and over the course of time. Given the speed of global processes, which is, of course, driven by cybernetic innovation and the expansion of computational power, it is clear that it is more or less impossible to imagine transparent and universal information and that the very technologies that made the late capitalist utopia possible have now begun to undermine its integrity. At this point we enter the space of what the late Ulrich Beck (1992) writes about in terms of global risk, Paul Virilio (2007) explores through the idea of the integral accident, and Ian Goldin and Mike Mariathasan (2014) examine in their work on the butterfly defect, which plays on Edward Lorenz’ chaos theory and the madness of hyper-connected, complex, nonlinear systems. What Beck (1992) and Virilio (2007) show in their respective works is that the management of the inherent instability of the complex global machine has led to a kind of arms race organised around the need to defend the integrity of the system in the face of the endless threats that it seems to produce. Given this situation, where the inevitability of the accident, risk, and instability lead to an obsession with security, insurance, and immunity, the war on threats to systemic integrity becomes generic and applies to economic instability, terror attacks, global pandemics, the computer virus, and a range of other risks that interact in order to represent interdependent global bads. Since the system is global, and stretches out across space and through time, these threats are, as both Baudrillard (1993) and Derrida (2014) point out, problems of auto-immunity, and therefore cannot be destroyed without threatening the integrity of the system itself. The reason for this is that where the cybernetic machine relies on communication and control, the problem of the intra-systemic other introduces the threat of progressive uncontrollability through viral contagion. There is no easy way to oppose the translation of communication into contagion, but the systemic fix recommends the acceleration of information transmission in order to resolve the problem of complex unpredictability, which, of course, leads to further mechanisation in the form of black box, algorithmic exchange in economics and the rise of the drone in the execution of war that never ends. But where is the human, and the body in the world, in this situation, which only seems to generate ever more risk in the form of automatic fire sales and more suicidal terror? The answer is that the human, bound to the body that cannot escape its reliance on the world, is nowhere in particular, because humans are simply part of the global, cybernetic machine that makes money and wages war for no particular reason. Perhaps the post-human horror of this situation, which collapses economics into war into social life in a post-political world where culture becomes little more than a blizzard of zeros and ones, has been coming since Smith (1982, 1999) wrote about the invisible hand that could somehow bring men together who were already in the process of making themselves machines impervious to the pain and misery of the other. Although the Stoics made a case for reserve in the face of misery, we must recognise that in the instance of Seneca (Romm, 2014), this was the result of his situation in the court of the tyrannical Nero. In much the same way that he thought we must bravely endure pain because we have no choice, he also imagined that escape from the horrors of life could be found in the open vein of suicide. Given this history, it is possible to shine a very different light on Smith’s support for individualism, which clearly came from the necessity of the acceptance of misery and starvation, and imagine the monstrosity of the invisible hand that, Jonathan Sheehan and Dror Wahrman (2015) note, may have inspired Horace Walpole’s original gothic horror, complete with a giant armoured hand that comes to earth in the name of the imposition of order upon chaos. But if Walpole’s (2008) hand may be seen to represent the gothic other side of Smith’s (1982, 1999) vision of the capitalist utopia, the truth of the contemporary system would be the cybernetic arm from the future that enables the invention of the supercomputer that eventually destroys humanity from the classic sci-fi film Terminator II (Cameron, 2001). The wrinkle in this story is, of course, that the arm—which the scientist who eventually invents the AI that terminates humanity keeps in a glass case—comes from the original terminator sent back to the past in order to assassinate the leader of the human resistance that defeats the machine to end the cybernetic war sometime in the future. What this means is that the supercomputer somehow gives birth to itself, that it is truly godlike because it has no other, and no real sense of purpose other than to work and expand its reach—we learn early in the film that when the machine becomes self-aware it decides that it has no need of the humans who imagine they are its masters and decides to wipe them out. What we never discover, of course, is precisely how the machine would choose to spend its time in the wake of human extinction. We encounter this same issue in the Marvel Avengers film The Age of Ultron (Whedon, 2015), where Ultron turns on humanity. But how would Ultron live without humanity? There is no answer to this question, beyond the meaningless conclusion that he would simply continue to work, which captures the dystopic truth of the contemporary cybernetic order—that is, that it has no significance beyond its post-human functionality and utility, because it is difficult to sustain the view that the global machine that prohibits trans-individual sympathy in the name of economic stability is effective from the perspective of humanity. In light of this, we must ask Lenin’s question: What is to be done?

#### That causes extinction from the global accident – it’s a threat multiplier that inverts try or die

**Thorpe 16.** Charles, Associate Professor in the Department of Sociology and the Science Studies Program at the University of California, San Diego, USA. “Necroculture.”

Against techno-futurist imaginaries of plenty and harmony stands the chaos and destructiveness of technological advance within capitalism. Technological acceleration is also the cascading of technological accidents such as Deepwater Horizon and Fukushima. Virilio suggests that the accident is becoming normalized, with disasters continually replayed as spectacle on 24-hour news and as the fabric of everyday life is interlaced with fear of the next catastrophic accident. As accidents are becoming normal and pervasive, and (ever since the development of nuclear weapons and nuclear power) global in their consequences, the technological trajectory is toward the “global accident.” This global accident is already unfolding in the form of global warming. Chris Harman has aptly described witnessing the world’s momentum into deepening climactic disaster as “watching a car crash in slow motion, with the driver aware of disaster ahead but ploughing on regardless.” 197 Global warming is not an aberration or breakdown but is, rather, integral to industrial capitalist economic growth and the way in which the technological transformation of the world at a global scale collides with capital’s inability to regulate itself on that scale. The capitalist world system is fundamentally antagonistic and tending toward war. Since the declaration of the “War on Terror,” a state of perpetual war has become normalized and technological advance is continually upgrading the war machine’s capacity for destruction. In such ways, the accident is, Virilio argues, “integral” to the process of technological acceleration: “The ecological, economic and political or integral accident has thus become an element that rises above and beyond war. War or politics become facets of the integral accident.” 198 Globalization of capital now means capital pushing against the limits of the planet’s resources and ecological stability. Technological acceleration means intensification of exploitation, transforming from explosion into implosion. We are living inside this accident, and everyday life takes on the character of this implosion. Virilio writes, “ Everything, right now! Such is the crazy catch-cry of hyper-modern times, of this hypercentre of temporal compression where everything crashes together.” 199 Living within this implosion is claustrophobic—consciousness and aspirations are compressed into the confi nes of the existing capitalist order that is presented as being without alternatives. The consumer-capitalist ideology that one can have “everything right now” also means there is nothing but the now. Techno-futurism’s celebration of speed within the confines of its assumption of the eternal naturalness of capitalist relations also makes this a form of imagination that is trapped, and entrapping, within the present. Instead of transcendence, it produces paralysis. Virilio writes, “too much speed... and you get inertia.” 200 The accident in which we are living is the collision of technological acceleration with the inertia of capitalist relations. 201

#### Technocratic apathy makes war an inevitable outcome of calculative logics---removes the inter-subjective nature of war and reduces conflict to risk calculations that always justify conflict because of the increasing sophistication and remoteness of weapons

Columba Peoples 9, Senior Lecturer in International Relations, University of Bristol, 2009, “Haunted Dreams: Critical theory, technology and the militarization of space,” in Securing Outer Space, International Relations Theory and the Politics of Space, p. 152-178 (All of Chapter 6)

***\*\* Italics in Original***

Christopher Coker interprets Adorno here as identifying a process of ‘dissociation’ by which the increasing sophistication and remote-ness of weapons, reaching new distances with the V-2, that had ‘begun to hollow out war as a social experience’. Adorno, according to Coker, feared that ‘in time societies would be able to target their enemies while immune from any threat or risk themselves. At that point war would cease to be an inter-subjective (and therefore) ethical experience’ (Coker 2001: 150).

Even more so than Adorno, Marcuse’s writings in the 1950s and 1960s make frequent reference to von Braun and the disturbing pre—history of the American space programme. In typically Marcusian fashion, these references played upon the contemporaraneous fixation with space in the US and the mix of fascination and fear it evoked in the public consciousness. By the early 1950s, as Rip Bulkeley and Graham Spinardi note, the American public had ‘acquired and alarmingly combined a typically post—war liking for science fiction, and a fascination for revelations about “ﬂying saucers”, with an intense “Cold War” anxiety about the “Communist menace” of the Soviet Union’ (Bulkely and Spinardi 1986: 11). Such combinations were encouraged by the publication of von Braun’s contribution to the ‘Space—Flight’ issue of Collier’s magazine in 1952, expounding plans for a ‘Space Station and Bomb Platform’, replete with illustrations of a wheel—shaped, nuclear—armed space station (Neufeld 2006: 52—62). ‘Facing the existence of the atomic bomb and the fact that such a circling rocket represents an everpresent threat above the heads of almost every nation’, von Braun assured US Army representatives in 1946, ‘that nation which ﬁrst reaches this goal will possess an overwhelming military superiority over other nations’, and recommended using such a platform as a means for launching pre-emptive nuclear strikes on the Soviet Union (Neufeld 2006: 53—54). Likewise, the *Collier’s* piece described how satellites placed in orbit could be used to fire ‘Small winged rocket missiles with atomic warheads’ which could be ‘accurately guided to any spot on earth’ (Bulkely and Spinardi 1986: 12). Such ideas only made Americans more nervous once the Soviet Union launched Sputnik in 1957.

Marcuse effectively tapped into this mixture of fascination and anxiety over the development of space technology by alluding to the more disquieting past of rocket technology discussed in the previous section. In a striking passage of *One Dimensional Man*, his assault on what he viewed as the disappearance of genuine freedom and critique in post—war (particularly American post—war) society, Marcuse asserts that:

*Auschwitz continues to haunt, not the memory but the accomplishments of man — the spaceﬂights; the rockets and missiles; the ‘labyrinthine basement under the Snack Bar’; the pretty electronic plants, clean, hygienic and with ﬂower beds; the poison gas which is not really harmful to people; the secrecy in which we all participate. This is the setting in which the great human achievements of science, medicine, technology take place; the efforts to save and ameliorate life are the sole promise in the disaster. The wilful play with fantastic possibilities; the ability to act with good conscience, contra naturum, to experiment with men and things, to convert illusion into reality and ﬁction into truth, testify to the extent to which Imagination has become an instrument ofprogress.*

(Marcuse 1962: 248)

Marcuse’s juxtaposition of the seemingly banal with the barbaric is one of his common motifs; the ‘labyrinthine basement under the Snack Bar’ is a reference to the nuclear war ‘scenarios’ played out in the 1950s and 1960s at the RAND corporation in sunny Santa Monica, California (Kaplan 1983).

Quoting from promotional material he found to be representatively abhorrent, Marcuse declares that

*The rockets are rattling, the H —bomb is waiting, and the space—ﬂights are flying, and the problem is ‘how to guard the nation and thefree world.’ It is a picture in which ‘the world becomes a map, missile merely symbols [long live the soothing power qfsymbolisml] and wars just [just] plans and calculations written down on article...’In this picture, RAND has transﬁgured the world into an interesting technological game, and one can relax — the ‘military planners can gain valuable "synthetic" experience without risk’.*

(Marcuse 1962: 81)

Marcuse identifies a similar tendency in the widespread ‘hyphenised abridgement’ of the corporeal and technological as an implicit sanitization of new means of destruction and their creators. Here he refers speciﬁcally to ‘“bush—browed” Teller, the “father of the H—bomb”’ and ‘“bull—shouldered missileman von Braun”’, representative quotes he takes from the popular media (Marcuse 1962: 84).

