# 1NC Round 5

### 1

#### The affirmative is invested in a will to transparency and global modus venvindi which seeks the maximization of norms and satellization of the planet through the installation of a universal security apparatus. Their cooperation over the peaceful use of space succumbs to an understanding of war as reality that expands the operational function of liquidation beyond the atmosphere. Be skeptical of their attachment to transparency, empirical reality, and necessity of security as the search for mastery normalizes an impulse to conquer alterity and produces the very conditions for its collapse.

Baudrillard 83 (Jean Baudrillard, who is he really. *Simulations* translated by Paul Foss, Paul Patton and Philip Beitchman 1983)DR 19

The "space race" played exactly the same role as the nuclear race. This is why it was so easily able to take over from it in the '60's (Kennedy Khrushchev), or to develop concurrently in a mode of "peaceful coexistence." For what is the ultimate function of the space race, of lunar conquest, of satellite launchings, if not the institution of a model of universal gravitation, of satellisation, whose perfect embryo is the lunar module: a programmed microcosm, where nothing can be left to chance? Trajectory, energy, computation, physiology, psychology, the environment - nothing can be left to contingency, this is the total universe of the norm - the Law no longer exists, it is the operational immanence of every detail which is law. A universe purged of every threat to the senses, in a state of asepsis and weightlessness - it is this very perfection which is fascinating. For the exaltation of the masses was not in response to the lunar landing or the voyage of man in space (this is rather the fulfillment of an earlier dream) - no, **we are dumbfounded by the perfection of their plannin**g and **technical manipulation**, by the immanent wonder of programmed development. Fascinated by the maximisation of norms and by the mastery of probability. Unbalanced by the model, as we are by death, but without fear or impulse. For if the law, with its aura of transgression, if order, with its aura of violence, still taps a perverse imaginary, then the norm fixes, hypnotises, dumbfounds, causing every imaginary to involve. We no longer fantasise about every minutia of a program. Its observance alone unbalances. The vertigo of a flawless world. The same model of planned infallibility, of maximal security and deterrence, now governs the spread of the social. That is the true nuclear fallout: the meticulous operation of technology serves as a model for the meticulous operation of the social. Here, too, **nothing will be left to chance**; moreover, this is the essence of socialisation, which has been going on for some centuries but which has now entered into its accelerated phase, towards a limit people imagined would be explosive (revolution), but which currently results in an inverse, irreversible, implosive process: a generalised deterrence of every chance, of every accident, of every transversality, of every finality, of every contradiction, rupture or complexity **in a sociality illuminated by the norm** and **doomed to the transparency of detail radiated by datacollecting mechanisms**. In fact, the spatial and nuclear models do not even have their own ends: **neither has lunar exploration**, nor **military and strategic superiority**. Their truth lies in their being models of simulation, **vector models of a system of planetary control** (where even the super-powers of this scenario are not free-the whole world is satellised). 8 Reject the evidence: **with satellisation**, the one who is satellised is not whom you might think. By the orbital inscription of a space object, the **planet earth becomes a satellite**, the terrestrial principle of reality becomes excentric, hyperreal and insignificant. By the orbital establishment of **a system of control like peaceful coexistence**, all terrestrial microsystems are satellised and lose their autonomy. All energy, all events are absorbed by this excentric gravitation, **everything condenses and implodes on the micro-model of control** alone **(the orbital satellite),** as conversely, in the other, biological dimension everything converges and implodes on the molecular micromodel of the genetic code. Between the two, caught between the nuclear and the genetic, in the simultaneous assumption of the two fundamental codes of deterrence, every principle of meaning is absorbed, every deployment of the real is impossible. The simultaneity of two events in July 1975 illustrates this in a striking way: **the linkup in space** of the two American and Soviet super-satellites, apotheosis of peaceful existence - and the suppression by the Chinese of character writing and conversion to the Roman alphabet. This latter signifies the "orbital" establishment of an abstract and model system of signs, into whose orbit will be reabsorbed all those once remarkable and singular forms of style and writing. The satellisation of their tongue: this is the way the Chinese enter the system of peaceful coexistence, which is inscribed in their sky at the very same time by the docking of the two satellites. The orbital flight of the Big Two, the neutralisation and homogenisation of everybody else on earth. **Yet, despite this deterrence by the orbital authority** - the nuclear code or molecular-events continue at ground level, mishaps are increasingly more numerous, despite the global process of contiguity and simultaneity of data. **But, subtly,** these events no longer make any sense; they are nothing more than a duplex effect of simulation at the summit. The best example must be the Vietnam war, since it was at the crossroads of a maximal historical or "revolutionary" stake and the installation of this deterrent authority. **What sense did that war make**, if not that its unfolding sealed the end of history in the culminating and decisive event of our age? **Why did such a difficult, long and arduous war vanish overnight as if by magic?** Why didn't the American defeat (the greatest reversal in its history) have any internal repercussions? If it had truly signified a setback in the planetary strategy of the USA, it should have necessarily disturbed the internal balance of the American political system. But no such thing happened. Hence **something else took place**. Ultimately this war was only a crucial episode in a peaceful coexistence. It marked the advent of China to peaceful coexistence. **The long sought-after securing and concretising of China's non-intervention**, China's apprenticeship in a global modus vivendi, the passing from a strategy of world revolution to one of a sharing of forces and empires, the transition from a radical alternative to political alternation in a now almost settled system (normalisation of PekingWashington relations): all this was the stake of the Vietnam war, and in that sense, the USA pulled out of Vietnam but they won the war. And the war "spontaneously" came to an end when the objective had been attained. This is why it was de-escalated, demobilised so easily. The effects of this same remolding are legible in the field. The war lasted as long as there remained unliquidated elements irreducible to a healthy politics and a discipline of power, even a communist one. When finally the war passed from the resistance to the hands of regular Northern troops, it could stop: it had attained its objective. Thus the stake was a political relay. When the Vietnamese proved they were no longer bearers of an unpredictable subversion, it could be handed over to them. That this was communist order wasn't fundamentally serious: it had proved itself, it could be trusted. They are even more effective than capitalists in liquidating "primitive" precapitalist and antiquated structures. Same scenario as in the Algerian war. The other aspect of this war and of all wars since: behind the armed violence, the murderous antagonism between adversaries - which seems a matter of life and death, and which is played as such (otherwise you could never send out people to get smashed up in this kind of trouble), behind this simulacrum of a struggle to death and of ruthless global stakes, the two adversaries are fundamentally as one against that other, unnamed, never mentioned thing, whose objective outcome in war, with equal complicity between the two adversaries, is total liquidation. It is tribal, communal, pre-capitalist structures, every form of exchange, language and symbolic organisation which must be abolished. Their murder is the object of war - and in its immense spectacular contrivance of death, war is only the medium of this process of terrorist rationalisation by the social - the murder through which sociality can be founded, **no matter what allegiance**, communist or capitalist. The total complicity or division of labour between two adversaries (who can even make huge sacrifices to reach that) for the very purpose of remolding and domesticating social relations. "The North Vietnamese were advised to countenance a scenario of the liquidation of the American presence through which, of course, honour must be preserved." The scenario: the extremely heavy bombardment of Hanoi. The intolerable nature of this bombing should not conceal the fact that it was only a simulacrum to allow the Vietnamese to seem to countenance a compromise and Nixon to make the Americans swallow the retreat of their forces. The game was already won, nothing was objectively at stake but the credibility of the final montage. **Moralists about war**, champions of war's exalted values should not be greatly upset: a war is not any the less heinous for being a mere simulacrum - the flesh suffers just the same, and the dead ex-combatants count as much there as in other wars. That objective is always amply accomplished, like that of the partitioning of territories and of disciplinary sociality. What no longer exists is the adversity of adversaries, **the reality of** antagonistic causes, the ideological seriousness of war - also the reality of defeat or victory, war being a process whose triumph lies quite beyond these appearances. In any case, the pacification (or deterrence) dominating us today is beyond war and peace, **the simultaneous equivalence of peace and war.** "War is peace," said Orwell. Here, also, the two differential poles implode into each other, or recycle one another - a simultaneity of contradictions that is both the parody and the end of all dialectic. Thus it is possible to miss the truth of a war: namely, that it was well over before reaching a conclusion, that at its very core, war was brought to an end, and that perhaps it never ever began. Many other such events (the oil crisis, etc,) never began, never existed, except that artificial mishaps - abstracts, ersatzes of troubles, catastrophes and crises intended to maintain a historical and psychological investment under hypnosis. All media and the official news service only exist to maintain the illusion of actuality - of the reality of the stakes, of the objectivity of the facts. All events are to be read in reverse, where one perceives (as with the communists "in power" in Italy, the posthumous, "nostalgic" rediscovery of gulags and Soviet dissidents like the almost contemporary rediscovery, by a moribund ethnology, of the lost "difference" of Savages) that all these things arrive too late, with an overdue history, a lagging spiral, that they have exhausted their meaning long in advance and only survive on an artificial effervescence of signs, that all these events follow on illogically from one another, with a total equanimity towards the greatest inconsistencies, with a profound indifference to their consequences (but this is because there are none any more: they burn out in their spectacular promotion) - thus the whole newsreel of "the present" gives the sinister impression of kitsch, retro and porno all at the same timedoubtless everyone knows this, and nobody really accepts it. The reality of simulation is unendurable - more cruel than Artaud's Theatre of Cruelty, which was still an attempt at a dramaturgy of life, the last flickering of an ideal of the body, blood and violence in a system already sweeping towards a reabsorption of all the stakes without a trace of blood. For us the trick has been played. All dramaturgy, and even all real writing of cruelty has disappeared. Simulation is master, and nostalgia, the phantasmal parodic rehabilitation of all lost referentials, alone remain. Everything still unfolds before us, in the cold light of deterrence (including Artaud, who is entitled like all the rest to his revival, to a second existence as the referential of cruelty).

**International cooperation over debris is an ideological smokescreen for neoconservative practices and capital fixes – debris risk is incalculable and their collision cascade arguments are a fantasy, but their modelling practice secures a social fantasy of threat that enables imperial transcendence.**

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

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

#### Their faith in satellites locks in global crises – suturing space to warfare locks out alternative futures in favor of fantasies of existential threat that make their impacts inevitable.

Masco, 12 (Joseph, Prof. of Anthropology @ U. of Chicago, “The End of Ends” *Anthropological Quarterly*, Vol. 85, No. 4 (Fall 2012), pp. 1107-1124)