With regard to the latter, von Braun’s time in America provides a rich tapestry for those of a Frankfurt School bent, with the rocket—man proving something of a model product of the ‘culture industry’ and the ‘star system’. Von Braun’s activity in promoting the idea of space exploration and the early American space—programme had elevated him to celebrity status, and his life became the subject of a Hollywood movie in 1960, I Aim at the Stars. Von Braun disliked the film intensely, although he was not exactly publicity shy.

His star—quality assured by his intellect, chiselled features and natural propensity for promotion of space exploration, von Braun appeared on the covers of Time and Life, and was a subject for This is Your Life! Among his celebrity friends were such luminaries as Walter Kronkite, John Denver and Walt Disney, with whom von Braun made a series of TV shows on the possibilities for space travel (Ward 2006: 11). This ‘management of his public image, backed by his superiors and a sympathetic, cold—war—driven press’ helped to diminish the memory of von Braun’s earlier proposals for a nuclear—armed space station and shift the emphasis to peaceful and scientific exploration of space (Neufeld 2006: 52, 59). Those who knew von Braun, such as the astronaut John Glenn, lauded him as ‘a space—age Renaissance man’, interested not only in space but also a keen reader of ‘books on religion, comparative religion, philosophy, geography, geology and politics and a whole realm of other subjects’ and possessing a ‘curiosity about everything around him just as curious about matters of religion and politics and philosophy and government as he was interested in how to build a better rocket’ (Ward 2006: x).

This image of the inquisitive von Braun, curious about all around him and conversant on topics of religion and philosophy, is somewhat difficult to reconcile with the image of von Braun as the dreamer caught up years earlier in the cogs of the German war—machine, oblivious to the suffering and slave labour of Dora and Mittelwerk. Bob Ward argues that there is no ﬁrm evidence that von Braun ever visited Camp Dora, although he had seen the primitive living conditions inside the factory tunnels prior to the camp’s establishment (Ward 2006: 67). Von Braun himself later emphasized that he was not directly in control of the production facilities, remarking of those that were that,

*I would never have believed that human beings can sink that low; but I realized that any attempt [at] reasoning on humane grounds would be utterlyfutile. These individuals had drifted soﬁzr away from even the most basic principles ofhuman [morality] that this scene ofgigantic suﬂering left them entirely untouched.*

(Ward 2006: 67)

Irrespective of what von Braun knew or could do about the conditions of the V weapons production, though, it’s difficult not to get the impression that his overriding concern was for his work:

*Any moral conﬂict caused by the thought the rockets [V—2s] could be used as weapons in a war was opposed by the desire for finance for our space plans. We always considered the development of rocketsfor military purposes as a roundabout way to get into to space.*

(Ward 2006: 70)

Von Braun ends up then, not as a Nazi ideologue, but as something of a Faustian character enslaved by the prospect of making his rocket dreams a reality, seemingly at any cost. As Michael J. Neufeld concludes, it is von Braun’s ‘technocratic amorality, his single—minded obsession with his technical dreams, that is so disturbing’ (Neufeld 2002: 72).

It is this seeming apathy to the relationship between means and ends, and the diptych between von Braun the idealistic dreamer of space and the pragmatic realist, that would perhaps mark out von Braun as a ‘One Dimensional Man’ in the Marcusian sense: ‘The formerly antagonistic realms merge on technical and political grounds — magic and science, life and death, joy and misery’ (Marcuse 1962: 248). The most damning criticism of von Braun is, perhaps, in his apolitical indifference to the furtherance of his dreams. Here again Marcuse takes von Braun to be representative of a broader trend:

*The interdependence of productive and destructive forces, which characterizes technicity as domination, tends to suppress any difference between the ‘normal ’and the abnormal ‘use’ of technology. The difference between the use of ‘technology’ and science by the Nazis and by democracy is dubious. A missile remains a missile whether it destroys London or Moscow, and Mr. von Braun remains Mr. von Braun whether he works for the Brown House or the White House. The absence of an ultimate purpose in technology manifests itself equally in politics, where it becomes open to suspicion and contestation.*

(Marcuse 1oo9: 124)

Von Braun’s imagination becomes an instrument of progress, to paraphrase Marcuse, becoming subservient to instrumental technical rationality. In this vision, ideological leanings are a somewhat secondary question. Perhaps appropriately, Ordway and Sharpe note that in the period during which von Braun and his rocket team were held by the allies before being allowed into the US, ‘Some of the Germans were issued brand new Nazi Party uniforms, but without insignia — the only clothing for them the British quartermasters could find’ (Ordway and Sharpe 2003: 209). This image — of the previous servant of the Nazi war machine now wearing the now apparently neutral costumes prior to their entry into the ‘Free World’ — fits the Marcusian vision perfectly. The elimination of the outward identifiers of fascism creates the grounds for the absorption of fascist techniques into capitalism: in this case, the instrumental calculation of the value of the Rocket Team to the US was reason enough to overlook the troubling context of their wartime work.

We might say that technological rationality, in this instance, is overriding, ﬁnal, and its own justiﬁcation, becoming what Marcuse termed as the ‘Happy Conscience’:

*In this general necessity, guilt has no place. One man can give the signal that liquidates hundreds and thousands of people, then declare himself free from all pangs of conscience, and live happily ever ater. The anti-fascist powers who beat fascism on the battleﬁeld reap the benefits of the Nazi scientists, generals and engineers," they have the historical advantage Qfthe late—comer. What begins as the horror of the concentration camps turns into the practice of training peoplejbr abnormal conditions — a subterranean human existence and the daily intake of radioactive nourishment.*

(Marcuse 1962: 80)

The ‘practice of training people for abnormal conditions’ (in reference to nuclear tests involving troops as well as the inculcation of the Cold War at a broader societal level) has a grim resonance with the altitude and cold experiments of Dachau and Auschwitz, although Marcuse, in some ways foreshadowing the starting point taken by Giorgio Agamben, views the logic of the camp as something more pervasive (Agamben 1998). Marcuse quotes one commentator approvingly that ‘The world of the concentration camps was not an exceptionally monstrous society. What we saw there was the image, and in a sense the quintessence, of the infernal society into which we are plunged every day’.4 Elsewhere Marcuse had noted that

*Throughout the world of industrial civilization, the domination of man by man is growing in scope and efficiency. Nor does this trend appear as an accidental, transitory regression on the road to progress. Concentration camps, mass exterminations, world wars and atom bombs are no ‘relapse into barbarism,’ but the unrepressed implementation of the achievements of modern science, technology and domination.*

(Marcuse 1998: 290)

In sum, for Marcuse and the other early Critical Theorists technological rationality equates to a mode of being in which modern science, technology and domination necessarily go together.

Contemporary US policy and the domination of space

It might be wondered, however, as to why particularly we should revisit Critical Theory in light of the resurgent debate on the militarization/weaponization of space. Certainly the rhetoric surrounding both the military and non—military use of space in the case of the United States, which has tended to stimulate the greatest debate in this regard, is pervaded by the language of domination underpinned by an assumption of technological supremacy. Indeed, pace Agamben, some have gone so far as to argue that current research into space weapons that could ‘target anyone, anywhere, at anytime’ portends the reduction of all life to ‘bare life’.5 Whether or not this assumption is backed up either by actual technological advances or funding is less easy to verify. But recent policy discourse surrounding US space technology is certainly replete with aspirations of ‘dominance’, and related concepts such as ‘space control’ and ‘space superiority’. Representative of this is the US National Space Policy, released in August, 2006 which states that:

*The United States considers space capabilities — including the ground and space segments and supporting links — vital to its national interests. Consistent with this policy, the United States will: preserve its rights, capabilities, and freedom of action in space; dissuade or deter others from either impeding those rights or developing capabilities intended to do so; take those actions necessary to protect its space capabilities; respond to interference; and deny, if necessary, adversaries the use of space capabilities hostile to US national interests.*

(US 2006)

This follows on the back of a persistent fascination with space as ‘the ultimate highground’ for both civil and military purposes (Wolfowitz 2002), the designation of space as within *Joint Vision 2020’s* mandate of ‘full spectrum dominance’,7 the elevation of the concept of ‘Space Control’ (‘the ability to assure access to space, freedom of operations within the space medium, and an ability to deny others the use of space, if required’8) within US air and space doctrine, as well as references by American military officials to the ‘importance of dominating space in peace and war’ (France 2000).

The role of space surveillance and communications technologies during the Gulf War of 1991, the US—led strike on Afghanistan and the invasion of Iraq in 2003 lend substance to this stated centrality of space dominance to US military capacity. In addition the latent ‘dual—use’ potentialities of missile defence technologies — whether in terms of using deployed Ground—Based or Sea—Based Missile Defense as a rudimentary form of anti—satellite or ASAT weapon (as was effectively illustrated by the US in its strike against an American spy—satellite in February 2008) or the offensive potential of ostensibly defensive technologies in development such as the ‘NFIRE’ and Space—Based Laser (SBL) — have raised further questions about the potential use of space as a theatre of war in its own right as well as a ‘force multiplier’ for conventional terrestrial conﬂicts (DeBlois et al. 2008).

Much of this current debate invites parallels with the period of the space weapons fantasies of the 1950s and 1960s and Marcuse’s ensuing analysis. Certainly there are echoes of von Braun’s proposed orbital bombing platforms in recent discussions of ‘Long—Rod Penetrators’ — satellites used to deliver projectile weapons from orbit (DeBlois et al. 2008: 70). Indeed, Neufeld argues that von Braun is a ‘forgotten forerunner to space power theory’, most notably being the first person to use the term ‘space superiority’, the antecedent to today’s concepts of space control and dominance, in print (Neufeld 2006: 52). Likewise, Marcuse’s war—gamers at RAND have their contemporary equivalent in simulations of space conflict in the ‘2o1o and 2020 time frame’ that invariably end up in escalated, even nuclear, conﬂict where players recommend space weaponization in the interim as a panacea (DeBlois et al. 2008: 66).

It would be tempting to read American space policy in this regard in terms of Marcuse’s assertion that:

*Technological rationality reveals its political character as it becomes the great vehicle of better domination, creating a truly totalitarian universe in which society and nature, mind and body are kept in a state of permanent mobilization for the defense of this universe 9.*

To do so would of course be taking Marcuse’s use of the term ‘universe’ too literally; even the ‘discursive universe’ surrounding American policy on space is not entirely closed, as objections to the bellicose nature of the current US stance attest to.1O At the same time, Marcuse’s foreboding reading of the nature of technological development in One—Dimensional Man and elsewhere might at the very least provide a cautionary reminder of the latent negative consequences of increasing technological sophistication, most obviously in weapons of war. As in Coker’s reading of Adorno cited earlier, Douglas Kellner argues that ‘[Marcuse] feared that more sophisticated technologies would “instrumentalize” war and produce ever more brutal forms of destruction — a vision amply confirmed in the Vietnam and Persian Gulf wars’.11 We could, arguably, easily extend this analysis to contemporary US space policy as illustrated above.

Conclusion: rocket dreams, critical consciousness

Where the Marcusian perspective arguably becomes more problematic, and certainly more provocative, is in its assertion that a stated desire to dominate, such as that recurrent espoused within recent US space policy, are only the most obvious outward manifestation of an intrinsic connection between technology and domination; his contention that there is a barbarism latent in all technological ‘progress’. Proponents of the military use of space as an aspect of current US policy are quick to point out that by space dominance they mean ensuring that the US preserves its access to space in all instances, not that the US should exercise complete control. Certainly, we might also want to refute the claim that technological innovation, in space as in any other realm, necessarily leads to domination. Here it is worth noting that Marcuse himself both dismissed the possibility that we might return to some kind of pre-technological culture and even at his most pessimistic still held out hope for what he termed as ‘the chance of the alternatives’:

*It [pre—technological culture] is an outdated and surpassed culture, and only dreams and childlike regressions can recapture it. But this culture is, in some of its decisive elements, also a p0st—technological one. Its most advanced images and positions seem to survive their absorption into administered comforts and stimuli; they continue to haunt the consciousness with the possibility of their rebirth in the consummation of technical progress.*

(Marcuse 1 962: 59)

So, in short, there might still be a chance that technological development could encompass more emancipatory social ends — a view extendable once again, presumably, to space technologies. Space has consistently been the realm of dreams, of the fantastical, of (hu)man’s striving to explore the unknown (Benjamin 2004) and imagination must certainly be required to think of alternative, less bellicose uses of space.

As Wendy Brown notes in a different context, however, ‘the ﬁgure of dreamwork taken up for political analysis promises to puncture the conceit of our innocence and virtue: dreams often tell us things we would rather not know about ourselves’ (2006: 690). Nowhere is this more clearly illustrated than in the case of von Braun and his Rocket Team and their inﬂuence upon the US space programme, where the ‘dream’ metaphor is employed recurrently both by participants and in subsequent historical narratives. The conditions of the advancement of their ‘dream’ of space exploration are, as was shown, somewhat opaque; even if the connections to forced labour and concentration camps are difficult to prove or disprove with finality, the vagaries of the past continue to exert a haunting quality to, as Marcuse put it, ‘the accomplishments of man — the space ﬂights; the rockets and missiles’. As in Goya’s painting, the sleep of reason produces monsters.

In this sense, it is perhaps worthwhile tarrying with the negative potentialities of the military use of space, even if these potentialities are still only in their infancy and dreams of ‘space control’ seem as fantastical as utopian visions for future space exploration and colonization (Radford 2006). Marcuse’s approach is suggestive of a move from, to paraphrase one of his own works, technology to hauntology: 12 current developments in space technology in the US in particular are haunted most immediately by the prospects for greater destructive capacity that they portend, but also by alternative visions for the use of space that they preclude. Marcuse argues that ‘Naming the “things that are absent" is breaking the spell of the things that are’ (1962: 68), and at the current moment there is a vital need to point out not only the negative consequences of the weaponization of space, but also to understand the tendency to conceive of space within a militarized framework in the ﬁrst place (think of the multiple visions of conﬂict in space that saturate the science ﬁction genre), and the rival ways of thinking about space that risk being marginalized as a result (for example, those with an emphasis on exploration or space, on outer space as a Weapons free ‘sanctuary’, or less anthropocentric understandings of the cosmos). In short, a critical approach to the military use of space must tread a careful path between despondency and determinism in the face of the development of space technology, and the utopian impulse so frequently associated with outer space. Without the former, the latter risks becoming ~~blind~~ idealism; Without the latter, assessments of the negative potentialities of space technology risk becoming complicit in the promotion of these largely still nascent capacities. As Joel Whitebook puts it in a different context: ‘The following question can still be raised: What is the fate of the transgressive— utopian impulse, given this new sobriety? For better or worse, that impulse Will exist as long as people dream’; but ‘Any process of enlightenment worth its name must engage the nocturnal’ (Whitebook 1996: 301). In the case of the militarization of space this might be extended to all aspects of the nocturnal: the dark side of the history of space exploration; space nightmares as Well as space dreams.

#### The alternative is a refusal to name and command space, a movement of transcendence to a plane focused on human experience, and an exploration of new affects that all interfere with the state’s technocratic, imperial impulses

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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, freefloating, 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 spacetime, 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.

## OFF

### NC – CP

#### Next off is the Crypto Counterplan:

#### The United Arab Emirates creating significant subsidies for private entites to create terrestrially accessible blockchain verification computing centers and cryptocurrency mining centers on the Moon is just. The appropriation of outer space by private entities in the United Arab Emirates for all other purposes is unjust.

#### The plan would destroy the basic value of crypto by making property rights reliant on government approval, which nukes adoption and value – appropriation is key

Rule & LeClair 21 [Dylan LeClair And Sam Rule Bitcoin Magazine. "Bitcoin’s Private Property Rights." https://www.nasdaq.com/articles/bitcoins-private-property-rights-2021-09-28]

Bitcoin’s Superior Private Property Rights

For the first time in history, bitcoin offers us a property option that does not rely on a local authority or legal system to enforce or protect it. It’s protected by the natural incentives of those participating in the network.

“Satoshi Nakamoto has created a form of property that can exist without relying on the state, centralized authority, or traditional legal structures.” - Eric D. Chason,"How Bitcoin Functions As Property Law"

It provides us with a store of value and savings technology where no government, central institution or voting bloc can seize, freeze or access it through violence or force when properly secured. Anyone in the world with an internet connection can secure this property without permission, and no other person or institution may take it away or erode its value. Whether it’s real estate, cash, equities, bonds, or gold, no other asset on the market provides this level of assurance and security.

What we know of strong, well-defined property rights is that they are the basis of human cooperation and economic activity. When private property rights flourish, so do the people. When we look at the nations of the world with the lowest ranking of property rights, we also find some of the key regions where bitcoin is making its mark.

#### Climate-motivated terrestrial mining regulations kill crypto now – those don’t get applied to space because of unique environments – that saves crypto with sufficient private investment

Greene 21 Greene, Tristan. Tristan covers human-centric artificial intelligence advances, quantum computing, STEM, Spiderman, physics, and space stuff. As far as I can tell his highest level of education was that he was in the Navy for a while. "What happens to Bitcoin when billionaires build cryptocurrency miners on the Moon?" TNW | Hardfork, 8 June 2021, thenextweb.com/news/bitcoin-billionaires-build-cryptocurrency-miners-on-moon-bitcoin.

Space exploration and exploitation have traditionally been nationalist endeavors. But the rise of the 12-digit billionaire has suddenly made outer space look like open territory. The players Jeff Bezos is stepping down from his position as the CEO of Amazon after 25 years ahead of his imminent launch into space aboard one of his own Blue Origin spaceships. This will be the future of fintech 6 trends that will dominate fintech in 2022 While it’s easy to imagine the long-time leader retiring to live out a childhood fantasy, there’s nothing in Bezos’ history as an incredibly ambitious person and businessman to indicate his he’ll just blast off into the sunset to live a life of quiet leisure. Simply put, Bezos’ interest in the space sector likely won’t end with offering consumer thrill rides. While it’s impossible to know where the soon-to-be-former CEO might take his ambition, it’s likely Amazon and/or Blue Origin is already looking for ways to exploit the space sector for profit. But, obviously, Bezos isn’t the only private citizen with a spaceship company. Elon Musk’s SpaceX has spent the last decade becoming the belle of NASA’s ball and he’s already all-in on the idea of sending humans to Mars. And we can’t forget Richard Branson. He may only be worth a paltry $5 billion (lol), but his Virgin Galactic company’s been banking on making some money in space tourism for a long time. Let’s also not forget that Virgin’s dabbled in everything from railroad technology to record labels. And the list goes on. Anyone with a few billion dollars has business options and opportunities that extend beyond our planet’s surface. Space for profit In the past, we’ve discussed the idea of mining space asteroids for profit. Some experts believe there are unimaginable fortunes floating around in space in the form of resource-rich asteroids. In fact, you can even get a degree in asteroid mining. And even Goldman Sachs has considered getting in on the action. But, at the end of the day, we still have to figure out where these resources are, build machines capable of extracting them, and get them safely to somewhere they can be useful. Right now, there’s not much value in investing in asteroid mining futures because the technology either doesn’t exist or isn’t ready yet. However, there’s more than one kind of mining you can do in space. Enter cryptocurrency and the future Elon Musk recently got involved in a friendly space race, but this time it has nothing to do with competition over rockets or government contracts. He’s racing against BitMEX, a cryptocurrency exchange and derivative platform, to see who can get a cryptocurrency on the Moon first. If you’re curious about how that works, here’s a snippet from BitMEX’s official announcement: BitMEX will mint a one-of-a-kind physical bitcoin, similar to the Casascius coins of 2013, which will be delivered to the Moon by Astrobotic. The coin will hold one bitcoin at an address to be publicly released, underneath a tamper-evident hologram covering. The coin will proudly display the BitMEX name, the mission name, the date it was minted and the bitcoin price at the time of minting. According to BitMEX, this isn’t just a ceremonial or token delivery. The coin itself is a hardware wallet containing an actual Bitcoin, so its value will change with the value of the BTC here on Earth. In other words, BitMEX is sending a literal treasure to the Moon for anyone brave (or rich) enough to retrieve it. Per the company’s blog post: A moon surface background with text superimposed, quote below Credit: BitMEX Come and Get It. When the physical coin lands, it will remain on the Moon until anyone deems it worthy of retrieval. Decades from now, what will it be worth? It’s a great question. Some experts have predicted a single bitcoin will one day be worth $100K, $1M, or even more. But an even better question is this: What’s the end game for cryptocurrency in space? Billionaires want to be trillionaires Back in 1999 Wired ran a feature about the imminent rise of the world’s first trillionaire. At the time, everyone assumed the richest man in the world, Microsoft CEO Bill Gates, would be the first trillionaire by a long shot. Here’s a quote from that article: The value of Bill’s Microsoft stake has grown from $233.9 million at the time of Microsoft’s 1986 IPO to $72.2 billion as of June 15, 1999 (disregarding stock sales). At this rate – 58.2 percent a year – he will become a trillionaire in March 2005, at age 49, and his Microsoft holdings will be valued at $1 quadrillion in March 2020, when he is 64. Of course, we still haven’t seen a trillionaire in modern history. As of the time of this writing, the richest person in the world is France’s Bernard Arnault, whose $193.6 billion empire edges out Jeff Bezos’ $189 billion. At some point, if Bezos wants to pull away with it or Elon Musk wants to close the widening gap between his $151.4 billion and a first place finish, the world’s richest people are going to have to do more than squeeze terrestrial markets for every last drop of profit. That’s why many experts view Elon Musk’s heavy involvement in cryptocurrency as the potential difference maker. On any given day the Tesla, SpaceX, and Neuralink founder’s total worth can skyrocket or plummet by tens of billions of dollars based on how his cryptocurrency holdings are performing. When you consider that market movements can be directly tied to Musk’s social media statements, the power proposition for billionaires holding cryptocurrency is unbridled. Simply put: Elon Musk has more control over the so-called “volatile” world of cryptocurrency than most. Putting a cryptocurrency in space, much like firing a Tesla off into the galaxy, is a PR move meant to generate interest in the burgeoning cryptomarket. But that’s not the only purpose they serve. These acts remind us that people like Musk and Bezos can do anything they want. If they want to put a coin on the Moon, they have the means to do it. And, for example, if Musk or Bezos suddenly wanted to solve the biggest problems with cryptocurrency mining – power consumption, carbon footprint, developing powerful-enough hardware – they’re in a unique position to do so. In space, no one can hear you mine Arguably, one of the biggest things stopping an apex whale like Elon Musk from spending a fair portion of his billions on cryptomining centers is the fact that such an operation would almost certainly draw universal condemnation for its potential effect on the global climate crisis. But the Moon’s atmosphere isn’t necessarily as fragile as the Earth’s. Hypothetically speaking, there’s nothing to stop a billionaire from building a facility on the Moon to mine cryptocurrency. They would, of course, need to be able to build their own batteries, have experience with artificial intelligence and supercomputers, and already have their own satellite network set up in space – all boxes Elon Musk can tick today. And, in the near-future, as we perfect deep space transmission technology, what’s to stop a billionaire from putting a supercomputer on a satellite and sending it somewhere in deep space to mine cryptocurrency 24/7 at near absolute-zero temperatures? All of this is conjecture, but the writing is on the wall. Cryptocurrency enthusiasts fear what the experts are consistently warning: regulation is coming. Eventually, it’s possible cryptocurrency mining could become regulated with harsh policies designed to keep mining operations from further damaging the environment. This could seriously hinder the market. If humanity walks away from terrestrial mining to save the planet, we’ll be leaving unfathomable amounts of money on table. Billionaires don’t become billionaires by doing that. The only logical path forward, barring some unknown new green mining technology, may be moving the cryptocurrency industry to space.