In an extreme age, we might well ask: what are the possibilities for a productive shock, an experience or insight that would allow us to rethink the terms of everyday life? In the discipline of biology, the recent discov- ery of microbial extremophiles in deep-sea volcanic vents has fundamen- tally challenged longstanding scientific definitions of life (Helmreich 2008). Living under conditions of extreme heat and pressure, these methane- eating beings have redefined the very limits of life on planet Earth and beyond. What could produce a similar effect in the domain of security? Opportunities for such a critique are ever present, an endless stream of moments in fact, yet constantly **subsumed by the normalizing effects** of a national security culture committed to a **constant state of emergency**. A return to basic questions of how to define profit, loss, and sustainability is a key concern today in the US and this paper asks what kind of analy- sis could begin to redefine the limits of a collective security? What kind of **de-familiarization** and/or **productive shock** might allow insight into the cultural terms of expert judgment today in the US, allowing us to **rethink** the logics and practices that have simultaneously produced a **global war on terror**, a global **financial meltdown**, **and a planetary climate crisis**? How can Americans- extremophiles of the national sort- assess their own his- tory within a national-cultural formation devoted to the **normalization of violence (as war, as boom and bust capitalism, as environmental ruin**) as the basis for everyday life? This short paper does not provide an answer to these questions (would that it could!), but rather seeks to offer a provocation and a meditation on paths constantly not taken in US national security culture. It asks: how can we read against the normalizing processes of the security state to assess **alternative futures,** alternative visions **rendered** **invisible** by the complex **logistics of military science, economic rationality**, and **global governance**? To do so is to break from the normalizing force of everyday national secu- rity/capitalism, and interrogate the assumed structures of security and risk that support a global American military deployment and permanent war posture. To accomplish this kind of critical maneuver, however, one needs to be able to recognize the **alternative futures rendered void** by the **specific configurations of politics and threat** empowering **military industrial action** at a given moment. An extreme critique requires the ability to assess the alternative costs and benefits that remain suspended within the spaces of an **everyday American life constantly rehearsing (via media, political culture, and military action) terror as normality**. What follows then is both an examination and a performance of extremity- pushing a critical history and theory well beyond the usual scholarly comfort level. It seeks less to settle and explain than to agitate and provoke. To engage an extreme point of view on crisis, both exterior and ob- jective, let's turn to a spectacular new technology that seemed to offer just such a perspective on US security culture in 1960- that of an exterior gaze on planet Earth. **The first satellite imagery** was not only a techno- logical revolution of profound importance to the military (and ultimately the earth and information sciences), it also **constituted a rare moment of ob- jective critique to American Cold War fantasies** at their most virulent and violent. Covert and extremely fragile, the first Corona satellite was secretly launched into outer space in August of 1 960, offering a new optics on Cold War military technologies and fantasies. Imagine, if you will, a rocket car- rying not a warhead but a giant panoramic camera (see Figures 1 and 2), slung into a low orbit over Europe, running a long reel of 70mm film, spe- cially designed by Kodak to function in outer space. The satellite makes a series of orbits exposing its film over designated areas, and then ejects a fire-proof capsule carrying the film, sending it back into Earth's atmosphere (see Figure 3). As the capsule descends via a series of parachutes, it emits a homing signal, allowing a specially equipped plane to detect the signal and swoop in, capturing the now charred film canister in mid-air via a gi- ant hook (see Figure 4). On August 18, 1960 the **Corona Project** became the first space based reconnaissance system, providing the CIA with the first satellite photographs of Soviet military installations (see Figures 5 and 6; as well as Day, Logsdon, and Latell 1998; and Peebles 1997). Corona provided the most accurate images of Soviet military capabilities to date, offering concrete photographic evidence of Soviet missile capabilities at a time of near hysterical speculation about imminent Soviet attack. Soon US **officials knew via photo- graphic documentation** of commu- nist military bases that **the Soviets did not have a vast and growing ICBM superiority** capable of over- whelming US defenses. In fact, the US had something on the order of a ten to one advantage in missiles, and even more in nuclear devices. At this moment in the Cold War, **outer space provided the only clear view of nuclear threat- providing a series of photographs that dramatically changed how US officials viewed the immediacy of nuclear war** (Richelson 2006). Over the next decade, **the race to the moon became the public face of a covert enterprise to extend and expand space surveillance**. Plans for manned photographic studios in space with Hubble telescope- sized lenses pointed toward Earth, soon were enhanced by digital communications that allowed in- stant data transmission (see Willis and Bamford 2007). The Corona cameras evolved quickly, moving from the 40-foot resolution offered in 1960 to five-foot resolution by 1967, a revolution in optics that was soon followed by digital satellite systems capable of three-inch resolution, in- frared imaging, and the near instantaneous transfer of information. These remote sensing technologies have since revolutionized everything from geography, to climate sciences, to the now ubiquitous GPS systems and Google Earth. The Central Intelligence Agency (CIA) has long considered the Corona satellite one of its most im- portant achievements, a pure suc- cess story. As Director of the CIA, Richard Helms held a ceremony in honor of the Corona Program's re- tirement in 1 972 (in favor of the next generation digital satellite system). He presented a documentary film, entitled "A Point in Time" to CIA personnel detailing the crucial his- tory of the top-secret program, its technological achievements, and its central role in Cold War geopolitics. litics. A Corona capsule and an exten- sive photographic display of Corona satellite imagery was then centrally installed at CIA Headquarters in Langley to document its success for all future employees. On display there through the end of the Cold War, com- ponents of this exhibit can now be seen at the Smithsonian Air and Space Museum. The extensive Corona photographic archive became available Corona as a fantastically successful covert spy system and others today value its photographic record for non-military scientific research, a basic lesson of the Corona achievement remains unrecognized: the first satellite system not only offered a new optic on Soviet technology, **it also revealed how fantastical American assessments of Soviet capabilities wer**e in the 1 950s. It offered a new remote viewing photography but also new insight into the American national security imaginary. The first Corona images have as much to say about the **ferocious US commitment to** nuclear weapons and **a global nuclear war machine** already set on a minute-to-minute trig- ger by 1960, as about Soviet weapons. The first Corona images contra- dicted expert US judgments of Soviet capabilities and desires, providing a powerful counterweight against arguments for a preemptive US attack on the Soviet Union. The slightly blurry satellite photographs thus held **the potential for a radical critique of American perceptions** of the Soviet Union, **showing that US officials were as much at war with their own apocalyptic projections** in 1 960 as with Soviet plans for territorial expansion. **An anthropology of extremes requires a non-normative reading of cul- ture and history, an effort to push past consensus logics to interrogate what alternative visions, projects, and futures are left unexplored at a given historical moment.** The rapidly evolving historical archive provides one op- portunity for this kind of critique: our understanding of the 20th century American security state is changing with each newly declassified program and document, dramatically reshaping what we know about US policy, mil- itary science, and threat assessments since World War II. The Corona pho- tographs are a compelling illustration of the power of the evolving national security archive. As the enormous military state apparatus that constitutes the core of the American political and economic machine is grudgingly opened to new kinds of conceptual interrogation, Americans should seize the opportunity to learn about their own commitments, political processes, and security imaginaries. Indeed, **the national security archive** is one place where we can formally consider how the 20th century "balance of terror" has been remade in the 21st century as a "war on terror"- following the **affective politics**, **technological fetishisms**, **and geopolitical** **ambitions** that have come to **structure US security culture**. The declassified Cold War ar- chive allows us to pursue an extreme reading of US security culture, one committed to pushing past official policy logics at moments of heightened emergency to consider how **threat**, historical contingency, **technological revolution**, **propaganda**, and geopolitical ambition **combine in a specific moment of extreme risk**. The first Corona images, for example, constitute a moment when administrators of the national security state had **their own logics** and fears **negated** in the form of direct photographic evidence, opening a **potential conceptual space for radical reassessment of their own** ambitions, perceptions, and **drives**, powerfully revealed in black and white photos **as fantasy**. We might well ask why **the Corona imagery** (**and** any number of **similar moments when existential threat** **has** objectively **dissolved into mere projection- most** recently, the missing weapons of mass destruction used to justify the US invasion of Iraq in 2003)- **did not pro- duce a radical self-critique in the US**. The Cold War nuclear standoff installed **existential threat as a core structure of everyday American life**, making nuclear fear the coordinat- ing principle of US geo-policy and a **new psychosocial reality** for citizens increasingly connected via images of their own imminent death. Indeed, few societies have prepared so meticulously for collective death as did Cold War America while simultaneously denying the possibility of an ac- tual ending. From large scale civil defense drills in which the destruction of the nation-state became a kind of public theater, to the articulation of a Cold War militarism that understood all global political events as condi- tioning everyday American life, the height of the Cold War worked in novel ways both to enable and deny the possibility of a collective death (Masco 2008). **The early history of the Corona Satellite System offers a compel- ling story about the technological achievement of a total ending, and the Cold War hysteria of the years 1957-1962 in the US**. This is a moment of maximal danger but also of new perspectives- crucially those derived from outer space- that momentarily opened up multiple contingent and radically different security futures. For an anthropology of extremes, this period of Cold War can be approached as an ur-moment; foundational in terms of the technology, theory, politics, and ambitions supporting the American security state. Interrogating this first period of global nuclear danger via recently declassified materials allows us to ask: how does one end the possibility of a total ending? How does a society pursuing war as a normalized condition of everyday life pause and reflect on its own intel- lectual and psychosocial processes? Within modern political theory the means to an end has been embed- ded within the very concept of rationality, making ends and means syn- onymous with progress, a perpetual engine of improving the infrastruc- tures of everyday life as well as the morality of those living within it. Within this modernity- glossed here as the application of reason to nature as progress- we have few efforts to theorize the reality or implication of con- ceptual blockages or blindnesses within the very notion of security. The assumption that instrumental reason is not only a means to an end but an essential good structures a Euro-American modernity in which supersti- tion is set against the possibility of an unending technological progress (Horkheimer and Adorno 2002:1). Benjamin (1969) offers perhaps the most powerful critique of "progress" by showing how **the promise of the "new" can be the vehicle of social mystification and entrenchment**. His call to "brush history against the grain" and establish a critical method that can "seize hold of a memory as it flashes up at a moment of danger" is ultimately a call to resist the normalization (and naturalization) of violence in everyday life. But how, and under what terms, can this be accomplished in a national security state that is premised on the total ending of nuclear war? Having built the war machine as a global system, how can a society turn towards an alternative notion of security, one not grounded in the technological possibility of total nuclear war? How, indeed, does **thinking about an absolute ending** work to **install a new set of fantasies and short circuits that prevent reflexive critique**? How do rational modes of planning work not to eliminate the possibility of collective death but rather, through self-mystification, to install its pos- sibility ever deeper into an expert state system? Kant (1986) articulated one central area where reason is installed as a compensation for a lack of understanding in his notion of the sublime. Sublime experience, in his view, overwhelms the human sensorium providing that strange mix of pleasure and terror involved in surpassing one's cognitive limit. For Kant, the experi- ence of incomprehensibility is then managed by an act of categorizing- by a naming of the event- rather than through understanding. Compensation rather than comprehension is thus achieved, installing at the very center of his notion of reason an irreducible problem about means, ends, and the ability of human beings in extreme moments to comprehend both. "**Terror**" has an inherent sublimity, one that has been multiplied across contempo- rary crisis- war, economy, environment- to create a new complex con- figuration of planetary risk that exceeds the power of the national security state (Masco 201 0). **Nuclear terror**, as a permanent state system, however, is not a momentary experience (as Kant's sublime requires) but **is** instead **a global infrastructure**- one **that coordinates American military power as well as its domestic politics**. **This infrastructure requires constant affective as well as technological support, merging complex social and technologi- cal processes that become fused in perceptions of global risk**. Put differently, instrumental reason has orchestrated our globalized, economized, technologized modernity but it has also installed a set of compensations for those events, desires, and biological facts that dis- rupt specific calculations of progress/profit. By the mid-20th century, the products of instrumental reason- the very means to an end- produced new forms of war that ultimately challenged the survival of the species. The atomic bomb stands as both a rational technology- produced via the combined work of physicists, engineers, chemists, industrialists, military planners, defense intellectuals, and civilian policy makers- and as a limit case to that instrumental reason (see Edwards 1996, Oakes 1994). In the early days of the nuclear age, some Manhattan Project scientists hoped this new technology would be so terrible that it would simply end the pos- sibility of war (e.g., Federation of American Scientists 1946). Instead, US war planners built a global system for nuclear war that could end life itself within a few minutes of actual conflict. Each new nuclear system- bomb- er, submarine, and missile- was both a technological achievement of the first order and an accelerating progression towards the end of modernity in the form of nuclear war. What these technical experts were attempting to negotiate through engineering is a basic relationship to death, a perverse project of build- ing ever more destructive machines in the name of producing "security." Indeed, **displacing** the threat of **one machine** (the bomb) with another (the bomb) became the basis for **deterrence theory, a way of organizing and containing the thought of death by expanding technological systems**. Freud (1991) saw this contradiction in militarism early on, and in his remarkable 1915 essay "Thoughts for the Times on War and Death" he is definitive that it is impossible to comprehend- to actually believe in- one's own death. Thus, he notes, even as the human organism moves closer to death with each tick of the clock, the ego pursues a program of immortality and works **to relocate the** onrushing **reality of death to exterior locations**- to novels, to foreign populations, to distant wars, **to a radical outside**. Thus, **the thought of an "ending" here literally pro- duces a new set of means- fantasies, projections, displacements, and amnesias all mobilized to suture together an idea of an eternal** **self**. In American national-culture, the Cold War performed this task through a series of circuits: the communist threat was simultaneously everywhere and nowhere, and the immanent threat of nuclear war was mitigated by a fetishistic focus on technological detail. Cold War planners managed the threat of nuclear war through constant proliferation- of weapons, deliv- ery systems, images, theories, and calculations. Through this prolifera- tion, Cold War planners pursued a program of intellectual compensation for the confrontation with a new kind of death. They did so by mobilizing all national resources (changing the very temporal horizon of war from days, to hours, to minutes in the process), as well as by pursuing proxy wars and covert actions around the world. In the process, Americans learned how to be committed to total war as a precondition for everyday life while locating death as exterior to the nation, even as the war machine grew ferociously in its technological capacities. This represents a distinc- tive national-cultural achievement: a notion of **security** that **brings collective death ever closer in an attempt to fix its location with ever more precision**. By the time of the first Corona photograph, the US nuclear system was on constant and permanent alert, managing a global war machine on a minute-by-minute temporal scale- one that imagined a Soviet nuclear strike coming with less than seven minutes warning (Keeney 201 1 :1 86). US military systems became both the most direct application of tech- nical rationality and the location of deep fantasies about national immor- tality and systems of total control. In the first decade of the Cold War, for example, the lack of detailed intelligence about the Soviet Union enabled an American national security project that was both technologically Uto- pian and driven by increasingly apocalyptic visions of an omnipotent other. A top-secret, blue-ribbon panel studying the possibility of nuclear civil defense in 1957, known as the Gaither Committee, not only recom- mended a nationwide commitment to building underground bunkers and training citizens to think calmly about experiencing nuclear war, its mem- bers also concluded that a "missile gap" with the Soviet Union left the US increasingly vulnerable to a devastating "first strike" (Security Resources Panel of the Science Advisory Committee 1 957). Reinforced by the hys- teria over Sputnik later in 1957- the first artificial satellite in space- US national security debates, by the end of the 1950s, were structured by visions of a Soviet sneak attack that would destroy urban America in an instant. The Gaither Committee leaked to the press their conclusion that by 1959 the Soviets would have a decisive advantage in ICBMs (see Roman 1995, Snead 1999) provoking huge nuclear arms expenditures in the US. The domestic politics informing the "missile gap" narrative were part of the battle between military branches for nuclear resources and soon key to John F. Kennedy's presidential campaign strategy of positioning his Republican rivals (Eisenhower and then Nixon) as weak on national security. Thus**, a threat projection with multiple political uses became codified as a kind of truth in US national security policy**, leading to massive increases in defense spending at the end of the Eisenhower administration and then again at the start of the Kennedy administration. The nuclear triad- of bombers, ICBMs, and submarines- is built at this moment, providing multiple redundant systems for waging nuclear war and giving each branch of the military a nuclear capability. Today we can see that in addition to the new weapons systems built at the end of the 1950s, there was also an important political discovery crucial to the evolving Cold War: namely, the universal utility of threat pro- liferation in US security culture. **The raw political value of existential threat as a motivating narrative became a well-worn domestic strategy** in the US, one linking the "missile gap" of the 1950s to the "window of vulner- ability" of the 1 970s, to the "strategic defense initiative" of the 1 980s to the "**space based Pearl Harbor**" narratives of the 1 990s **to the terrorist "WMD" discourses** of the 2000s as illustrations of a nuclear culture. In each of these cases, we can see how the bomb (as **a consolidated form of existential threat**) **has** been good for Americans to think with, **becom**ing the basis for building a nuclear state and a **global military system** but also for trans- forming raw military ambition into a necessary form of "defense." But if the bomb has been crucial to constituting US "superpower" status, it has also **produced a complex new domestic affective political domain, allowing images of**, **and** **appeals to,** **existential threat to become a central means of** establishing and **expanding a militarized national security culture**.