#### Cryptocurrency reach a wide rollout---that builds resilience to survive inevitable existential filters.

Alex McShane 21, Writer and Head of Video for Bitcoin Magazine, BA from the University of Iowa, Degree from the University College Dublin, Degree from Kirkwood Community College, “Bitcoin and Existential Risk”, Bitcoin Magazine, 9/5/2021, https://bitcoinmagazine.com/culture/bitcoin-and-existential-risk-alex-mcshane

TL;DR - An existential risk is the possibility of an event or series of events that could drastically curtail humanity’s potential. A hypothetical global catastrophe could be anthropogenic or non-anthropogenic and internal or external in nature. The adoption of Bitcoin will better position us to address these risks as a society.

EXTERNAL NON-ANTHROPOGENIC

A catastrophic collision with an astronomical object, such as an asteroid impact would be an external non-anthropogenic risk. This has already occurred here several times. During the Permian Triassic period (ending 250 million years ago) an astronomical impact killed 90 percent of the species on Earth. It took tens of millions of years for life on Earth to repopulate and Earth’s intelligence potential to recover.

One interesting external non-anthropogenic risk is Earth’s reflected light, which could be measured by an external intelligence who then come to extinguish us. (The topic of our own signal bringing about this death by misadventure is discussed further below.)

What does this have to do with Bitcoin?

Generally, hard money facilitates greater innovation and technological process. At this point one might argue that if we do not migrate to some degree from Earth as a species, and are subsequently wiped out by an astronomical object impact or a super-volcanic event, the risk becomes anthropogenic in nature. We are a centralized species on a grand scale, and at this point one could say we have through consensus chosen to remain vulnerable to a single vector of attack by staying here.

Bitcoin is not only the hardest money known to man, it is the most responsible from this standpoint. Bitcoin as it currently operates is currency that can provide a monetary framework on which humans can achieve greater capital growth, collaboration, resource allocation, and therefore technological progress. Because the terminal supply of Bitcoin is capped, we can store value in it indefinitely as a society.

66 Million years ago the Cretaceous-Paleogene Extinction Event extinguished the life and intelligence potential of the non-avian dinosaurs. This series of events was external, and broadly non-anthropogenic in the sense that no form of life on Earth at the time contributed to its own demise, but more specifically, at the time of those astronomical impacts the first humans hadn’t split from chimpanzee lineages. This split is thought to have occurred between between 4 and 8 million years ago.

An important distinction between astronomical impacts or super-volcanic events of the past and such events if they were to happen today is that one could argue that our intelligence potential is now mature enough to tackle certain of the external existential risks. Today, the risk posed by an asteroid impact or something similar would still be external in its origin, but at what point does the burden of responsibility to migrate off of the planet fall upon our population? We can surely solve for some external existential risks, and in any case, no one is going to do it for us. You could say that failing to collectively pursue a solution when technically we could have would recategorize a civilization-extinguishing asteroid impact as an external but anthropogenic risk.

At what point do innovation dampening authoritarian states and their mandated broken money cause society to stall at a local optimum? Surely the government has already caused this. It’s only a matter of time before another object strikes the Earth with devastating consequence. I would argue it is irresponsible to continue life here with government money. Government money is an existential risk. Bitcoin is not only a solution, it is a societal responsibility.

INTERNAL ANTHROPOGENIC

Nuclear war is one example of an internal anthropogenic risk. That is, should nuclear war arise, it would be both self destructive, and relatively self contained on a cosmic scale. It follows that biological warfare is an internal anthropogenic risk, the reality of which we as a species can surely understand now. If I were to hazard a guess I would say virtual emergencies and cyber pandemics are next. These self constructed catastrophes are the government’s misguided attempts at proof of work. This is a topic for another time. Do not surrender your ability to think and speak freely.

The second law of thermodynamics can summed thus, processes that involve the transfer or conversion of heat energy are irreversible. The law indicates we have not observed a spontaneous transfer of energy from cold to hot. Another way to think of this is that there is no such thing as cold, only lesser degrees of hot. Nothing cannot transfer. So broadly, within a closed system, the second law of thermodynamics would indicate that all differences tend to level out.

So what has this got to do with Bitcoin?

Well firstly, all hardware is subject to entropy. The distributed nature of the blockchain increases the probability that it will survive centralized entropy. At Bitcoin’s inception, imagine a failure because Satoshi’s computer randomly crashed. Distributed networks are inherently hedged against this particular centralized form of existential risk.

The second law of thermodynamics also suggests that on a grander scale, relatively isolated (centralized) systems will degenerate more and more into disordered states. Proof of work, and network growth are two ways Bitcoin fights against falling into disrepair.

Bitcoin uses proof of work to stave off entropy. The system cannot stay dormant. It must continue to use proof of work to advance the state of the chain, and to fight entropy to secure the monetary value all of the users have stored in the network. The U.S. dollar, as many have pointed out, relies on proof of war, or distributed political energies to maintain dominance. Its methodology can be described as haphazard at best.

INTERNAL NON-ANTHROPOGENIC

One internal non-anthropogenic risk is that of a super-volcanic eruption, provided it wasn’t humans who brought about the eruption. Just like with external non-anthropogenic risks, Bitcoin alone cannot prevent them, but it can help humans prepare for them such that we may survive these relatively small intelligence filters the universe throws our way.

Bitcoin allows for fundamental capital accumulation and human innovation, and promotes collaboration to such a degree that we will find an increased collective problem solving power as humans the further Bitcoin adoption spreads. It is worth mentioning that Bitcoin also maintains and appreciates wealth to such a degree that often those of us to chose to live our lives on a Bitcoin standard will experience relatively greater freedoms, and vastly greater amounts of free time than our peers who chose to continue their lives on a fiat standard, and are perpetually working to outpace their chronic debt. Many Bitcoiners will likely forego that newfound free time to work and continue to provide value to others in whatever area interests them, because Bitcoin incentivizes the collaborative accumulation of capital but also the responsible reallocation of it.

EXTERNAL ANTHROPOGENIC

An external anthropogenic risk has the least probability of occurring. This is a problem of reach. Imagine human intelligence being sent into the cosmos and signaling or generally causing an external intelligence or astronomical object to come back to extinguish us. This is a most improbable extinction by misadventure.

The probability that we send messages of consequence into the cosmos that in turn cause some other far-flung intelligence, with knowledge enough to reach us, to come and bring about our own destruction is next to zero, but it isn’t zero.

I would posit that the probability increases every day that Bitcoin survives, with each person that chooses to hold Bitcoin over fiat, because on a fiat standard we are again, stuck at a local optimum at best, and each day the global monetary system devolves further into chaos. The fiat world may continue to be habitable chaos, but our technological progress and our greatest capacity for innovation cannot be achieved on a fiat standard.

A Bitcoin standard is not only our current best bet, it is the only monetary vehicle that will take us from here, or enable us to build technology that can effectively communicate with places in the universe where other intelligence has emerged. The other reason this fatal miscommunication is unlikely to occur is that once through a Bitcoin standard we have manage to build a society that can effectively reach and communicate at greater depths of the cosmos we will at that time have already become a multi-planetary, if not transitory, if not multi-solar system species. The topic of Bitcoin in space and planetary interoperability will be discussed in a later essay.

The most distant human made object from the earth is the Voyager 1, which is over 13 billion miles away. (For perspective, Apha Centuri, the nearest star system to Earth, is 25 trillion miles away.) Human radio signals have announced our presence and our intelligence to the cosmos since around 1900. The first human radio signals have all ready traveled 114 light years, that is 681,920,540,000,000 miles. Although the reach of our radio signals is very great, the probability of us being heard and subsequently extinguished is negligible. External anthropogenic risks are the least of our concerns at the moment.

As Bitcoin adoption grows, it serves to promote advances in artificial intelligence and nanotechnology. External anthropogenic risks will become more relevant to human intelligence at a much later time. External non-anthropogenic risks are similarly out of our hands for the time being. That is, at the moment there is nothing we can do to prevent the Sun from becoming a red giant star and subsuming the Earth.

But we do already have the monetary technology upon which to engineer solutions to some of these problems. We have the potential as humans to prevent internal global catastrophes, both those set on by us and not. Survival and longevity is arguably our greatest task as a species. Adopting Bitcoin, and protecting this network is proceeding with diligence and a long eye toward the future in all of our political and scientific affairs. The existential risks of living are great, though it is human nature for our ambitions to out pace our current abilities. The only evidence of life is change. To change is to exit fiat currency, it is to use Bitcoin instead.

## OFF

### NC – T

#### Interp: Affirmatives may not defend only specific instances of outer space appropriation by private entities as unjust.

#### Violation: They only identify UAE’s appropriation of space as unjust

#### Moral statements are generic normative principles – necessitates the generic interpretation

McDonald 09 [Hugh P. McDonald, professor of philosophy at the New York City College of Technology. "Principles: The Principles of Principles." The Pluralist, vol. 4, no. 3, [University of Illinois Press, Society for the Advancement of American Philosophy], 2009, pp. 98–126, https://www.jstor.org/stable/20708996] HWIC

"Principle" has a great many meanings: origin, beginning, cause, rule, axiom, and so on.5 However, we cannot assume any necessary relation of these meanings. They may be distinct meanings without relations. Neverthe less we can trace some common roots and thereby interconnections of the meanings. I will concentrate here on certain meanings relevant to the prin ciple of principles, that principles are actual. One meaning is that principles are the "ultimate source, origin, or cause of something" or the "originating or actuating agency or force." Principles are connected with the origin and cause of any "something." Moreover, principles may cause the actuality of the something. A second meaning of principles is that they regulate change, whether internally, as the "method of operation of a thing," or as an external cause. That is, principles are regulative, especially including rules for opera tions, involving changes. As rules, they are universal for a kind, although there may be exceptions to them in certain modes. A principle, then, is an originating rule that universally regulates the formation, operation, or other changes of any actuality, which as universal applies to that kind of thing. Machines may be built according to a principle and operate on the same or even a different principle. Ships presume the principle of floatation but may be built according to principles of woodworking or those of other materials. The principle can have different modes?whether necessary, as in logical inference; general, as in scientific laws; or actualization of possibilities, as in machines or as in moral principles that we follow, but could do otherwise.6 I will cover modes below.

Principles are also a cause as regulative, combining cause and rule. The principle can be external, as in a chemical catalyst; or internal, as in geneti cally caused changes.7 Both kinds of causes involve relations. Internal prin ciples exhibit "tendencies," to borrow the word used in the dictionary. They continue to operate across time. Actions that come under principles may be of kinds whose causes are separate in time, since we may cease an action for a time and then take it up again; while genetic characteristics are tenden cies whose causes are connected by reproduction. As causal, principles may be originary for a kind. Especially in new technologies, for example, flying machines, the principle that organisms could fly (birds, bats, and insects) preceded the invention of the technology, although the principles of aero dynamics were discovered later. However, flying utilized and actualized the latter principles. In this sense, principles can be constitutive rules as the origin of a kind, whether generic or specific.

External principles are regulative and not attributes. They regulate change, such that change is not chaotic. Principles are not bodies, objects, or entities but are the basis of the judgment or evaluation that the latter will persist, since they follow or are regulated by principles. Moreover, there is another sense in which principles are not attributes, since the relation of bodies, ob jects, or other terms for actualities implies a common principle, an identity that is regulated and constituted by the same actual principle. "Object" is a principle uniting instances normatively, for example, that solids persist unless acted upon by heat, etc.

Scientific, engineering, and practical laws are cases of principles. The "law of gravity" is the principle of gravity. Rules of "right conduct" also exhibit laws. Principles form an identity of different instances that fall under the law, whether generally or invariably. Laws and rules are regulative identities, applicable to different instances, and whether originary, constitutive, or ex ternally regulative. Voluntary adherence to a rule is bringing actions in line with a principle or enacting a principle.

Since principles are general, the statement of a principle includes an abstraction of some identity element of the instance. Principles, then, can constitute the elements in any instance insofar as there are identical ele ments, such as matter, species, and genera. This abstraction both identifies the instance as alike with other instances in some respect and differentiates it from those that do not exhibit the principle. The instance may contain several principles conjointly, matter, the state of the matter, function, aes thetic element, and many others. Thus principles connect like instances in a very complex set of relations. A diamond and a painting may share aesthetic qualities but their material, functional, and cultural principles may be quite different. Since identity and difference are correlative terms, every identity is also a difference and this principle applies to actual principles in the world, one principle of principles. To identify a rock of a certain type as consisting in certain chemical combinations connects it with that kind of mineral in general but also certain chemical elements in general, their physical proper ties (such as consisting of a certain atomic number of protons, electrons, and the like), and other principles. However, it also differentiates the rock from other types with their own specific principles, although some generic prin ciples may overlap, namely, the physical properties of all chemical elements as consisting in protons, electrons, and other principles of atoms. Principles then mark both a difference and an identity. The principles identify a distinc tion, but such identifications differentiate from other identifying principles. The wavelengths for green light are identical at different times of emission from the sun but are not identical with those for red.

#### Vote neg:

#### 1] Precision – if we win definitions the aff is not topical. The resolution is the only predictable stasis point for dividing ground—any deviation justifies the aff arbitrarily jettisoning words in the resolution at their whim which decks negative ground and preparation because the aff is no longer bounded by the resolution.

#### 2] Predictable limits—specifying appropriations offers huge explosion in the topic since they get permutations of hundreds of appropriations by hundreds of states. This is magnified by the fact that most space programs are nascent so they’re incentivized to specify random countries with no literature. Limits explodes neg prep burden and draws un-reciprocal lines of debate, where the aff is always ahead, turns their pragmatics offense

#### Topicality is a voting issue that should be evaluated through competing interpretations – it tells the negative what they do and do not have to prepare for—there’s no way for the negative to know what constitutes a “reasonable interpretation” when we do prep – reasonability is arbitrary and causes a race to the bottom, proliferating abuse

#### No RVIs—it’s your burden to be topical.

## Case

### NC – Advantage

#### No Mid East escalation

* Proxy wars stay localized

They are cheaper to change the status quo

Gives countries the opportunity to deny conflict

Non-state actors can’t escalate because of institutional capacity

* Consensus of international scholars and data conclude

Imran 2/6/19 [Myra Imran, writer for The News International. Citing the international seminar on “Strategic Dimensions of Peace and Conflict in South Asia and the Middle East”. Seminar on ‘Strategic dimensions of peace and conflict in South Asia, Middle East’. 2/6/19, https://www.thenews.com.pk/print/428298-seminar-on-strategic-dimensions-of-peace-and-conflict-in-south-asia-middle-east]

Islamabad : There is a need to study the causes of proxy wars, and what are the potential impacts of such wars on the overall conflict. These thoughts in a daylong international seminar on ‘Strategic Dimensions of Peace and Conflict in South Asia and the Middle East,’ organised by Pak Institute for Peace Studies (PIPS), an Islamabad-based think tank, participated by prominent national and international scholars.

Prof. Shahram Akbarzadeh, Deakin University, Australia, argued there is significant gap in the literature on non-state actors. He called for empirical research, along with concrete policy suggestions, on the topic, so as to mitigate the conflicts in the region, in particular South Asia and Middle East.

Speakers grappled at the notion of non-state actors and proxy wars: PIPS director Muhammad Amir Rana said non-state actors often evoke memories of violent elements. This despite that as per definition, non-state actors include organizations working for human rights.

Prof. Syed Rifaat Hussain, Department of Government and Public Policy, NUST, said the term “proxy wars” is a contested notion. There is no universal agreement on its definition, nor on the set of circumstances behind such wars. Interestingly, he said, proxy wars are as old as the phenomena of conventional war itself.

Speakers noted proxy wars are instruments of state power. As to why states go for it, it was argued, it is because they are often cheap undertaking to change the status quo.

Participants noted over the decades, much of the conflict involves non-state actors. Interstate conflict, on the other hand, has declined. In recent times, he said tit-for-tat tactics on behalf of such actors have reduced their appeal.

Dr. Ibrahim Fraihat, Doha Institute of Graduate Studies, Doha, termed proxy war as an arms conflict between two parties, though one of them is not directly involved. This way, domestic conflicts are escalated by external power intervention. At the same time, proxy war, if unresolved, can take the shape of conventional war, the most significant example was of Vietnam War. In contemporary times, he lamented, the Middle East has been rendered a stock market of proxy organizations.

William Gueriache, Associate Professor American University in the Emirates Dubai, said on surface, all states support open diplomacy and multilateralism. Yet the survival of patronage has paved the way for foreign intervention during conflicts in the whole Middle East.

Dr. Marwan Kablan, Director Policy Analysis at the Arab Center for Research and Policy Studies Doha, also hinted multiplicity of actors involved in Syrian conflict, calling it as mother of conflicts in the region. It was said that wars cannot be ended unless patron states achieve their interests.

Dr. Shaheen Akhtar, Professor National Defence University Islamabad focused on the apprehension of Pakistan about India’s involvement in Afghanistan. She said Pakistan’s uneasy relationship with Kabul reinforces a perception of encirclement while growing US-India strategic cooperation further aggravates these apprehensions.

Dr. Muhammad Riaz Shad, National University of Modern Languages (NUML) Islamabad, said fighting through proxies gives states an opportunity of deniability.

#### Instability is endemic key to prevent African industrial development

**UN Economic Development in Africa Report, 11**

(United Nations, "Chapter 6: Fostering industrial development in Africa: main findings and recommendations," Jan 11, l/n, accessed 1-15-12)

The Report also recognizes the importance of regional integration and political stability in developing and sustaining industrialization in Africa. Consequently, it calls upon African governments to strengthen regional integration and enhance political stability. \* Strengthening regional integration. Building a robust regional market is necessary to unlock Africa's manufacturing potential and prepare it to compete in global export markets. Regional integration can contribute to building robust regional markets through, for example, cooperation in the development of regional infrastructure, harmonization of policies and maintenance of political stability. Given the small domestic markets of African economies, the regional market can be a force for industrial development in the region. This is important because unlike Africa's exports to the rest of the world that is skewed towards commodities and against manufactures, the share of manufactures in intra-African exports is high. In 2009, manufactures accounted for about 40 per cent of intra-African exports while their share of Africa's exports to the rest of the world was about 18 per cent. Further, Africa is among the fast-growing regions of the world both in terms of population and income. As a result, the region is increasingly becoming an important source of export demand that **could form the basis for** initiating and sustaining **industrial development**. \* Maintaining political stability. Political stability is a **necessary condition** for industrial development in Africa. Without political stability, even a well-designed and well-implemented industrialization programme is bound to fail. Therefore, efforts should be made by African governments to reduce the incidence of political crisis through better political and economic governance, for example. In addition, the role of regional institutions such as the African Union Commission and the regional economic communities should be strengthened in the areas of crisis prevention, management and resolution.

#### That destroys African biodiversity- current levels of industrialization insufficient to trigger the impact

**Tesi, 2k --** Middle Tennessee State University political science professor

(Moses, PhD in political science from Vanderbilt University, editor of The Journal of African Policy Studies, *The Environment and Development in Africa*, 33-4, google books, accessed 1-15-12)

Activities in each category of elements discussed above were usually de- signed to generate modemization inspired development for countries across Africa. Such development involved political, social, economic, and technologi- cal changes, which were often very disruptive to the natural interaction among the species (including humans) of Africa's ecosystems and their environments." Because development activities as conceived by academics and policy makers were primarily assessed in relation to their contribution to the enhancement of human or societal capacity and welfare (some of which never did), consideration was not always given the changed or degraded environment that often resulted from the process." Thus, development activities were often measured by factors such as democratization, urbanization, industrialization, science and technology, secularization, and a capitalist economic system-elements embedded in West- em values." The indicators of development, in other words, did not always take into account the benefits of a clean and natural environment (that is, nonmaterial values) that were not embedded in Western material values. This made the ac- tivities grouped under the classification above evoke serious environmental dis- ruption, degradation, or change to various ecosystems in Aliica where any of the activities took place. Thus, **as African countries** expanded and **intensified** such activities to accelerate their **development, higher levels of environmental degradation and disruptions were generated.** Although African countries have yet to achieve the high level of development that they aspire to, discussions about development-triggered environmental changes must also contend with the question as to how much environmental disruption, change, and degradation is acceptable for how much development. The question is even more complex when the laws goveming the functioning of eco- systems and the experiences of early developers in the West are taken into con- sideration. The four laws of ecology as discussed by Barry Commoner-namely, everything is connected to everything else, everything must go somewhere, na- ture knows best, and there is no such thing as a free lunch-emphasize the com- plex yet stable relationship that exists between human beings and their environments." Any activities that excessively disturb that stability would lead to the **collapse of the whole system**, even though that may not appear to do so to the instigators. The notion that everything must go somewhere suggests that anything that is disposed of in the ecosystem does not just disappear. It is recy- cled back into the ecosystem. If nothing that is thrown away ever goes away, this suggests that waste, more of which is produced in the development process than under ordinary circumstances, remains a hindrance to the very progress that the process is put in motion to generate. The more that is produced, the more de- graded the environment will be and the less it will be able to sustain life. The contention that nature knows best highlights the dangers of excessive tinkering with natural systems in the name of making life better. Not only would that lead to the introduction of substances that do not occur in the natural systems, it also suggests that such substances need to be more restricted." The final law empha- sizes the price that humans must pay for altering the natural order of things in the ecosystem. Such alterations will only come to haunt them as the environment is destroyed to such an extent that it is **no longer able to sustain life**.

#### Key to prevent extinction

**Owusu-Afriyie, 2 ---** Aburi Botanic Gardens staff

(George, "The Potential Role of African Botanic Gardens in Environmental Awareness Programmes and the Need to be Involved," 10-1-2, www.bgci.org/education/1703/, accessed 1-15-12)

Today some of the 60 botanic gardens and arboreta in Africa are among those botanic gardens that are leading the worldwide fight to save plant diversity, as well as creating an understanding and awareness for the promotion of methods of conservation and development of plant resources. Despite financial constraints, a number of African botanic gardens are implementing major reforms under the auspices of Botanic Gardens Conservation International, to enable them play a more purposeful role in conservation. The Creation of Environmental Awareness Among the Populace **African's biological diversity is** not only of continental economic importance but is also **of global significance**. Unfortunately, existing arrangements for the utilization of the continent's biodiversity cannot be considered sustainable and this is having serious repercussions on development programmes in Africa. The rich plant diversity in Africa is indiscriminately harvested for a number of purposes including: cultivation and production of food and cash crops for domestic and external interests herbal medicine construction. Luckily, in spite of their continued exploitation, botanic gardens and other habitats still contain some of the **richest assemblages of plant life known on this planet.** Thus African gardens are appropriate institutions with the necessary capacities and plant diversities for use in environmental awareness programmes. The success of environmental awareness programmes will largely depend upon the communities' understanding of the functioning of the environment, the problems it presents, and their expected contribution to its protection and improvement. The pursuit of conservation-oriented practices to halt the degradation and extinction of plant resources will depend not only on their acceptability, but also on the active support and involvement of the populace at large. In addition, people need to be well informed, sensitized and motivated towards adopting specific plant conservation practices and the sustainable use of plant resources. It is well known that plants are the **key to life on Earth** and the **prime element in biodiversity**. They dominate our landscape, providing the framework of natural ecosystems that provide the habitats for animal species and **make life on earth possible for humans** as well as other living beings. Yet in spite of this common knowledge of the importance of plants in human survival, plant life is being lost at an increasing rate not only in Africa, but also throughout the whole world. This is the result of economic pressure on the developing countries and careless human activities. Until unfair transactions, particularly in trading systems, are addressed and humans made the centre of attention, only a limited impact will be made in our effort to control the excessive utilization of resources and the regenerability of the various life-sustaining systems on the Earth.