#### Their project of sustainability is only ever possible through the creation of a coherent nature, docile to humanity – this mythical construct frames any deviance as scum, creating a spiral of violence against that which refuses the sanitary natural order

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PART II: MIMESIS AND EXCEPTIONALISM: THE WORLD AS SACRIFICIAL STANDING RESERVE. Generalized imitation has the power to create worlds that are perfectly disconnected from reality: at once orderly, stable, and totally illusory. (Dupuy 2011: 209) In order to navigate the creative and destructive mechanism of mimesis, I argue that it is first necessary to distinguish between mimetic projects that attempt to create new worlds regardless of the rest of the natural world and those that are grounded in planetary systems. Obviously, the opening quote of this section suggests that mimesis in our meaning-making practices has the capacity to create orderly but illusory worlds. This, I would argue, is the mimetic function of something like the truth regime of the global mobiles outlined above. Of course, such mimetic processes—ones that ignore the evolving planetary context—ultimately create a lot of violence toward the rest of the natural world because the world becomes standing reserve, separated out from moral concern as that which is used in the project to re-create the orderly world of contemporary globalized capitalism. One can also see this type of mimesis at work in (abstract) foundations of gender and sexuality roles that are defined as “normal” (usually as heteronormative), and into which our bodies are forced. These types of mimesis force life into specific channels. To some extent, religions have played a large role in this process as well. However, religion ought not to be seen only in a negative light. Religions and philosophies also reveal the mimetic structure of our very imaginings as grounded in evolutionary mimetic structures, and part of ecological healing is the re-cognition of such groundings. Refusal of our Mimetic Entanglement How did we begin to refuse our embeddedness in larger cosmic and evolutionary mimetic structures? When did humans begin to regard humanity as over and against the rest of the natural world? This is, of course, a question that obviously cannot be answered; but some wagers can be made. Rather than lay the blame of domination on sexism, racism, anthropocentrism, or any other isms as the critical theories that I am in debt to tend to do, I would lay it on an emergent transition resulting from the space of mimetic excess. My reasons for this are that if one travels down the rabbit hole of searching for the ultimate source of the logic of domination that leads to all isms, then one has already committed him/herself to the idea that humans are (at least from that point on) really separate from the rest of the natural world. Not to mention one is already then committed to laying blame for oppressions onto a scapegoat: patriarchy, heterosexism, speciesism, or racism. In order to re-read humans as always and already a part of the natural world, I follow an idea put forth by Max Horkheimer and Theodor Adorno in Dialectic of Enlightenment (2007). Bruce Martin sums up their insight well. He writes: Human reason ‘degenerated’ as it imitated the nature it came to dominate; in so doing it created a vicious, lifeless circle of domination perpetuated by a ‘rational’ society that has come to dominate the individual as much as ‘nature’ ever did. (Martin 2011: 116) In other words, we could attribute our forward looking and deliberating brains that emerged from the rest of the evolutionary process and more specifically out of lines of hominids, to the location of our eyes in front of our skulls, our ears on the side of our heads that give us honing abilities, and our upright posture that made it easier for our ancestors to hunt. Such features orient us toward critically examining the evidence and making decisions toward and about things that are not immediately present or in the distance. These features, along with our opposable thumbs, set us up eventually in a fairly dominant position vis-à-vis other animals and species on the planet. These moments of mimetic excess or spaces of creative emergence eventually lead to hominization. As Girard notes, “We can conceive of hominization as a series of steps that allow for the domestication of progressively increasing and intense mimetic effects, separated from one another by crises that would be catastrophes but also generative in that they would trigger the founding mechanism and at each step provide for more rigorous prohibition within the group, and for a more ritual canalization toward the outside” (1987: 96).6 In other words, at each emergent level, an inside/outside is created that marks sameness off from that which is other. The patterns of sameness that led to success would be mimicked—as any useful evolutionary adaptation is—and over time the genetic lines that survived would see differences in brain structures that lead to something like critical reflection. Far from being intentional, such a “dominating” position is an emergent phenomenon from the spaces of mimetic excess when our species began taking advantage of emergent possibilities (rather than necessarily falling into the same patterns of the past). Eventually, reason becomes the key in human success and in the domination over other humans and the rest of the natural world. The repetition of such narratives of dominations has led to the “isms” of our species rather than any sort of inherent capacities or tendencies, and it is this type of narrative that has led to the refusal of our mimetic embeddedness and to the type of human exceptionalism that we are so familiar with and critical of. This desire for control makes sense in an evolutionary context in which hominids and Homo sapiens have largely been at the whim of a nature “red in tooth and claw.” At a time before modern technologies, mastery of nature would be an essential component of survival. Humans would be the victims of a nature that was uncaring and unkind. Nature then becomes the ultimate victim and scapegoat that the logic of mastery then sacrifices. As Girard notes: The accusation makes the victim responsible for the disorder and catastrophe, in other words for the crisis, that afflicts the community. … [The mistreatment of the victim] is an aggressive reaction against a victim that would not be killed if it were not held responsible for the mimetic crisis. (1987: 38) One important point that helps to argue for something like nature as victim in the ways in which I am arguing here is the writings of Francis Bacon and other authors of the early scientific method and scientific revolution. There is no clear reason as to why natural science had to understand nature as dead matter, religion as somehow subjective opinion, and science as an objective adventure. Philosophical and other literary works such as Bacon's New Atlantis had to teach people that science would replace the church, that it was okay to experiment on other animals, and that this would lead to human progress (Merchant 1980). What some have termed “literary lynchings” and “literary sacrifices” had to prepare the euro-western imagination for treating nature as if it were merely standing reserve and for creating the human logic of domination.7 Though the contemporary logic of domination has long forgotten its founding myth, the religious, philosophical, and scientific attempts to make humans exceptional all participate in this story. This recognition can help us to argue for and re-inscribe our continuity with the rest of the natural world in ways that might open our meaning-making practices up toward planetary concerns. If we understand our whole thought process as dependent upon mimetic structures and processes found in the rest of the natural world, then we can begin to see even our meaning-making practices as emerging out of and addressing these types of structures. As Girard notes, “Order in human culture certainly does arise from an extreme of disorder, for such disorder is the disappearance of any and all contested objects in the midst of conflict, and it is at such a point that acquisitive mimesis is transformed into conflictual mimesis and tends toward the unification of conflict against an adversary” (1987: 28–29). Just as order seems to emerge out of chaos in other biological systems, so too in our cultural and religious systems; and, Girard argues, these moments of mimetic frenzy require some type of scapegoat, ritual, or expulsion of adversary if order is to be restored (1987: 30). However, there is in much of Girardian thought too much fear of chaos, hybridity, and disorder. Such a fear, or at least a desire to project order onto disorder where no real order exists, is actually part of the problem of a projective form of mimesis that leads to more and more disorder (or so I am arguing). In other words, perhaps mimetic identification with the rest of the natural world could provide an alternative way in which we can appreciate our difference and recognize our continuity without the need for continuing mass ecological destruction in the name of the enforced (dis)order of human exceptionalism. From this understanding, religions and philosophies have captured within their meaning-making structures certain truths expressed in the form of human thinking that can be found in other systems of the rest of the natural world: the balance between chaos and order, the sacrifice necessary for life to continue, and the inherent impossibility of any ultimate order or peace in the worlds that we currently inhabit. As Eric Schneider, Dorion Sagan, and other scientists that discuss non-equilibrium thermodynamics argue, equilibrium—or in this case ultimate order and peace—means death (Schneider and Sagan 2006). Perhaps this last insight is the reason that humans strive for some sort of transcendent resolution: every part of our being cries out against the seeming injustice of predator–prey, creative–destructive cycles, so our reason forces us to produce some sort of order that we just have not arrived at yet, in the case of religions, or imposes a logic of order on the entire planet, in the case of sciences. In any event, this type of understanding could help us understand our current planetary crises in a way that is in continuity with the ongoing creative–destructive processes of the planet. \*\*\*\*\*\*The Earth as Sacrificial Standing Reserve: The Logic of Domination One thing I find promising about the mechanism of mimesis as Girard understands it is that it has the potential to help re-write human thinking, including religious imaginings and scientific logic and reasoning, into the rest of the evolving planetary community, even if Girard himself did not imagine such a re-writing. If our human thinking operates according to mimetic structures, then they are in continuity with other repetitive cycles and systems in the cosmos and planet—as I argued above. In particular, I think that Girard's discussion of mimetic crisis has something to offer in terms of thinking about our current, global ecological problems. Girard argues that paroxysm is the result of certain points of conflictual mimesis within communities (1987: 26). At some points in human histories, the energy of mimetic excess must be released in moments of violence or breakdown. The repetitions of roles—defined in terms of gender, sex, sexuality, race, nationality, and even humanity—are always imperfect and lead to some type of remainder that is other from the repetitive role performances. This mimetic excess must be dealt with or the loss of all order and fall into chaos is risked (Girard 1987: 7). Religions, and I would argue the logic of domination found in reductive materialism, positivism, and scientism, all have ways of dealing with mimetic excess and releasing the violence that builds up. As Girard notes, “All modern ideologies are immense machines that justify and legitimate conflicts that in our time could put an end to humanity” (1987: 31). In other words, these systems must deal with mimetic excess, but they always risk violence. This is where the concept of the scapegoat comes in: as mimetic release. If, as I have argued, one of the dominant ideologies through which humans create meaning-making practices in the contemporary process of globalization relies on the logic of domination via science and technology, then perhaps the mimetic excess, the moment of paroxysm, can be understood as climate change and all the other environmental disasters we are faced with at this planetary moment. In the case of the effects of climate change especially, the human “community thinks of itself as entirely passive vis-à-vis its own victim, whereas” the rest of the natural world “appears by contrast, to be the only active and responsible agent in the matter” (Girard 1987: 27). We have now become victims of the excess of our own desire to impose order on the world. The logic of domination that imposes human desires and values upon the rest of the natural world and sets it up as standing reserve for humans returns in the form of climate change, huge storms, cancers, droughts, heat waves, and other acts of “nature” or “God” over which we poor humans have no control. In this case, the evolutionary fear of nature, leading to the imposition of order through repetition of the place of humanity as over and against the rest of the natural world, is creating terror, disorder, and chaos that are rising to a planetary frenzy.8 This mimetic excess, this abject remainder is the space of chaos and complexity, of creativity and destruction; but this excess demands some sort of recognition at threat of even greater destruction and chaos. Current rituals of scapegoating and release of this mimetic excess, in my opinion, only lead to projections of repressed mimesis. That is, “where the self as subject is projected onto the external world. The result is often fear of the other and subsequent attempts to master or dominate it” (Martin 2011: 120). In this case, “reversal of domination requires ‘mimetic identification’—that is internalization of the external that honors the particularity or individuality of the other” (Martin 2011: 120). We need new rituals and ways of thinking that help us to leave open spaces for mimetic excess, for the abject, and for creative emergence of possibilities toward planetary alternatives. I end this article with some ideas of what that might look like. Previous Section Next Section PART III: TRANSHUMANITY AND THE PLANETARY FUTURE: MIMETIC EXCESS, ABJECTION, AND SITES OF TRANSFORMATION Only the damming of mimetic forces by means of the prohibition and the diversion of these forces in the direction of ritual are capable of spreading and perpetuating the reconciliatory effect of the surrogate victim. … The Sacred is Violence. (Girard 1987: 32) The seemingly simple insight that Girard articulates here, that the sacred is violence, is a hard pill to swallow for many contemporary minds. The idea that the ground of being, that god or ultimate reality is somehow supposed to be peace, harmony, or some type of wholeness, may be the very idea that leads to much ecological and human violence today. We seek in our repetitions of actions and roles to enforce some type of order and balance upon the world that just does not exist. This desire to enforce equilibrium on the planet is actually wreaking havoc on humans and the rest of the planetary community. What if we begin our meaning-making practices from a space that suggests we are always already mixed up in a creative–destructive process of planetary becoming and that there is no ultimate explanation, end, or goal toward which all life can be conformed. This is what I have articulated elsewhere as a viable agnostic, planetary theology (Bauman 2009, 2014). Here I articulate three components of our meaning-making practices that might help us create points of mimetic identification with the abject: human thinking as “lines of flight,” thinking toward the trans-human, and planetary ethics of the “not yet.”