#### Prefer the specificity our evidence to African biodiversity- its key to prevent extinction- key region and species to global life-support systems

**Richard, 10** -- science and technology editor

(Michael Graham, "The True Size and Importance of Africa," 10-13-10, www.treehugger.com/clean-technology/the-true-size-and-importance-of-africa-map.html, accessed 1-16-12)

Don't Overlook Africa! Because of the way flat maps distort the size of countries (the closer they are to the poles, the more distorted they are), most people don't really know just how big the African continent is. This leads many people - and the smart and powerful aren't immune to this - to underestimate Africa's importance. The map above shows just how wrong our perception can be (unless we've already seen a map like this before). It shows that you could fit the whole USA, China, India, Spain, France, Germany, the UK, Italy, Switzerland, Japan, and Eastern Europe, inside of Africa and still have some room left. We're All Inter-Connected Africa matters a lot because of the number of people who live there (about 1 billion as of 2005, with projections of 2 billion by 2050), but also because of the **number of indigenous animal and plant species**, because of the vast expanses of land that aren't being protected, because of the huge ecosystems that are uniquely found there, because of the impact that it can have on the global climate (especially deforestation and desertification), because of all the solar power potential and other natural resources, etc. It is one of the **key regions** that needs to improve on many levels for the welfare of its people and **to safeguard the integrity of our planet's life-support systems.** Africa is too often the forgotten continent, but it shouldn't be, and humanitarian problems should make us forget environmental issues because both go hand in hand. The degradation of the environment will affect the most vulnerable people there.

#### Instability key to African rainforests- key to the hydro-cycle

**DeCapua, 12 --** VOA News staff

(Joe, "African Rainforests Continue to Face Challenges," Voice of America News, www.voanews.com/english/news/africa/decapua-africa-rainforests-6jan12-136821648.html, accessed 1-15-12)

The African continent contains about 30 percent of the world’s global rainforests, second only to the Amazon. Scientists and conservationists met at Oxford University to discuss changes the forests are expected to undergo in the 21st Century. Africa’s tropical forests face challenges from deforestation, hunting, logging and mining, as well as climate change. “Climate change is a major issue for much of the world, but for Africa, in particular. And there’s much interest and concern around Africa’s forests, which is the second largest area of tropical forest in the world after the Amazon forest. And yet there’s been very little synthesis of the research that’s there. There’s much less known about both climate and forest and people and there interaction in Africa compared to many other regions of the world,” said Yadvinder Malhi is a professor of ecosystems science at Oxford University and director of Oxford’s Center for Tropical Forests. He said the conference brought together experts in climate change, ecology, social sciences, economics, anthropology and archeology to discuss Africa’s rainforests. “They’re important at an international level for many reasons. They hold a large amount of carbon. They seem to be absorbing carbon from the atmosphere, which is slightly **slowing down the rate of climate change**. In the case of Africa, the **recycling of water.** So water that falls in the Congo region gets taken up in the roots of trees and evaporated back into the atmosphere where it forms clouds and new rain,” he said. The clouds that form over the Congo Basin actually have **long range effects on water supplies** and weather patterns in parts of Asia and even North America. West and Central Africa There’s a big difference between the forests of the Congo Basin and West Africa. Malhi says there’s been extensive deforestation in West Africa. Much of the land has been cleared for agriculture over the last 20 to 30 years. “When we look at **the Congo Basin** we see a very different situation. That’s an area that **is** at the moment **almost all intact forest and has had** relatively **low rates of deforestation**. And the reasons why those rates have been low are varied from country to country. But in the largest area, the Democratic Republic, **it’s been political instability and poor infrastructure linked to that instability that has meant that this large forest reserve has not** currently really **faced** very **heavy pressure**, at least compared to forests of Asia or the Amazon,” Malhi said.

#### Hydrologic cycle key to prevent extinction

**Abreu et al, 5**

(Francisco de Assis Matos de Abreu, André Montenegro Duarte, Mário Ramos Ribeiro, Ana Rosa Carriço de Lima and Wellington de Jesus Sousa. “The Hydrologic cycle: an open or closed system?” Revista Geográfica 137 (Jan-June 2005): p109)

This paper deals with the Hydrologic Cycle, a vital element for the Earth as a whole, and especially for life, climatic conditions and the planet's dynamic equilibrium, presenting it, based on the fundamental concepts of Thermodynamics and on the new knowledge and discoveries of geosciences, under two distinct foci: 1) As a Closed System, in the form in which it is currently conceived; 2) As an Open System, in the form in which this article proposes it be understood. Introduction Water is present in the Universe (1) as a whole and in other planets of the Solar System, but, from the evidence seen so far, only on Earth it is present in the three physical states (solid, liquid and gaseous). This fact, which is absolutely imperative for the existence of life, as it is conceived of and known, is due to the existence of a system called the hydrologic cycle, in which water not only alters its physical state, but also mores, both vertically and horizontally, and, as a result of the physical changes and spatial movements, is recycled and produces effects in living creatures (flora and fauna), and in inanimate objects, such as rocks and soils. The existence and importance of this cycle are undeniable. Barron et al. (1989) have noted that the history of the Earth is strongly influenced by the water cycle, be it in terms of the temperature variations resulting from gas and energy flows in the planetary atmosphere, the erosion and transport of sediments and consequent formation of relief, and soil and vegetation covering. Water's property of being a universal solvent makes it an essential part of chemical reactions and geochemical cycles. Thus, in almost all the processes inherent of the Earth System, water, inserted in its cycle, is present. Barron et al (1989) also recommended that the Hydrologic Cycle, so vital for the functioning of the Earth System, should be the main field of research with regard to global changes.

#### Protecting African rainforests key to solve global water circulation

**Anaruk, 9** -- citing studies in the peer-reviewed journal Nature

(Amy, freelance health and environmental writer, "The Importance of African Forests as Carbon Sinks," 3-21-9, www.celsias.com/article/importance-african-forests-carbon-sinks/, accessed 1-16-12)

The Importance of African Forests as Carbon Sinks

It may be **impossible to overestimate the importance** of tropical rainforests to human health and **global stability**. Their incredible biodiversity produces cancer fighters and other lifesaving medication, and **the control they exert on atmospheric climate is enormous**, in part **because of their role in global water circulation.** Rainforests' carbon storage capacities, however, are garnering the most press lately. Nature reports that African forests are taking in 0.6 metric tons of carbon per hectare (2.471 acres) every year, a significant finding that puts them on par with the Amazon rainforests as carbon sinks. While research can't yet pinpoint the cause of the increased mass - either the forests are still growing because of past damage or the trees are soaking up excess carbon dioxide because of climate changes, or both - the forests need protection at any rate: "The research also highlights the need to protect African forests, write the authors of the Nature paper, led by Simon Lewis of the University of Leeds, UK. "**With adequate protection these forests are likely to remain large carbon stores in the long**er **term**. Securing this service will probably require formalising and enforcing land rights for forest dwellers, alongside payments for ecosystem services to those living near forested areas." - Science and Development Network Whether the African forests are simply recovering from undetected damage like wildfires or whether they're helping alleviate climate change, the fact remains that cutting the trees down would release all that CO2 into the air. Over in Canada, ForestEthics, Greenpeace, and Sierra Club BC just published a report on the side effects of industrial logging in the 21 million-acre Great Bear Rainforest in British Columbia, one of the last large non-tropical rainforests on Earth. Damage estimates equal 153 million metric tons of released CO2.

#### African instability key to justify strong EU foreign policy

**Loisel, Institut d'Etudes Politiques de Paris, 5**

(Sebastien, "Secutisation Processes in the Formulation of European Foreign and Security Policy in Sub-Saharan Africa," CFSP Forum, 3:5, Sept 05, unimaas.academia.edu/KarolinaPomorska/Papers/110624/Europeanisation\_framework\_or\_fashion, accessed 1-18-12)

Normative references to both humanitarian imperatives and security interests have largely been used to legitimise and foster the reinforcement of European foreign and security capacities throughout the 1990s. Securitisation discourses have been used to claim that regional conflicts had proliferated in Africa in the post- Cold War era, and that they represented a new threat the EU had to deal with. In other words, these discourses have "˜brought about a change in the world by representing it as having been changed'.5 Whose security? Securitisation processes in the formulation of EU foreign and security policy These African conflicts have moreover been constructed discursively as two different forms of threats. On the one hand regional instability in Africa has been depicted as a threat in relation to immigration, terrorism, arms and drug smuggling. Analysing these securitising moves might therefore open promising insights into how and why **African stability has been designed as a stake of importance for European security** and put up on the European agenda in a manner that crosses over all three pillars of EU policies. On the other hand African regional instability has been characterised as a necessity per se, in order to prevent further massacres and civil wars, thereby helping to legitimise the creation of new instruments (ESDP) and the transformation of older EU policies such as development cooperation. The referent object in this case is not European; it is the sheer survival of African civilians that is at stake.

#### Strong EU is key to solve extinction

**Bruton, former prime minister of Ireland, 2**

(John, former ambassador of the EU to the US, European Commission Delegation ambassador, "The Future of the European Union," The Irish Times, 1-31-2002, 195.7.33.33/newspaper/special/2002/europe/index.htm, accessed 6-23-11)

As the Laeken Declaration put it, "Europe needs to shoulder its responsibilities in the governance of globalisation" adding that Europe must exercise its power in order "to set globalisation within a moral framework, in other words to anchor it in solidarity and sustainable development". Only a strong European Union is big enough to create a space, and a stable set of rules, within which all Europeans can live securely, move freely, and provide for themselves, for their families and for their old age. Individual states are too small to do that on their own. Only a strong European Union is big enough to deal with the globalised human diseases, such as AIDS and tuberculosis. Only a strong European Union is big enough to deal with globalised criminal conspiracies, like the Mafia, that threaten the security of all Europeans. Only a strong European Union is big enough to deal with globalised environmental threats, such as global warming, which threaten our continent and generations of its future inhabitants. Only a strong European Union is big enough to deal with globalised economic forces, which could spread recession from one country to another and destroy millions of jobs. Only a strong European Union is big enough to regulate, in the interests of society as a whole, the activities of profit seeking private corporations, some of which now have more spending power than many individual states. These tasks are too large for individual states. Only by coming together in the European Union can we ensure that humanity, and the values which make us, as individuals, truly human, prevail over blind global forces that will otherwise overwhelm us.