#### When confronted with the ethical injunction of the aff, respond with “I would prefer not to”—vote neg on presumption

Baudrillard 98 (Jean, Ex-Prof of Media and Philosophy @ EGS, Paroxysm, p 60//shree)

JB: The paradox of liberation is that the people liberated are never the ones you think: children, slaves, women or colonial peoples. It’s always the others liberating themselves from them, getting rid of them in the name of a principle of freedom and emancipation. Hence the dramatic concern of children to ensure that parents don’t stop being parents, or at least that they do so as late as possible. Hence the collective concern to beg the State not to stop being the State, to force it to take on its role, whereas it’s constantly trying to relinquish that role—and with good reason. The State is constantly ‘liberating’ the citizens, urging them to look after themselves—something they generally don’t want to do at all. In this sense, we’re all potential Bartlebys: ‘I would prefer not to’. Be free! Be responsible! Take responsibility for yourself!—‘I would prefer not to’. Preferring not to, rather than willing something (Philippe Lancon, Liberation). Preferring not to any more. Not to run any more, or compete, or consume, and not, at any price, to be free. This is all part of the pattern of a repentance of modernity, of a subtle indifference which senses the dangers of a responsibility and an emancipation which are too good to be true. Hence the currently triumphant sentimental, familial, political and moral revisionism, which can take on the more violent aspect of a ‘reactionary’ hatred of oneself or others, the product of the disillusionment that follows liberatory violence. This opposite tide, this ‘regressive’ resublimation, is the contemporary form—and, so to speak, the consequence—of the repressive desublimation analysed by Marcuse. Decidedly, freedom isn’t simple, and liberation even less so.

## Case

### Space War

#### The asteroid impact threat is propaganda meant to legitimize continued research into incredibly powerful militarized technologies—turning the debate away from existential threats is the only way to develop peaceful solutions and divorce science from militarization

Mellor 07. **–** (Felicity, PhD Theoretical Physics Newcastle University, *Colliding Worlds: Asteroid Research and the Legitimization of War in Space,* Social Studies of Science, Vol. 37, No. 4 (Aug., 2007), pp. 499-531, <http://www.jstor.org/stable/2547453>, SUSSMAN, PDF)

During the 1980s and 1990s, a small group of planetary scientists and astronomers set about actively promoting the asteroid impact threat. They drew on an expanded empirical base, but also on narratives of technologi cal salvation. Despite their concerns that their warnings were greeted by a 'giggle factor' and that funding remained too low, they succeeded in cap turning the attention of the media and of some policy-makers and in establishing the impact threat as a legitimate and serious topic for scientific study. By the eve of the new millennium, the meaning of asteroids had undergone a significant transformation. Asteroids had gone from being distant relics of Solar System history to being a hidden enemy that could strike at any time with catastrophic consequences. The reconceptualization of asteroids was accompanied by a reconceptualization of both space and astronomy. In Newtonianism, space had been conceived as an empty geometrical abstraction in which God's handiwork was displayed to the knowing observer. Space was both predictable and dis tant. Now, with the promotion of the impact threat, space was configured as the source of an enemy against which we must defend ourselves. This threatening conception of space matched the conception of space as a theatre of war promoted by the supporters of SDI. Space had become a place, a technologized location for human action where wars could be fought and human salvation sought. Thus astronomy was also reconceptualized. Further developing the violent metaphors already appropriated by impact-extinction theory (Davis, 2001), astronomers recast their role as impassioned prophets of doom and saviours of mankind rather than as cold calculators of cosmic order. Traditionally, Solar System astronomy had dealt with the grand narratives of planetary history and the timeless certainties of celestial dynamics. The technologies of astronomy - telescopes and, later, space probes - were the tools through which new knowledge had been sought. They were not, on the whole, instruments of action. Now, however, astronomy was to be prophetic and interventionist. As comets had been in a far earlier period, both asteroids and comets were now treated as 'monsters' - portents of Earthly calamities. It was the purpose of planetary astronomy to watch for these portents. Equally, it was the duty of astronomers to warn the unsuspecting public and to intervene to save the world. Planetary astronomy was transformed from the passive observation of the heavens to the active surveillance of the heavens, and the instruments of astronomy were to be supplemented with the technologies of war. By the 1980s and 1990s, asteroid science, defence science and science fiction all presented space as an arena for technological intervention where an invisible enemy would be defeated for the greater good of mankind. Science fiction provided a culturally available resource that could give con crete form to the ideas of both asteroid scientists and weapons designers. Through narrative, the timeless and universal speculations of science could be converted into a specific sequence of events. By drawing on narratives of technological salvation, asteroid scientists made their case more compelling, but they also became dependent on narrative scenarios shared by the defence scientists. Even as the scientists themselves attempted to pull back from concrete proposals for weapons systems, their own discourse irresistibly drew them towards the militaristic intervention demanded by the narrative impera tive. The identification of asteroids as a threat required a military response. Astronomer Duncan Steel (2000b), writing about the impact threat in The Guardian newspaper, put it most clearly when he stated that 'we too need to declare war on the heavens'. Just as the overlap between science and science fiction was mutually supportive, so the overlap between impact science and defence helped legitimize both. The civilian scientists could draw on a repertoire of metaphors and concepts already articulated by the defence scientists to help make the case for the threat from space. They would no longer be a marginalized and underfunded group of astronomers, but would take on the ultimate role of defending the world. Similarly, in the context of the impact threat, the defence scientists could further develop their weapons systems without being accused of threatening the delicate nuclear balance of mutually assured destruction or, in the period between the fall of the Soviet Union and the 9/11 attacks, of irresponsibly generating a climate of fear in the absence of an identifiable enemy. The civilian scientists attempted to still their consciences in their deal ings with the defence scientists by suggesting that, with the end of the Cold War and the demise of SDI, the latter had lost their traditional role. This argument was naive at best. In fact, as we have seen, the US defence scientists had taken an interest in the impact threat since the early 1980s, from the time that SDI had greatest political support during the defence build-up of the Reagan era. Even at the time of the fractious Interception Workshop, George H.W. Bush was maintaining SDI funding at the same level as it had been during the second Reagan administration. If outwardly the Clinton administration was less supportive when it took office in 1993 and declared that SDI was over, many of those involved in the programme felt that it would actually go on much as before (FitzGerald, 2000: 491). SDI was renamed, and to some extent reconceived, but funding continued and was soon increased when the Republicans gained a majority in Congress.33 After George W. Bush took office in 2001, spending on missile defence research was greatly increased, including programmes to follow on from Brilliant Pebbles (Wall, 2001a; 2001b). Thus the defence scientists had shown an interest in the impact threat from the time of the very first meeting onwards, regardless of the state of funding for missile defence, which in any case continued throughout the This is not to suggest that the impact threat was not used by the defence scientists as a means of maintaining the weapons establishment. Indeed, the impact threat offered a possible means of circumventing or undermining arms treaties.34 But it does mean that the attempt to access new sources of funding, while being an important factor in the promotion of asteroids as a threat, did not fully explain either the weapons scientists' interests or the civilian scientists' repeated meetings with them. The asteroid impact threat offered a scientifically validated enemy onto which could be projected the fears on which a militaristic culture depends. Far from providing a replacement outlet for weapons technologies, the pro motion of the asteroid impact threat helped make the idea of war in space more acceptable and helped justify the continued development of space based weaponry. Arguably, with the Clementine and Deep Impact mis sions, the asteroid impact threat even facilitated the testing of SDI-style systems. The asteroid impact threat legitimized a way of talking, and thinking, that was founded on fear of the unknown and the assumption that advanced technology could usher in a safer era. In so doing, it resonated with the politics of fear and the technologies of permanent war that are now at the centre of US defence policy. In this post-Cold War period, scholars of the relation between military and civilian science need to examine carefully claims about 'ploughshare' or 'conversion' technologies. New technologies arise not just out of fund ing and policy decisions, but also out of the social imaginaries in which new weapons can be imagined and construed as necessary. Concepts such as 'dual use' or 'cover' also need to be assessed critically.35 One way of characterizing the Clementine missions would be as dual-use technologies whose scientific aims served as cover for the testing of SDI technologies. Yet this fails to reveal the ways in which these missions were just one concrete output of a more **fundamental conceptual alliance between weapons designers and astronomers.** In this paper, I have attempted to show that by also considering the narrative context in which such initiatives are located, it is possible to throw some light on the cultural web that binds civilian science to military programmes. But the focus on narrative also begs a question: Which stories would we prefer to frame our science? Should science be driven by fear or by curiosity? Should it be aimed at creating technologies of war or cultures of compassion? These are normative questions, but they are also precisely the questions that make the military influence on science such an important issue. Narratives are inherently ideological and a refusal to see them as such does no more to enhance the scholar's objectivity than it does the scien tist's. The stories told by the asteroid scientists led them into collaborations with weapons scientists and helped fuel a discourse of fear that **served a particular ideological purpose**. This should be both recognized and challenged, not for the sake of regaining some impossible ideal of an undistorted science but because there are other stories, based on different ideological assumptions, that we could tell in order to guide science towards more peaceful ends.

**Not only is there no space war, there is no territory to wage it on. Virtual constructs of space decide where and how power operates. Ignoring this virtuality, in favor of banning operations in name only, only shifts weaponry from one place to another and guises the horror, violence, and abandonment central to any and all virtual wars.**

Öberg 19. Dan Öberg, Associate Professor of War Studies at the Swedish Defence University, his research focuses on the ontology of war, critical military studies and the thought of Jean Baudrillard, “Requiem for the Battlefield,” *The Disorder of Things*, January 13th, 2019, <https://thedisorderofthings.com/2019/01/13/requiem-for-the-battlefield/>, ar

If we look closely, we see that the real world begins, in the modern age, with the decision to transform the world, and to do so by means of science, analytical knowledge and the implementation of technology – that is to say that it begins, in Hannah Arendt’s words, with the invention of an Archimedean point outside the world (on the basis of the invention of the telescope by Galileo and the discovery of modern mathematical calculation) by which the natural world is definitively alienated. This is the moment when human beings, while setting about analyzing and transforming the world, take their leave of it, while at the same time lending it force of reality. We may say, then, that the real world begins, paradoxically, to disappear at the very same time as it begins to exist. (Jean Baudrillard, Why Hasn’t Everything Already Disappeared?) Antoine Bousquet’s excellent and much anticipated book The Eye of War: Military Perception from the Telescope to the Drone traces how the history of the rationalisation of vision and the mathematisation of space during the Renaissance have enabled an ever expanding martial gaze. Herein the reader, among many things, gets an in-depth look at the changing fields of military perception and the subsequent attempts to hide from its view. As the author notes, this development leads towards the dispersal and disappearance of the battlefield in its traditional sense.[1] In this intervention, I would like to put forward a complementary view of the battlefield in relation to the trajectory traced by the author. This view can be summarised as an insistence that from the end of the 18th century and onwards, the traditional battlefield starts to disappear as it is operationalised through military doctrines, planning, and conduct. Moreover, as a direct consequence, the battlefield reappears, refracted through military attempts to model space and time. Below I attempt to sketch out this dual process of disappearance and reappearance by engaging with the history of the military imaginary which both sees and targets, and which arguably corresponds to that martial gaze of which the book speaks so well. As The Eye of War illustrates, often through fantastic pictures and drawings from historical times, the introduction of new weapon-systems and their social interpretation influence the possibility of targeting and the remits of the battlefield. Historically, we may perhaps argue that varying conceptions of the battlefield have been part of warfare for as long as there has been strategic dispositions in war, evident particularly in attempts to connect tactical means with strategic ends. At times such connections have been drawn on spatially and temporally demarcated battlefields. However, at other times, we find examples of how the conception of the battlefield challenges such remits. For example, in medieval warfare when a strategy of attrition was employed to starve an opponent, the target was crops and the tactics was to put your army in the field, aggressively devastate the countryside, and live off the land. Here the battlefield expands and the target shifts from the enemy soldier to the milieu in which a system of production is established. Or when the strategy was one of plunder, the target was likely to be a poorly protected enemy fortress and the tactics assaulting its walls and exciting pay, while avoiding surrounding armies through manoeuvre. Consequently, the attempt to operationalise the tactical means into strategic ends, that is, the attempt “to target”, potentially constitutes and challenges the remits of the battlefield. That said, the characteristic of the classical battlefield was often a combination of disparate units, tactical conducts, and weapon-systems in gradual transition. One such transition during the Great Italian Wars (1494-1559) between two types of “targeteers”: the crossbowman and the arquebusier, is captured in Charles Oman’s classical work History of the Art of War in the Sixteenth Century. Oman (quoting Gascon Montluc) writes as follows regarding the French army: Arquebusiers were known, but there were very few of them in the early years of the war: it was only in the second generation that the arquebus superseded the cross-bow. Montluc remarks that in 1523, when he was ensign in the company of Monsieur de la Clotte, he had only six arquebusiers with him, and they were all deserters from the Spanish army.’Encore en ce temps la il n’y avait point d’arquebusiers parmi notre nation’. He then proceeds to remark that he wishes that the arquebus had never been invented.’Would to God that this unhappy weapon had never been devised, and that so many brave and valiant men had never died by the hands of those who are often cowards and shirkers, who would never dare to look in the face those whom they lay low with their wretched bullets…’ The day had gone by when a certain commander used to order that quarter should never be given to men carrying firearms, but they were still hated and despised, and it took some time to teach French generals that they must rather be encouraged, and introduced on the largest scale possible.’ This quote illustrates the shift from when the arquebus was rare and firearms were seen with hatred and contempt, towards a gradual acceptance of “their wretched bullets”, until we reach the point where their use was encouraged as part of all major armies. Beyond the fact that methods of warfare change due to the introduction of new weapon systems, this historical example illustrates an important aspect of the constant contestation of the traditional battlefield. The arquebusier doing the targeting (and thereby efficiently killing “so many brave and valiant men”) is present at the field of battle and at the same time hated, accepted, and encouraged. That is, the character of the battlefield is negotiated through the direct relationship between targeteer and target and their corresponding tactical means. Arguably, such negotiation between targeteer and target changes drastically in character from the Napoleonic wars and onward. With the risk of simplifying matters, we may say that from the medieval times up to the 18th century, the battlefield was characterised by a gradual homogenisation of units and their array. From a situation where warfare was dominated by disparate units and weapon systems, we move towards standardised infantry and cavalry based units and the use of firearms and bayonets. This is a homogenisation that mirrors the rise of modern society in a more general sense. However, it is not until the next century, with the French Grande Armée, particularly due to the administrative care of Lazare Carnot (1753-1823) and the military thinking of the likes of Comte de Guibert (1743-1790) that the military imaginary starts to view the battlefield as a consequence of military analysis and planning. That is, as an operational model. As is well known, the operational dimension of warfare comes up in part as a result of the levée en masse, responding to practical needs to oversee and manage a system of national mobilization with the training and movement of large-scale units. Technological innovations such as the railroad and the telegraph among others, also helped ushering warfare into this new era. It is from this time onward that the battlefield expands through logistics, new intelligence, new command structures, and the administrational machinery of which the most obvious examples are the improved staffs and corps and the divisional system. While the culminating battle of the Napoleonic wars, Waterloo, was fought at a battlefield where 140,000 men and 400 guns were crammed into an area of roughly 3,5 miles, the latter half of the 19th century becomes characterised by the dispersal and implosion of the battlefield. As Bousquet has directed our attention to in his work, after the birth of modern warfare the battlefield dissolves due to the increased range of weapons systems. Its disappearance is also facilitated by how the military logistics of perception conditions the appearances of targets, particularly through how the “eye of war” manages to move from the commander occupying a high-point next to the field of battle, to being facilitated by balloons, binoculars, aerial reconnaissance, satellites, algorithms, and cloud computing. It is as part of this process we eventually reach the contemporary era where targeting is characterised by polar inertia, as targets arrive as digital images from anywhere on the globe in front of a stationary targeteer. However, I would like to argue that, parallel to this, there is a corresponding process taking place, which erases and remodels the battlefield as a result of the military disposition that is born with the operational dimension of warfare. To grasp this disposition and its consequences we need to ponder the fact that it is no coincidence that the operational dimension emerges at precisely the time when the traditional battlefield is starting to disappear. As The Eye of War outlines, global targeting is enabled by a logistics of perception. However, the demand for maps and images as well as the attempts to make sense of the battlefield arguably receives its impetus and frame of reference from elsewhere. It finds its nexus in standard operating procedures, regulations, instructions and manuals, military working groups, administrative ideals, organisational routines, and bureaucratic rituals. And, as the battlefield is managed, coded, and homogenised, it simultaneously starts to become an external point of reference, enacted through operational analysis and planning far from the battlefield itself. Let us not forget here that “to analyse” literally means “to dissolve”, as the perception of the operational analyst subsumes the field of battle into compartmentalised objects and relations. Moreover, as Carl von Clausewitz reminds us, operational planning is necessarily a reductive enterprise.[2] That is, it subtracts from the world, when reducing this said world to a theater of war. We may therefore say that the battlefield receives its force of reality through operational analysis and planning and appears as an “alienated” entity dominated by range, trajectories and a territory coded through a military grammar. Nevertheless, it seems that when the battlefield reappears as a concept or scenario, that is, as a model, it also starts to vanish. Therefore, it is arguably in the development of operational models of warfare: the doctrinal handbooks, the logistical apparatus, and the staff meetings on what to target, we find a corresponding erasure of the battlefield. If we return to the introductory quote, particularly to the insistence that the real world begins with the invention of an Archimedean point outside the world, we may say that it is with the introduction of the operational level of war that military practice and theory find and substantiate its own external point of reference. It finds it at the start of the Napoleonic wars, in the introduction of an operational military machinery which gradually starts to think warfare independently of the army in the field. It substantiates it through a code that strives to make war an efficient and integrated version of its own programmatic execution. This code outlines how to arrange and rearrange, compose, coordinate, and manufacture targets and effects. It also works as a method through the tasking and employment of tactical units, the translation of rules and diagrams into select weapon systems, and the integration of protocols into a concentration of force, making fires and bomb drops preplanned responses to problem situations. In the final chapter of The Eye of War we encounter a battlefield that is spatially and temporally boundless, what the author calls a “Global Imperium of Targeting”. What relationship between targeteer and target characterises this limitless battlefield? I will end by briefly introducing two alienating reference points that I have discussed elsewhere: the operational environment and the battle-rhythm as examples of a military modelling of space and time. According to the military imaginary, the operational environment consists of:’the composite of the conditions, circumstances, and influences that affect the employment of military capabilities’ (see military doctrine). This term imposes a set of spatial relations that are conditioned through military concepts and functions: logistical routes and lines of communication, the range of weapon-platforms, perceived centres of gravity, the margining of targets, their weaponeering, and so forth. This spatial concept transmits relations through reductive doctrinal denominators such as “target-sets”, “undesirable systems” or “future end-states,” often visualised through PowerPoints. Corresponding to the remits of the operational environment, the’battle rhythm’ is the’combination of procedures, processes, and actions which facilitates extended continuous operations’. It is synchronised zulu-time: a coordinated 24 hour universal clock time enabling warfare to endure in real-time and coordinate fires and manoeuvres into tactical effects. The battle-rhythm is anticipatory, relating to ideas of dynamic actions, particularly in so called dynamic targeting. But it is also pre-planned as it forecasts and codes future time to shape its unfolding and becoming in accordance with the preparation and execution of warfare. So, as the traditional battlefield and its conceptualisation and contestation by crossbowmen and arquebusiers alike disappears due to the operationalisation of a martial gaze, what reappears is an abstract model of military space/time. This model perceives of the battlefield as that which facilitates military capabilities as extended operations as it targets for action. This means, I think, that in the Global Imperium of Targeting that The Eye of War portrays, the soldiers embodying the martial gaze assumes the roles of managers over our world as if it were this abstract and homogenous space/time. This points to a world that is indeed, a’battlespace in potentia’ watched over by’glacially indifferent machines’, as the author so eloquently puts it. However, it also points to the role of the military imaginary which oversees this gaze and which refines the modelling of space and time to impose a point of view on that which it sees. In short, the traditional battlefield may be dead, but we continue to live under the eye of its operational model.