#### No escalation- great powers won’t intervene in Africa- Sudan proves

**Barrett, 5** -- Ph.D. student in Strategic Studies and Conflict Resolution

(Robert, Ph.D. student, Strategic Studies and Conflict Resolution Centre for Military and Strategic Studies University of Calgary Canada, MA, Conflict Analysis and Management, “Understanding the Challenges of African Democratization through Conflict Analysis,” 6-1-5, http://papers.ssrn.com/sol3/Delivery.cfm/SSRN\_ID726162\_code327511.pdf?abstractid=726162&mirid=1, accessed 1-18-12)

Westerners eager to promote democracy must be wary of African politicians who promise democratic reform without sincere commitment to the process. Offering money to corrupt leaders in exchange for their taking small steps away from autocracy may in fact be a way of pushing countries into anocracy. As such, world financial lenders and interventionists who wield leverage and influence must take responsibility in considering the ramifications of African nations who adopt democracy in order to maintain elite political privileges. The obvious reason for this, aside from the potential costs in human life should conflict arise from hastily constructed democratic reforms, is the fact that Western donors, in the face of intrastate war would then be faced with channeling funds and resources away from democratization efforts and toward conflict intervention based on issues of human security. This is a problem, as Western nations may be increasingly wary of intervening in Africa hotspots after experiencing firsthand the unpredictable and unforgiving nature of societal warfare in both Somalia and Rwanda. On a costbenefit basis, the West continues to be somewhat reluctant to get to get involved in Africa’s dirty wars, evidenced by its political hesitation when discussing ongoing sanguinary grassroots conflicts in Africa. Even as the world apologizes for bearing witness to the Rwandan genocide without having intervened, the United States, recently using the label ‘genocide’ in the context of the Sudanese conflict (in September of 2004), has only proclaimed sanctions against Sudan, while dismissing any suggestions at actual intervention (Giry, 2005). Part of the problem is that traditional military and diplomatic approaches at separating combatants and enforcing ceasefires have yielded little in Africa. **No powerful nations want to get embroiled** in conflicts they cannot win – especially those conflicts in which the intervening nation has very little interest.

#### No great power war in Africa- no serious interests

**Fehrenbach, 8 --** American author and former head of the Texas Historical Commission

(T.R., "Central Asia ripe for next Big One," San Antonio Express-News, 3-9-8, l/n, accessed 1-16-12)

Me, I've never been a Holy Land-Armageddon fan. The nexus of the world's powers aren't right for that. Israel and Arabs can have at it; Shiites and Sunnis murder by the millions, but like genocidal rampages in Africa, these are simply not planet-threatening. I'm talking big war. To create a serious conflict, important great-power interests must be involved, producing fear and loathing among the world's empires. China and Russia may mess around in the Middle East to tweak Uncle Sam's nose, but we all know that while we have vital stakes there, they do not. The same with Africa: The U.S., European Union and China are all vying for influence and resources on the continent, but this is in nobody's backyard. African wars are usually fought by proxies and a few paratroops.

#### Escalation empirically denied and based on cold war thinking- states will cooperate and peace-keep

**Cilliers, 2k --** Institute for Security Studies (South Africa) executive director

(Jakkie, "African Security," Paper by Jakkie Cilliers at the Ministerial Conference on Security, Stability, Development and Co-operation in Africa, May 2000, www.iss.co.za/uploads/CONFREPCSSDCA.PDF, accessed 1-18-12)

Direct conflict between African states such as that which we see between Ethiopia and Eritrea has, in fact, been a relatively isolated phenomenon. Not so war by proxy. Today any numbers of African countries are involved in indirect confrontations with one another. Often these conflicts are conducted through support to armed opposition parties in neighbouring states, sometimes with a religious or ethnic character, often taking place in a third country, drawing others into the war and expanding the conflict. There are many examples of these activities in the Horn and in Central Africa. In other cases neighbouring countries have involved themselves directly in the internal affairs of others or allowed their territory to be used as a springboard for such involvement. Possibly the most obvious examples today relate to what is happening in central and eastern parts of the DR Congo. Yet in other instances countries have been drawn into conflicts by their difficulty to control their often inhospitable and rugged borders, particularly when international boundaries cut through rather than follow broad ethnic and tribal divides. During the Cold War regional conflicts were at once internationalised and subsumed within the superpower competition and controlled to avoid escalation into nuclear conflict. In the process the strategic relevance of regions such as Africa was elevated as part of the global chessboard - pawns in a much larger game. At the beginning of the twenty-first century the situation is much changed. **Africa has lost its strategic relevance**. Apart from humanitarian concerns, only selected areas with exploitable natural resources demand the attention of the larger and more powerful countries. A blurring in the clear demarcation of roles between sub-regional, regional and international organisations - the UN in particular — has occurred after the end of the Cold War. During the bi-polar era, the division of labour was clear. The UN mounted peacekeeping operations and deployed political missions, while regional organisations concentrated on preventive diplomacy. The proliferation of internal conflicts after the fall of the Berlin Wall has confounded this clear division. Almost as if to mirror this trend, the increase in the number and the nature of the various actors involved in internal conflicts have further complicated the ability of state-centred negotiations and mediation to succeed. The response of the international community and much of Africa, to the challenge of instability on the continent is generally hostage to the state-centred peacekeeping debate. It is to peacekeeping that commentators turn when looking for solutions to violent crises, crises that are very different to those envisaged at the end of Second World War when the UN Charter was drafted. Globally a new security paradigm seems to be emerging. This consists of regions accepting co-responsibility and sharing the burden to police themselves and a dilution of the central role that many had hoped that the United Nations would play in this regard. This agenda is primarily, but not exclusively, driven by the United States that is seeking co-option and burden sharing by others in the hegemonic role that the demise of the Soviet Union had thrust upon it. The most recent and arguably the most important indication of this trend is the US drive for NATO to undertake so-called non-Article 5 missions and US support for a greater ‘European defence identity’ as opposed to a transatlantic identity. A combination of developments — Africa’s peripheral status in a period of global financial instability, Western peacekeeping failure’s in Somalia, Rwanda and in Angola, and the enthusiasm for sub-regional initiatives under the auspices of organisations such as ECOWAS and SADC — have led to successive French, British, American and other initiatives to build African peacekeeping capacities to deal with African emergencies. In this process of obtaining ‘peacekeeping on the cheap’, countries such as Nigeria and Ghana have had to bear a huge burden in financial, diplomatic and political resources. The recent push by the international community in Sierra Leone and MONUC in the DR Congo represent a welcome but tentative return to Africa that holds promise and may, if successfully concluded, indicate a limited re-engagement of Africa. Therefore the importance of ensuring that recent developments in Sierra Leone not derail this tentative reengagement. But there can be little doubt that the era of ‘lean peacekeeping’ has arrived which will require the ability to ‘make do’ with available resources where peacekeepers are neither impartial nor busy with consensual peacekeeping. These operations will also appear to remain essentially Third World operations within which the role of the developed world is a logistically and financially supportive one. African peacekeepers will have to adapt to these conditions of stringency and efficacy in seeking to deal with complex emergencies and we will have to ensure that the international community does indeed come up with the supportive peacebuilding abilities and developmental engagement that is required by these often intractable problems.

#### No African terror threat- constructed by the US to justify petro-imperialism

**Feffer, 11 --** Foreign Policy in Focus co-director

(John, "In Search of Terrorist Enemies in Africa," Huffington Post, 10-25-11, www.huffingtonpost.com/john-feffer/in-search-of-terrorist-en\_b\_1031364.html, accessed 1-16-12)

An informal competition took place during the Bush years for the title of "second front" in the war on terror. Administration officials often referred to Southeast Asia as the next major franchise location for al-Qaeda, with the Philippines in particular slated to become the "next Afghanistan." Then there was the border between Brazil, Argentina, and Paraguay, which State Department officials termed a "focal point for Islamic extremism in Latin America." Worried about the spread of al-Qaeda operatives in North Africa, the Bush administration also developed the Pan-Sahel Initiative, which became the Trans-Sahara Counterterrorism Initiative before finally being folded into the Pentagon's new Africa Command. In none of these regions did a new Afghanistan in fact develop. Still, U.S. counter-terrorism operatives continue to ply their trade all over the map. The "second front" thesis, meanwhile, is alive and well and living in Africa and its immediate environs. Last summer, long before the assassination of Osama bin Laden, the CIA was already billing al-Qaeda in the Arabian Peninsula (AQAP) as the most urgent threat to the United States. Beginning in May, the shadowy Joint Special Operations Command (JSOC) began using drones to target AQAP leaders in Yemen, which lies across the Red Sea from the horn of Africa. The campaign escalated over the summer, culminating in the killing of AQAP leader, U.S. citizen Anwar al-Awlaki, at the end of last month. The administration has also emphasized the link between al-Qaeda and the al-Shabaab militias in Somalia -- through AQAP as a go-between -- and is now supporting Kenya's recent incursion into that country. Then there's the recent dispatch of U.S. Special Forces to central Africa, with Pentagon chief Leon Panetta worrying about "elements there that either have ties to al-Qaeda or that represent the forces of terrorism on their own." And plenty of pundits and politicians are urging the administration to address the prospect of radical Islamists taking over the North African countries liberated during the Arab Spring. It might seem a strange time for all this terrorism talk to resurface. Osama bin Laden is dead, and his cohort in Pakistan is beleaguered. There are fewer than 100 al-Qaeda operatives in Afghanistan. Al-Qaeda in Iraq is a spent force, and the Obama administration announced last week that all U.S. troops will be out of the country by year's end (though as many as a thousand may in fact remain behind). After the first Gulf War, Colin Powell complained that the United States was running out of enemies to fight. Now, the United States is discovering that it might be running out of terrorists to fight as well. Ah, but "terrorism" is a flexible term, and Africa is a big place. The "second front" thesis continues to thrive. But it’s just as **full of hot air** as before. Let's start with AQAP, the CIA's greatest terrorist concern. It's not particularly large, probably no more than 300 core operatives, according to Fawaz Gerges in his new book The Rise and Fall of Al-Qaeda, and it lacks any mass following. "Although AQAP is extremely dangerous -- as shown by its offensive against the Yemeni authorities, the failed underwear bomber, and the foiled mail bombings – it poses a relatively slight challenge to Yemen and a limited security menace to the West," Gerges writes. "It does not possess the material, human means or endurance to sustain a transnational campaign, nor does it have the assets or resources to build viable alliances with Yemeni tribes and a social welfare infrastructure." The situation in Yemen is complicated by a major grassroots effort to unseat the country’s long-serving authoritarian leader Ali Abdullah Saleh. The Obama administration has called on Saleh to step down. But it has also relied on Saleh's support to conduct aerial attacks. Indeed, as Ibrahim Sharqieh of Brookings Doha Centre has pointed out, the United States is worried that Yemen's Islamist-flavored opposition, should it take power, would not continue to fight AQAP. Just as in Pakistan, however, the drone strikes in Yemen are focusing anger at the United States and helping to create future terrorists. The Obama administration would be well-advised to stop the drone attacks, decisively end its relationship with Saleh, and welcome a new political order in Yemen. Given the deep-seated rift between Islamist politicians and al-Qaeda terrorists, this would also make for the most effective counter-terrorism policy. Obama is making similar mistakes just across the Red Sea in Africa proper. Last week, Kenya sent troops and tanks 100 miles into Somalia to fight the militant organization al-Shabaab, which it accused of kidnapping several foreigners in Kenya. Although the U.S. government has denied conducting air strikes in support of the operation, U.S. ambassador to Kenya Scott Gratian pledged technical assistance to the Kenyans. What seemed initially to be an invitation to the Kenyans to intervene has turned into something altogether different. Although equally disposed against al-Shabaab, the Somali government has rejected the invasion, thinking that Kenya was only intending to provide training and logistical support. The last time a country invaded Somalia – Ethiopia in 2006, with U.S. support – the disastrous action gave birth to the very al-Shabaab that Kenya is now fighting. Al-Shabaab, Arabic for "the youth," is not exactly a group of choir boys. In 2010, the group announced its formal affiliation to al-Qaeda. Despite this announcement, the group's ties to al-Qaeda are likely to be weak, and its popularity recently plummeted because of its culpability for the famine that has struck Somalia. But there's nothing like a foreign invasion to bring a country together across ideological lines, as happened after the Ethiopian invasion five years ago. Al-Shabaab might just have been given a new lease on life by Kenya's actions. In nearby Uganda, meanwhile, the dispatch of U.S. Special Forces is, on the face of it, about dealing with the Lord's Resistance Army (LRA), led by the pathological Joseph Kony. The LRA certainly qualifies as a terrorist outfit, but Kony is no Islamic radical. He considers himself some form of Christian. So why is Panetta suddenly talking about al-Qaeda in this case? It goes back to the link the United States has asserted between al-Shabaab and al-Qaeda in Somalia. "The Ugandans did not pull out from Somalia following the 2010 Kampala bombings," writes Foreign Policy In Focus contributor Paul Mutter in Great Game in the Horn of Africa, "and remain committed to maintaining a force there, something other U.S. allies in Africa have been reluctant to do. Those boots on the ground might go some way in firmly establishing a central Somalia government the United States and Uganda can live with." Terrorism is, of course, not the only thing the Obama administration is looking at in Africa. Securing access to oil is a key priority for the United States, and it needs relative stability to guarantee that access. Uganda is just starting up a new oil industry. Energy corporations are ramping up their exploration in Kenya. To the north, the oil fields of South Sudan have outside investors salivating. On the other side of Africa, Ghana has also recently discovered black gold, and it's already had an effect on its economic statistics. "According to Economy Watch, Ghana was the world’s fastest growing economy in the first half of 2011 with a GDP growth rate of 20 percent, which is six percent higher than the first runner-up, Qatar," writes FPIF contributor Kwei Quartey in Dismantling Elmina Castle. But the oil profits remain concentrated in the hands of the few in a country where the gross national income per capita hovers around $700 and life expectancy is only 57. The discovery of new oil fields in Africa raises the stakes considerably. The intersection of oil and militarism, what Kevin Philips has called petro-imperialism, has transformed the U.S. military into a "global oil-protection force." The maps of oil fields in Africa and U.S. military involvement in the continent correspond all too closely. The threat of terrorists from Africa sponsoring another lone suicide attack on America certainly captures headlines. But the threat of terrorists disrupting the flow of oil from the region is the more immediate concern of national security officials. During the Bush years, second fronts in terrorism proliferated as the ruling neoconservatives imagined remapping the globe to accommodate U.S. interests. Today, there is really only one second front, Africa. As U.S. forces continue to withdraw from Central Asia and the Middle East, this second front is fast becoming the war on terrorism’s first front. It will be a terrible irony if the first American president with roots in Africa ends up turning the continent upside down in America's endless search for, and production of, enemies.