#### China says no they will exploit the resources – official Chinese declaration

Xinhua News 19 (Chinese government controlled media, 5-17,  Chinese deep space research leads to deeper international cooperation, <http://www.xinhuanet.com/english/2019-05/07/c_138040362.htm>, accessed 8/13/19, jmg)

Chinese space experts have strengthened international exchanges in the latest achievements in exploring the moon, Mars, Jupiter, asteroids and the deeper cosmos. While developing the Chang'e-5 and Chang'e-6 lunar probes and China's first Mars probe, China Academy of Space Technology (CAST) is also pushing forward space programs such as the planned unmanned lunar research station, and probing asteroids, Mars, the Jovian system and the edge of the solar system, as well as interplanetary exploration, said experts from CAST. They were speaking to more than 370 experts from both at home and abroad in Beijing at a recent international symposium on lunar and deep space exploration. Deng Zongquan, an academician of the Chinese Academy of Engineering and a professor with the Harbin Institute of Technology, introduced many creative ideas at the symposium on designing future probes and rovers for exploring the moon and Mars. The design of the future lunar and Mars rovers could be different from the six-wheeled lunar rovers, Yutu and Yutu-2, already sent onto the moon, Deng said. Four-wheeled and eight-wheeled rovers also have advantages. For instance, the eight-wheeled rover could have a better carrying capacity and be used in building lunar scientific research station, Deng said. Chinese experts are also developing drilling technology and research on ice detection methods on the moon, he said. China recently unveiled its plan to explore an asteroid and a comet, inviting scientists around the world to participate. The mission will involve exploring a near-Earth asteroid, named 2016HO3, and a main-belt comet, named 133P, according to the China National Space Administration. Huang Jiangchuan, a researcher from CAST and chief designer of China's Chang'e-2 probe, said China's first asteroid probe is expected to be launched before 2025. He said the scientific objective of the exploration includes studying the formulation and evolution of the solar system, the role of near-Earth asteroid and main-belt comet impacts on the origin of life, and the solar system small bodies dynamics formation. The target 2016HO3 has a very close relationship with Earth and is called as a "mini moon" or a quasi satellite of the earth, said Huang. "Where is it from? What's its relationship with the earth and moon? Those are questions we want to know," he said. The second detection target of the mission, the comet 133P, probably contains water based on observation on Earth, and the exploration will help study its volatilization mechanism. "We are facing great technological challenges in exploring asteroids and comets due to the little understanding about their detailed features and high uncertainty," he added. "Compared with Japan, Europe and the United States, China is a latecomer in the exploration of asteroids and comets. We need to go faster, and we hope the mission will have multiple goals and can satisfy scientists' curiosity," said Huang. Over the past few years, CAST has been working on the mission design, and key technologies of asteroid exploration through self-funded projects, Huang said. "Due to the technology complexity, vast investment and high risks, CAST is willing to cooperate with other institutes in various ways and jointly conduct international deep space exploration for the benefit of humanity," said Huang. "There are so many small bodies like asteroids and comets in space, but only a few have been detected. The exploration could help us prevent threat from them to the earth, as well as exploit their resources," Huang said. Athena Coustenis, an astrophysicist from the Paris Observatory, said at the symposium that European scientists have a strong interest in collaborating with China on the asteroid exploration mission.

#### No ‘space war’ – Insurmountable barriers and everyone has an interest in keeping space peaceful

**Dobos 19** [(Bohumil Doboš, scholar at the Institute of Political Studies, Faculty of Social Sciences, Charles University in Prague, Czech Republic, and a coordinator of the Geopolitical Studies Research Centre) “Geopolitics of the Outer Space, Chapter 3: Outer Space as a Military-Diplomatic Field,” Pgs. 48-49] TDI

Despite the theorized potential for the achievement of the terrestrial dominance throughout the utilization of the ultimate high ground and the ease of destruction of space-based assets by the potential space weaponry, the utilization of space weapons is with current technology and no effective means to protect them far from fulfilling this potential (Steinberg 2012, p. 255). In current global international political and technological setting, the utility of space weapons is very limited, even if we accept that the ultimate high ground presents the potential to get a decisive tangible military advantage (which is unclear). This stands among the reasons for the lack of their utilization so far. Last but not the least, it must be pointed out that the states also develop passive defense systems designed to protect the satellites on orbit or critical capabilities they provide. These further decrease the utility of space weapons. These systems include larger maneuvering capacities, launching of decoys, preparation of spare satellites that are ready for launch in case of ASAT attack on its twin on orbit, or attempts to decrease the visibility of satellites using paint or materials less visible from radars (Moltz 2014, p. 31). Finally, we must look at the main obstacles of connection of the outer space and warfare. The first set of barriers is comprised of physical obstructions. As has been presented in the previous chapter, the outer space is very challenging domain to operate in. Environmental factors still present the largest threat to any space military capabilities if compared to any man-made threats (Rendleman 2013, p. 79). A following issue that hinders military operations in the outer space is the predictability of orbital movement. If the reconnaissance satellite's orbit is known, the terrestrial actor might attempt to hide some critical capabilities-an option that is countered by new surveillance techniques (spectrometers, etc.) (Norris 2010, p. 196)-but the hide-and-seek game is on. This same principle is, however, in place for any other space asset-any nation with basic tracking capabilities may quickly detect whether the military asset or weapon is located above its territory or on the other side of the planet and thus mitigate the possible strategic impact of space weapons not aiming at mass destruction. Another possibility is to attempt to destroy the weapon in orbit. Given the level of development for the ASAT technology, it seems that they will prevail over any possible weapon system for the time to come. Next issue, directly connected to the first one, is the utilization of weak physical protection of space objects that need to be as light as possible to reach the orbit and to be able to withstand harsh conditions of the domain. This means that their protection against ASAT weapons is very limited, and, whereas some avoidance techniques are being discussed, they are of limited use in case of ASAT attack. We can thus add to the issue of predictability also the issue of easy destructibility of space weapons and other military hardware (Dolman 2005, p. 40; Anantatmula 2013, p. 137; Steinberg 2012, p. 255). Even if the high ground was effectively achieved and other nations could not attack the space assets directly, there is still a need for communication with those assets from Earth. There are also ground facilities that support and control such weapons located on the surface. Electromagnetic communication with satellites might be jammed or hacked and the ground facilities infiltrated or destroyed thus rendering the possible space weapons useless (Klein 2006, p. 105; Rendleman 2013, p. 81). This issue might be overcome by the establishment of a base controlling these assets outside the Earth-on Moon or lunar orbit, at lunar L-points, etc.-but this perspective remains, for now, unrealistic. Furthermore, no contemporary actor will risk full space weaponization in the face of possible competition and the possibility of rendering the outer space useless. No actor is dominant enough to prevent others to challenge any possible attempts to dominate the domain by military means. To quote 2016 Stratfor analysis, "(a) war in space would be devastating to all, and preventing it, rather than finding ways to fight it, will likely remain the goal" (Larnrani 20 16). This stands true unless some space actor finds a utility in disrupting the arena for others.

### Collisions

#### The management of space debris is rooted in a militarized approach to the future that culminates in the *full-spectrum dominance* of the globe

**Reno 20** (Joshua Ozias Reno, Associate Professor of Anthropology at Binghamton University. PhD from the University of Michigan, “The Wrong Stuff”, chapter 4 of Military Waste: The Unexpected Consequences of Permanent War Readiness Univ of California Press, Feb 4, 2020 Pg. 127-130)DR 19

**Space debris** can be dangerous to orbiting vessels and, as such, it represents an ever-growing hazard to human uses of Earth space. But these objects are hard to track and easy to mistake for something else, even for people who spend all of their time looking up at the night sky. Like space exploration itself, this is a difficult problem to solve, so it is not surprising that **only the most powerful and prominent space agencies imagine they are capable of finding space debris**, let alone clearing it from orbital environments. A core dimension of that power and prominence, moreover, is about having military ambitions that extend beyond the surface of the planet. And, **from the very beginnings**, doing so has meant enrolling amateur or civilian scientists in DoD plans for outer-space. Historically, **solving space-related challenges has meant getting funds and resources from wealthy and powerful nations**. **With the growth of** a permanent war economy, **such expenditure** is very often **tied** **to** imagined or real military applications. Consequently, the history of space exploration has been and continues to be shaped by tensions and networks between **civilian and military** scientific objectives. But these seemingly opposed **groups** also align and become indistinguishable, especially insofar as they embrace a fascination with developing the latest technology and an unrelenting faith in its ability to solve all problems. This is also known as techno-solutionism. Evgeny Morozov (2013) developed this idea related to utopian appraisals of the internet. His account draws heavily on **Hannah Arendt’s** *On Violence* (1970), a book which openly criticizes **US administrations** that thought they could solve global problems through technically ingenuous forms of death and destruction. Broadly defined, techno-solutionism is faith that technical fixes can solve any problem…even when they are targeting a realm like **outer space**, one that is already saturated with the leftovers of generations of technological problem-solving. According to Gökçe Günel (2019, 129), any technical adjustment is not only about “functionality, effectiveness, or use, but rather the ways in which its materially and conceptually indeterminate existence mobilizes potential towards a technically adjusted future.” In this sense, **technical fixes for space debris are more about extending the possibility of future technical intervention in orbital environments**, rather than, for instance, **encouraging ethical reflection** on whether people should create debris at all. Space debris is not just any problem, it is **one that originated** **with** and threatens **space science** and, as such, shows the limits of technical solution-making in general. If it is problematic to see space debris as a technical glitch, as noise in an otherwise perfectly rendered human design, that is because such a view can **mislead us** into thinking that all it takes is a little more ingenuity, a bit more mastery, to solve the problem entirely. But, following Virilio (2007), every new technical innovation and improvement brings a new disaster, an unprecedented act of contamination. If **space debris represents inevitable traces** that human artifacts and projects leave behind in the space beyond Earth, then, whatever the future may hold, this problem is unavoidable. If people want to continue to escape their earthly confines, space debris will have to be reckoned with. Space debris is a possibility that haunts all uses of space *tout court*, rather than an incidental by-product of space exploration and travel. A focus on technical mastery links the cause of space debris with its proposed cure. As a counterpoint, I discuss how amateur astronomers and ham radio operators have engaged with space debris in a different manner and with altogether different goals. Specifically, they tend to look for ways to become attuned with and enliven debris that has been abandoned. Militarizing Civilian Science The possibility of a semiautonomous civilian space agency had defined space exploration from the start, but by the 1970s and ‘80s, funding had dropped precipitously from the heyday of the Apollo missions. By that time, NASA had come under widespread criticism as the country entered recession and other big programs (such as the CIA) and national initiatives (the War on poverty, Civil Rights Legislation, the Vietnam War) were attacked by political representatives and activists across the political spectrum. The prominent images that NASA members used to promote the organization during the 1960s was that of pragmatism, that space efforts would yield scientific benefits. This failed to improve the prestige of the organization within the government, until the Reagan era, when there was a resurgence of nationalist and romanticist rhetoric from earlier in NASA’s history. With the Reagan administration there was an effort, first, to block international efforts to ban weapons use in outer space and, second, to invest new symbolic importance and new financial resources in the militarization of space. Since that time, **solving space debris has become a common pursuit** of space agencies all over the world, both the more militarized and the more civilian among them. By the early 1980s, **satellites were central infrastructure**, particularly for the United States. The militarization of space had already occurred, in other words, and **without extravagant laser weapons**. Consequently, among the most central issues of the time was the testing and development of antisatellite weaponry (ASAT). The use of experimental ASAT has been partly responsible for reorienting international attention to space debris, since ASAT is a spectacular technology, the goal of which is to transform working satellites into unusable waste. Since satellites were so vulnerable to attack, and space treaties did not allow for the defense of particular regions of space as sovereign territory, satellites could be destroyed simply by sending “space mines” to collide with them. This constitutes one clear reason why DARPA and the Air Force are so intent on tracking space debris—they want to know whether satellites colliding with unidentified objects represent coincidental hazards or deliberate attacks. Being able to tell the difference between space debris and an actively launched space mine would be like knowing whether an ocean vessel sank because of an iceberg or a submarine. Even if one cannot capture space debris, being able to detect and identify it might be **necessary to predict or avoid war**. The ambiguities of witnessing discussed in the previous section, not knowing what one is seeing, therefore take on perilous consequences. While Reagan’s “Star Wars” and Trump’s “Space Force” have been heavily discussed and derided, other administrations have had similar designs. Perhaps most enduring has been the Clinton-era concept of *full-spectrum dominance*, first outlined in the United States Space Command “Vision for 2020” released in 1997. This relationship between outer space and defense and security has been so central to US policy that prominent advocates for science, notably Neil deGrasse Tyson, have authored reports suggesting that **NASA could be restored to its former glory by becoming more like DARPA**, that is, the militaristic organization it was partly created ***not to become***. In many ways the DoD’s Defense Advanced Research Projects Agency (**DARPA) is the epitome of techno-solutionist practice**. Though the term *defense* was only added to the acronym later (it was termed ARPA until 1972), **the agency was always closely linked to military interests and problem-solving**. In management studies, the concept of problems that are “DARPA-hard” has become widespread, with websites baiting visitors to see whether their company’s challenges would come close to qualifying. According to Leifer and Steinert (2011, 159), there are four criteria for the agency to consider something DARPA-hard: 1. Technically challenging (beyond current limits); 2. Actionable (proof of concept or prototype); 3. Multidisciplinary (complex); and 4. Far-reaching (advances on a grand scale, radical). At the turn of the century, **DARPA** clearly **determined that solving orbital space debris met these criteria**. Space debris fragments **exceeded the capabilities of the Air Force’s Space Surveillance Network** (SSN), it would take work with specialists from various fields, and the achievement of a solution would be legitimately global in impact. The only thing missing was proof of concept. Their first attempt at a solution was to work with MIT aeronautics labs to develop a specialized telescope to detect faint objects. In 2011, DARPA unveiled a massive new telescope, the Space Surveillance Telescope (SST), specially developed with MIT labs to identify space debris. In contrast with what DARPA spokespersons described as the “soda straw approach” of existing telescopes, the SST would allow wide-angle shots of the night sky, made possible by a much larger aperture and an advanced visual processing system. **In at least one report** provided to NBC, moreover, cleaning up space debris was linked directly with military objectives.

#### Russia and China say no, or the plan gets watered down.

**Bahney and Pearl 19** [Benjamin Bahney and Jonathan Pearl, 3-26-2019, "Why Creating a Space Force Changes Nothing," BENJAMIN BAHNEY and JONATHAN PEARL are Senior Fellows at the Lawrence Livermore National Laboratory’s Center for Global Security Research and contributing authors to [Cross Domain Deterrence: Strategy in an Era of Complexity](https://archive.md/o/Hlbi1/https:/www.amazon.com/Cross-Domain-Deterrence-Strategy-Era-Complexity/dp/0190908653). Foreign Affairs, [https://www.foreignaffairs.com/articles/space/2019-03-26/why-creating-space-force-changes-nothing accessed 12/10/21](https://www.foreignaffairs.com/articles/space/2019-03-26/why-creating-space-force-changes-nothing%20accessed%2012/10/21)] Adam

As Russia and China continue to push forward, U.S. policymakers may be tempted to use treaties and diplomacy to head off their efforts entirely. This option, although alluring on paper, is simply not feasible. Existing treaties designed to limit military competition in space have had little success in actually doing so. The 1967 Outer Space Treaty bans parties from placing nuclear weapons or other weapons of mass destruction in space, on the moon, or on other celestial bodies, but it has no formal mechanism for verifying compliance, and places no restrictions on the development or deployment in space of conventional antisatellite weapons. Even if it were possible to convince Moscow and Beijing of the benefits of comprehensive space arms control, existing technology makes it extremely difficult to verify compliance with the necessary treaty provisions—and without comprehensive and reliable verification, treaties are toothless. Moreover, regulating the development and deployment of antisatellite weapons is extremely difficult, both because they include such a broad and diverse range of technologies and because many types of antisatellite weapons can be concealed or explained away as having some other use. Unsurprisingly, Russia and China’s draft Treaty on the Prevention of Placement of Weapons in Space, which they have been pushing for several years now, has an unenforceable definition of what constitutes a “weapon” and does nothing at all to address ground-based antisatellite weapons development.

#### near earth asteroids solve!

Carter 21, Jamie Carter, 10-19-2021, "Space Mining: Scientists Discover Two Asteroids Whose Precious Metals Would Exceed Global Reserves," Forbes, <https://www.forbes.com/sites/jamiecartereurope/2021/10/19/the-age-of-space-mining-just-got-closer-as-scientists-discover-two-asteroids-whose-precious-metals-would-exceed-global-reserves/?sh=1f3c202c713b> //tanya

Space Mining: Scientists Discover Two Asteroids Whose Precious Metals Would Exceed Global Reserves. We know the age of private space travel is here, but what about the wider commercial space industry? “[Space mining” has been talked-up in recent years](https://www.forbes.com/sites/brucedorminey/2021/08/31/does-commercial-asteroid-mining-still-have-a-future), but the hype-cycle has peaked with the realization that the technology to fetch rare-Earth metals from distant asteroids is some way off. Now researchers have uncovered two metal-rich near-Earth asteroids (NEAs) that could one day be mined for iron, nickel and cobalt could for use on Earth or in space. “Our analysis shows that both NEAs have surfaces with 85% metal such as iron and nickel and 15% silicate material, which is basically rock,” said lead author Juan Sanchez, who is based at the Planetary Science Institute in Arizona. “These asteroids are similar to some stony-iron meteorites such as mesosiderites found on Earth ... it is rewarding that we have discovered these “mini Psyches” so close to the Earth.”

#### And it’s feasible – our ev postates theirs

Ho 21, Kenny L. Ho, 6-2021, "THE TECHNOLOGICAL AND ECONOMIC FEASIBILITY OF ASTEROID MINING," No Publication, <https://calhoun.nps.edu/handle/10945/67738> //tanya

Asteroid mining will be technologically feasible in the near future. Three successful asteroid sample return missions from two different countries have already been conducted: Japan’s Hayabusa 1 at 25143 Itokawa, Hayabusa 2 at 162173 Ryugu, and the United States’ OSIRIS-REx at 101955 Bennu. Spacefaring nations have demonstrated the ability to travel to, characterize, safely land on, and collect from the surface of a NEA and safely return the asteroid sample back to Earth. Therefore, the question is not, “Will asteroid mining ever be feasible?” Instead, a better question should be, “What key development should governments and companies prioritize in order to accelerate technical feasibility?” The answer to this also improves the chances of a profitable asteroid mining architecture. The key development that governments and commercial industries should focus on is perfecting the manufacturing of water not only on the Moon but also on NEAs. Refining the manufacturing of water in space will enable future sample return mission to collect much needed water for life support, shielding, and propellant. As McKay and Allen have demonstrated, producing water “from lunar materials is now a reality.”262 Yields are predictable and the water-producing reactions occur on the order of tens of minutes.263 Identifying the potential of lunar soil for the production of water can be determined from orbit.264 However, just because their findings are a reality does not mean that the technology is ready to be used in an actual space architecture. McKay and Allen’s findings illustrate that manufacturing water on the Moon is the closest next tangible technology that needs to be refined. This is because it will provide the highest chances of creating a profitable asteroid mining architecture, detailed in the next subsection, “Economic Benefit and Feasibility.”

### Framing

#### The role of the ballot is to determine whether the 1AC was productive in the debate space - material violence does not go away after the ballot and there's no intrinsic connection between their scholarship and a W - any defense against their method means we win.

#### The 1AC’s try or die extinction scenario is a form of sublime rhetoric that compels us to endlessly repeat the failed project of Empire through confirmation bias. In the face of the incalculable violence of hyperreality, the only response is to prioritize imperial violence over deterrence-based impacts. Only de-linking existential risk calculus from instrumentality can break the cycle of political tautology.

* Instrumentalizing pascal'Jonathan Shell used pascals wager to push people towards disarmament. That same argument was hijacked by Hawks (Cheney) and instrumentalized to produce the Bush doctrine of pre-emptive strike – the illogicality of nuclear deterrence/US power projection is that you have to be willing to risk being the nuclear “madman” in order to deter. Makes politics paradoxically irrational and dangerous.
* If we understand Pascal’s wager subliminally rather than instrumentally/rationally, then high magnitude impacts orient away from calculative logic toward alternative horizons of the social/political and retain a radical possibility. In the face of infinite harm you should risk everything for a different world. Not the continuation of this one.

Matheson 17 [Calum, Assoc. Prof Communication @ Pitt, “The sublime rhetoric of Pascal’s wager,” Argumentation and Advocacy Vol. 0 , Iss. 0,0, Sep 2017, <http://www.tandfonline.com/eprint/CTPGbVmNAmtvfJPI8Q86/full>//ak47]