#### No terrorist CBW

Mueller and Stewart 10/29/18 [John Mueller is Woody Hayes Senior Research Scientist, Mershon Center for International Security Studies, and adjunct professor of Political Science, at Ohio State University. He is also a Senior Fellow at the Cato Institute in Washington. Mark G. Stewart is Professor of Civil Engineering and Director of the Centre for Infrastructure Performance and Reliability at The University of Newcastle in Australia. Terrorism and Bathtubs: Comparing and Assessing the Risks. October 29, 2018. https://www.tandfonline.com/doi/abs/10.1080/09546553.2018.1530662?journalCode=ftpv20]

However, there is of course no guarantee that things will remain that way, and the 9/11 attacks inspired the remarkable extrapolation that, because the terrorists were successful with box cutters, they might soon be able to turn out weapons of mass destruction— particularly nuclear ones—and then detonate them in an American city. For example, in his influential 2004 book, Nuclear Terrorism, Harvard’s Graham Allison relayed his “considered judgment” that “on the current path, a nuclear terrorist attack on America in the decade ahead is more likely than not.”11 Allison has had a great deal of company in his alarming pronouncements. In 2007, the distinguished physicist Richard Garwin put the likelihood of a nuclear explosion on an American or European city by terrorist or other means at 20 percent per year, which would work out to 91 percent over the eleven-year period to 2018.12

Allison’s time is up, and so is Garwin’s. These off-repeated warnings have proven to be empty. And it is important to point out that not only have terrorists failed to go nuclear, but as William Langewiesche, who has assessed the process in detail, put it in 2007, “The best information is that no one has gotten anywhere near this. I mean, if you look carefully and practically at this process, you see that it is an enormous undertaking full of risks for the would-be terrorists.”13 That process requires trusting corrupted foreign collaborators and other criminals, obtaining and transporting highly guarded material, setting up a machine shop staffed with top scientists and technicians, and rolling the heavy, cumbersome, and untested finished product into position to be detonated by a skilled crew, all the while attracting no attention from outsiders.

Nor have terrorist groups been able to steal existing nuclear weapons—characteristically burdened with multiple safety devices and often stored in pieces at separate secure locales—from existing arsenals as was once much feared. And they certainly have not been able to cajole leaders in nuclear states to palm one off to them—though a war inflicting more death than Hiroshima and Nagasaki combined was launched against Iraq in 2003 in major part under the spell of fantasies about such a handover.14

More generally, the actual terrorist “adversaries” in the West scarcely deserve accolades for either dedication or prowess. It is true, of course, that sometimes even incompetents can get lucky, but such instances, however tragic, are rare. For the most part, terrorists in the United States are a confused, inadequate, incompetent, blundering, and gullible bunch, only occasionally able to get their act together. Most seem to be far better at frenetic and often self-deluded scheming than at actual execution. A summary assessment by RAND’s Brian Jenkins is apt: “their numbers remain small, their determination limp, and their competence poor.”15 And much the same holds for Europe and the rest of the developed world.16 Also working against terrorist success in the West is the fact that almost all are amateurs: they have never before tried to do something like this. Unlike criminals they have not been able to develop street smarts.

Except perhaps for the use of vehicles to deliver mayhem (though this idea is by no means new in the history of terrorism), there has been remarkably little innovation in terrorist weaponry or methodology since 9/11.17 Like their predecessors, they have continued to rely on bombs (many of which fail to detonate or do much damage) and bullets.18

#### Bioweapons shift is a myth – they aren’t an alternative

Koblentz 15 [Gregory D. Koblentz is an associate professor and deputy director of the Biodefense Graduate Program in the School of Policy, Government, and International Affairs at George Mason University. He is the author Living Weapons: Biological Warfare and International Security (Cornell University Press, 2009). The myth of biological weapons as the poor man’s atomic bomb. March 18, 2015. https://thebulletin.org/roundtable\_entry/the-myth-of-biological-weapons-as-the-poor-mans-atomic-bomb/]

In his recent column, “Deterrence, without nuclear winter,” Seth Baum concludes that non-contagious biological weapons are one of two viable alternatives to replacing nuclear weapons in order to achieve what he calls “winter-safe deterrence.” He writes that non-contagious biological weapons “could work well if deterrence required threatening large human populations” without posing the risk of a global catastrophe like nuclear winter or a pandemic. Leaving aside the disturbing normative and legal implications of Baum’s proposal to start a global biological arms race, I will focus on the strategic logic underpinning his proposal to replace nuclear weapons with biological weapons. Baum’s conclusion is based on an uncritical acceptance of the long-standing myth that biological weapons are “the poor man’s atomic bomb.” This myth is based on the simplistic notion that because biological weapons could potentially cause mass casualties on par with those caused by nuclear weapons, these weapons should have similar political effects and implications for international security. Although biological and nuclear weapons are both considered weapons of mass destruction, biological weapons differ from nuclear weapons in three important ways that undermine the utility of biological weapons for deterrence: uncertainty of effects, availability of defenses, and the need for secrecy and surprise.

#### Countermeasures solve bioweapons but not nuclear war – that also deters states from using them even if countermeasures fail

Koblentz 15 [Gregory D. Koblentz is an associate professor and deputy director of the Biodefense Graduate Program in the School of Policy, Government, and International Affairs at George Mason University. He is the author Living Weapons: Biological Warfare and International Security (Cornell University Press, 2009). The myth of biological weapons as the poor man’s atomic bomb. March 18, 2015. https://thebulletin.org/roundtable\_entry/the-myth-of-biological-weapons-as-the-poor-mans-atomic-bomb/]

The second major difference between nuclear and biological weapons concerns the availability of defenses. There are no effective defenses against the effects of a nuclear attack. There are, however, a number of countermeasures that can be taken before, during, and after a biological attack that can mitigate the consequences of such an attack. Masks and filters can prevent exposure to biological agents. Biological weapons are also unique in that vaccines can be used to protect soldiers and civilians before an actual attack occurs. Because diseases have an incubation period of days to weeks, defenders have a window of opportunity to detect an attack using sensors and biosurveillance systems. Early detection can trigger the distribution of medical countermeasures to treat the victims of an attack and there are already vaccines and /or treatments available for the most lethal diseases such as anthrax, plague, smallpox, and tularemia. As a result, the effects of a biological attack are not absolute and incontestable; they can be mitigated and limited by a well-prepared defender. This possibility is likely to reduce the confidence of states in their ability to reliably inflict unacceptable damage against an adversary in a retaliatory strike. The full panoply of defenses need not be deployed constantly at full readiness because the very availability of these defenses may be sufficient to dissuade a state from calculating that it can inflict unacceptable damage. Although civilian populations will remain more vulnerable to biological weapons than will military forces, damage limitation remains a viable option for larger, more advanced states facing less sophisticated adversaries.

#### The secrecy required to develop bioweapons means they fail as a deterrent – issuing threats allows countermeasures

Koblentz 15 [Gregory D. Koblentz is an associate professor and deputy director of the Biodefense Graduate Program in the School of Policy, Government, and International Affairs at George Mason University. He is the author Living Weapons: Biological Warfare and International Security (Cornell University Press, 2009). The myth of biological weapons as the poor man’s atomic bomb. March 18, 2015. https://thebulletin.org/roundtable\_entry/the-myth-of-biological-weapons-as-the-poor-mans-atomic-bomb/]

Third, biological weapons have limited value as strategic deterrents due to the need for states to shroud their biological weapons programs in strict secrecy. This need for secrecy is driven by normative, legal, and strategic considerations. In the strategic context, the availability of defenses against biological weapons places a premium on the attacker achieving surprise. This undermines the ability of a state to use biological weapons as a deterrent in two ways. First, the secrecy required to retain the element of surprise in a biological attack reduces a state’s ability to issue credible threats to inflict unacceptable damage against an adversary. To make a deterrent threat credible, a state would not only have to admit that it was violating international norms and laws but it would also have to reveal details about its offensive biological warfare capabilities such as the types of agents it has developed and their means of delivery. These revelations could reduce the effectiveness of these weapons by allowing the defender to mobilize appropriate countermeasures. In contrast, the superpowers flaunted their nuclear forces during the Cold War for deterrent purposes. They were able to do this because these demonstrations of their nuclear capabilities did not provide the other side with an improved means of defending against them. Second, secrecy is a flimsy means of protecting strategic forces designed for deterrence. Strategic forces that depend on secrecy for their protection are vulnerable to intelligence breakthroughs by an adversary. If a defender gained inside information about an attacker’s capabilities, it would be possible to develop and stockpile new pharmaceuticals, immunize the at-risk population, distribute protective masks and treatments, enhance public health surveillance, and take other precautions that could substantially mitigate the impact of a first-strike or retaliatory attack with biological weapons. Although such information is difficult to acquire, the cases of Soviet biologist Vladimir Pasechnik, former Soviet bioweapons program official Ken Alibek, and Iraqi weapons official Hussein Kamal attest to the risk posed by the defection of high-level government officials knowledgeable about their nation’s biological warfare programs.