The form of Pascal's wager has been adapted outside of its explicitly religious context. It perennially crops up in debates over important public political decisions, from space exploration (Bostrom 2003 Bostrom, N. 2003. “Astronomical Waste: The Opportunity Cost of Delayed Technological Development.” Utilitas 15 (2): 308–314. ) and asteroid collisions (Matheny 2007 Matheny, J. 2007. “Reducing the Risk of Human Extinction.” Risk Analysis 27 (5): 1334–1345. [Google Scholar] , 1340–1342) to climate change (Hurka 1993 Hurka, T. 1993. “Ethical Principles.” In Ethics and Climate Change: The Greenhouse Effect, edited by H. Coward and T. Hurka, 23–38. Waterloo: Wilfrid Laurier University Press. , 25) and anything else potentially covered by the precautionary principle.1 [Footnote 1: Those with recent experience in intercollegiate policy debate should recognize the logic of Pascal's wager in the “try or die” arguments that dominate its risk calculus in debates over the desirability of hypothetical plans and the attendant necessity to describe the outcomes of any decision in terms of possible human extinction, whether the topic revolves around military deployment, subsidies for agriculture, or decriminalizing prostitution in the United States. End footnote 1] Chief amongst these is nuclear weapons. Most clearly articulated in Jonathan Schell's (1982 Schell, J. 1982. The Fate of the Earth. New York: Alfred A. Knopf. ) Fate of the Earth and modified in Dick Cheney's “One Percent Doctrine,” the logic of the wager features in calculations of the catastrophic, but relatively unlikely, prospect of nuclear destruction. But despite its continued iteration, the logic of Pascal's wager is far from uncontroversial. A great number of critics over the years have shown that Pascal's argument is fundamentally unsound whether or not God exists. Indeed, as a logical proof the wager has few defenders. How then might we account for its persistence? What political possibilities does the trope afford? To answer these questions, this article will examine Pascal's original wager and the logical objections to it with reference to debates over nuclear weapons. My central argument is that Pascal's wager is best understood as an example of the rhetorical sublime. In making this case, I will link the sublime to Paul de Man's observations on the undecidability of grammar and rhetoric. Critics of Pascal have often interpreted his wager grammatically as a logical argument for belief rather than rhetorically as a use of trope to establish the impossibility of logical argument. Even those who identify rhetoric at work in Pascal's wager tend to analyze it in terms of rational persuasion, oftentimes with some distrust. However, Pascal's rhetorical method in the wager is more akin to the sublime style of Longinus (1991 Longinus. 1991. On Great Writing (On the Sublime). Indianapolis, IN: Hackett Publishing Company. ) than the rational persuasion of Aristotelian logos, a result of the negative theology that informed Pascal's approach to the subject of God. The wager's power comes not from its mathematical consistency or reasoned argument but rather its stark presentation of infinity as something that exceeds reason itself in some measure and forces the potential believer to confront what exceeds logic itself. The outcome of this discussion matters because it implicates modern-day uses of the wager's argumentative structure and the sublime more generally. Appeals to act in the face of enormous, but enormously unlikely, threats cannot be effectively resisted by simply disputing the logic of their calculation, nor are they productive roadmaps for politics as conventionally understood. Rather, these arguments should be read in relation to Pascal's original theological motive as efforts to overwhelm auditors with the appeal to values and forces beyond their ability to comprehend or calculate with reason alone. Like Pascal's wager, the sublime also has its critics, and the nuclear example suggests that it might be particularly threatening in combination with Pascal's wager. However, the wager might also be read as evidence that the sublime also presents opportunities for political critique. Although Schell and Cheney's opposite deployments of the infinite demonstrate that aporia may result, Pascal's sublime rhetoric should not be dismissed. Indecision can also gesture towards political possibilities beyond rational, orderly politics. This essay will proceed in four parts. First, it will elaborate the structure and context of Pascal's original wager in the Pensées and the logical objections to it with the aim of recovering Pascal's reputation as a rhetorician employing a powerful trope, rather than a mathematician systematizing belief. Second, it will discuss Jonathan Schell's famous appeal for nuclear abolition in his book Fate of the Earth and Dick Cheney's so-called “One Percent Doctrine” against terrorism as contemporary uses of the wager's logical structure. Third, it will analyze the wager in terms of its sublime rhetoric and the influence of negative theology on Pascal's work. Finally, it will conclude with a discussion of the appeal to infinity as an argumentative strategy and the challenges of the sublime as an aspect of political rhetoric. Pascal's wager When he died at the age of 39, Blaise Pascal was in the midst of a project (or projects) of apology for the Christian faith. Although the work was never completed, it was ultimately to be assembled as the Pensées, a “mildly heretical” treatise reflecting Pascal's Jansenist conviction (Velchik 2009 Velchik, M. 2009. “Pascal's Wager is a Lie: An Epistemic Interpretation of the Ultimate Pragmatic Argument.” Aporia 19 (2): 1–8. , 1). Much of the book concerns the fallen state of humanity and the inability to directly contemplate the “hidden God,” the motive force of the universe that exists beyond the realms of speech and rational cognition. Pascal's work was inspired by the events of November 23 1654, eight years prior to his death, which he christened the “Night of Fire.” Vividly described in the Pensées, the Night of Fire was a two-hour long religious vision which he interpreted as a revelation of God (Ludwin 2001 Ludwin, D. 2001. Blaise Pascal's Quest for the Ineffable. New York: Peter Lang. , xi). Unable to communicate this experience directly, Pascal nevertheless endeavored to reach unbelievers with his brand of Jansenist Catholicism. One result was his famous wager, which Westel (1995 Westel, D. (1995). Pascal and Disbelief: Catechesis and Conversion in the Penseés. Washington, DC: The Catholic University of America Press. , 13) has suggested would have been near the beginning of the assembled Penseés based on Pascal's notes and more recent textual scholarship. There is “not one inkling of doubt” that the final project was intended as an extended Christian apology (Westel 1995 Westel, D. (1995). Pascal and Disbelief: Catechesis and Conversion in the Penseés. Washington, DC: The Catholic University of America Press. , 18) with the wager as a key element.22. Pascal himself was not the first to propose such an argument (Ryan 1994 Ryan, J. 1994. “The Wager in Pascal and Others.” In Gambling on God: Essays on Pascal's Wager, edited by J. Jordan, 11–20. Lanham, MD: Rowman and Littlefied. ), but his formulation of it is the most complete, widely known, studied, and influential and is therefore the most appropriate target for analysis. Also, although the wager argument did not originate with Pascal, Patricia Topliss has argued that its mathematical expression did, which again makes it a key analogue for later, secular iterations (Topliss 1966 Topliss, P. 1966. The Rhetoric of Pascal: A Study of his Art of Persuasion in the Provinciales and the Pensées. Leicester: Leicester University Press. , 193–194). As Westel notes, “apology” applies a modern concept which Pascal would have understood somewhat differently. “‘Either God is or he [sic] is not,’” Pascal (2003 Pascal, B. 2003. Pensées [Kindle version].. Amazon.com . (Original work published 1670). ) wrote. “Reason cannot decide this question. Infinite chaos separates us. At the far end of this infinite distance a coin is being spun which will come down heads or tails. How will you wager? Reason cannot make you choose either, reason cannot prove either wrong” (122). Because the proposition that God is real cannot be proven or disproven, neither decision is clearly correct. But some decision must be made, because one either believes or does not – “you are already committed,” as Pascal put it (2003 Pascal, B. 2003. Pensées [Kindle version].. Amazon.com . (Original work published 1670). , 122).33. This reflects the Jansenist emphasis on individual faith as an element of salvation, a doctrinal commitment opposed by the Jesuits. View all notes Pascal argues that four outcomes are possible – that God exists and I believe, that God exists and that I do not believe, that God does not exist but I believe, and that God does not exist and I do not believe. These outcomes can be mapped onto a decision matrix, and indeed Pascal is considered one of the progenitors of decision theory for his analysis of alternative choices (Jordan 1994a Jordan, J. 1994a. “Introduction.” In Gambling on God: Essays on Pascal's Wager, edited by J. Jordan, 1–10. Lanham, MD: Rowman and Littlefied. , 3). Although Pascal implied a 50% probability of God's existence (assuming that the coin he described is fair), the most significant aspect of his argument is that probability itself is unimportant for this particular decision. Because the rewards for belief if God is real are “an eternity of life and happiness” while the potential losses of false belief are finite, the potential benefits of belief outweigh any drawback. “[T]hough there were an infinite number of chances,” Pascal (2003 Pascal, B. 2003. Pensées [Kindle version].. Amazon.com . (Original work published 1670). ) wrote, “of which only one were in your favor,” one would be right to wager if “there were an infinity of infinitely happy life to be won.” But the chance of God's existence is not one-in-infinity, but some finite fraction: “there is an infinity of infinitely happy life to be won, one chance of winning against a finite number of chances of losing, and what you are staking is finite” (123–124). That Pascal describes the bet in terms of “lives” bet and won only eases the way for its adaptation to public policy questions. Pascal's argument here is not that God exists, but that given the non-zero chance that God exists multiplied by the infinite reward of correct belief, it is rational to act as if God exists. It is rational to believe because of the expected value of this course of action, and if the “passions” prevent “reason” from convincing the gambler, then behaving like one believes by “taking holy water, having masses said, and so on” will eventually lead one to belief (Pascal 2003 Pascal, B. 2003. Pensées [Kindle version].. Amazon.com . (Original work published 1670). , 124). Pascal also argues that the salubrious effects of a pious lifestyle are worth the attendant loss of hedonistic pleasures even without the infinite rewards of Heaven (125). Eventually, as these boons accumulate and the convert behaves in a pious fashion, the repetition of worship will instill genuine faith and fear for one's immortal soul: “Anyone who grows accustomed to faith believes it, and can no longer help fearing hell, and believes nothing else” (126). The fear of hell adds a dimension of infinite suffering as an alternative to infinite happiness, and it is this negative incentive that is often echoed in secular incarnations of the wager. Leaving aside the moral objections to Pascal's wager, the logic of this argument has been attacked in a number of ways. One objection is that because many gods – perhaps an infinite number of them – are possible, Pascal cannot do more than argue that atheism and agnosticism are irrational, which does not prove that Catholicism is correct (Jordan 1994b Jordan, J. 1994b. “The Many Gods Objection.” In Gambling on God: Essays on Pascal's Wager, edited by J. Jordan, 1–10. Lanham, MD: Rowman and Littlefied.). The argument that any small probability with an infinite impact should be assessed as infinite creates an obvious difficulty when two infinitely important outcomes – one good, one bad – are compared against one another. Suppose that choosing the wrong god results in damnation by the right one. On which god does one then decide? The result is either paralysis, which Pascal rejects with his insistence that some choice is inescapable, or an assessment that returns to probability, making the appeal to infinity moot (Schlesinger 1994 Schlesinger, G. 1994. “A Central Theistic Argument.” In Gambling on God: Essays on Pascal's Wager, edited by J. Jordan, 83–100. Lanham, MD: Rowman and Littlefied, 89). At this point, Patricia Topliss (1966 Topliss, P. 1966. The Rhetoric of Pascal: A Study of his Art of Persuasion in the Provinciales and the Pensées. Leicester: Leicester University Press.) argues, the wager no longer makes sense. The unbeliever might argue that sufficiently low odds make the wager irrational (“is there an even chance that the unicorn exists?”) and that, knowing only the mortal world in which we live, to stake one's life in exchange for the possibility of salvation is to risk everything potentially for nothing (195–196). Perhaps God does exist but perversely tortures true believers – even if this outcome is unlikely, to make a judgment on this basis merely returns the debate to probability. Other difficulties exist with the nature of infinity as a concept, vital to the rewards and punishments of Pascal's wager. Leaving aside the well-known problem of Russell's Paradox, in which a set that contains all sets must paradoxically either include or exclude itself, there is also the St. Petersburg Paradox. Imagine that Peter offers a game to Paul involving coin flips. Peter will pay Paul a dollar if the coin ends up heads, two dollars if the second flip also turns up heads, four if this is repeated on the third flip, eight on the fourth, and so on to infinity (Bernoulli 1954, 31). How much would one be willing to pay to play this game? The amount that one could win rises towards the infinite, but the chances of winning decline toward zero as one continues to play. In addition, after a certain amount, doubling the prize money does not double its actual value – while having a 1000 dollars might legitimately make one twice as happy as having 500, having 200 billion dollars is not twice as good as having 100 billion, because as the prize increases the marginal utility of each dollar decreases. Although the expected value may only have an asymptotic relationship to zero, the value of playing this game has been set as low as two dollars (Ellenberg 2014, 244). The various objections to Pascal's wager have substantially discredited it is a logical argument and therefore led to its rejection by many scholars. In the summary judgment of Ian Hacking (1994), although the arguments of the wager are “valid,” none of them are convincing. “The arguments are worthless as apologetics today, for no present agnostic who understood the arguments would ever be moved to accept all the premises” (27). The wager is structured something like a geometric proof, so if Pascal the geometer has the math wrong, the wager has no value. At its extreme, this line of thinking lends credence to Buford Norman's (1977) claim that the Pensées are not rhetorical at all. “[M]any of the fragments of the Pensées,” he wrote, “consist of a direct association of ideas, with few connectives. This is precisely what the Port-Royal Logique calls jugement, which is basically the same as grammar … perhaps the most logical of all methods (styles), since it follows thought quite closely, and it is definitely far removed from rhetoric” (32). It seems reasonable to suggest, however, that Blaise Pascal, one of the great scientific and mathematical minds of his age, might well have realized the logical deficits of his wager but advanced it anyway for its rhetorical effect. In this sense, it is less a demonstration and more an effort to persuade, and Pascal should instead be judged for his merits as a rhetorician. Grammar and rhetoric of the wager The mathematical or logical reading of Pascal is the chief claim against him as a rhetorician. For interpreters such as Ellenberg and Hacking, Pascal's work is an effort to persuade through demonstration or at best grammar, as Norman argues. This interpretation sees Pascal as an earnest mathematician establishing what amounts to a proof, rather than a rhetorician employing his persuasive art to win the hearts of believers along with their minds. Others, however, have claimed the opposite position that Pascal's Penseés should be understood as primarily rhetorical, and Pascal himself as an expert rhetorician, although whether this is a complement or aspersion varies according to the source. This section will summarize and analyze this rhetorical interpretation, ultimately concluding that the opposition between grammar (as indexical structure) and rhetoric (as persuasion) is an opportunity to view Pascal's rhetoric as something in excess of both, more in line with the sublime tradition than the Aristotelian one. Pascal's own theory of rhetoric is developed in an essay called “The Art of Persuasion” (1909),4 which begins by acknowledging that although people tend to believe what pleases them, this is “base, ignoble and irrelevant” (406). The “art of persuasion,” as Pascal names it, is “simply the process of perfect methodical proofs,” and “consists of three essential parts: of defining the terms of which we should avail ourselves by clear definitions; of proposing principles or evident axioms to prove the thing in question; and of always mentally substituting in the demonstrations the definition in the place of the thing defined” (Pascal 1909, 410). Blaise Pascal, “arguably the most successful and significant practitioner of written rhetoric in his century” (Lockwood 1996, 273), thus seems to treat the art of persuasion as something with a set of codifiable, if elusive, rules and laws, a sort of geometry of human interiority. Although Pascal professes not to know all the rules, persuasion is, in this view of his work, still thought of a technique bound by laws, hidden or not (Ijsseling 1976, 73). Rule-bound and systematic, this view of Pascal's rhetoric tends to support the idea that his mathematical language is meant to be taken literally, which is perhaps what Paul Valéry (1968) was thinking when he wrote that the wager is “absurd” because it “concludes with a hope in mathematics” (319). Pascal could be expected to transmit ideas with the minimum amount of figural embellishment or distortion, and it was precisely his failure to do that which sparked Valéry's ire, leading him to describe the deceased mathematician as “an enemy of the human race.” “My complaint against Pascal,” he wrote, “is that he wanted to persuade … For me this is shocking – I've caught him in the act of literature. As I see it, if a man has something to say and thinks it should be said, he should put it just as it is in his mind … Exactly as it is” (318). This attack resonates with criticisms of rhetoric more generally as an art of deception and deceit, unsuited to the serious questions of religion, science, and even statecraft. Indeed, in discussing another of Pascal's arguments Valéry claims that he cannot be an “inspired writer” because “it's a piece of rhetoric, a fake window … It's an effect—[Pascal] is a rhetorician” (317). Even Velchik, who acknowledges Pascal as a rhetorician without condemning him as such, still concludes that Pascal's wager is deceptive – “a white lie,” no matter how insightful (Velchik 2009, 8). The most influential work on this subject is Topliss's (1966) The Rhetoric of Pascal in which she concurs with Valéry's claim that Pascal uses figurative language as more than mere ornament, transforming the meaning of his arguments through sophisticated rhetorical technique. Although she did not envenom her judgment as did Valéry, Topliss argued that Pascal's technique departed from “Ancient Rhetoric” substantially in this regard (258). For Topliss, while something more may be at work, persuasion is still the central project of the Pensées, and in this sense Pascal does follow a certain tradition of ancient rhetoric beginning with Aristotle's well-known definition of rhetoric as the faculty of observing in any given case the available means of persuasion. Topliss and Valéry thus see Pascal's work as persuasive at its core, the exact opposite of Norman's claim that Pacal communicates so directly that his work is not rhetorical. The work of Paul de Man (1988) suggests one way to resolve this disparity. de Man argued that two theories of the function of language were at work in Pascal's writing. One was a “cognitive function” that is “right (juste) but powerless,” while the other was “a modal function” that was “mighty (forte) in its claim to rightness.” The “necessary choice” between “seduction and truth remains undecidable,” de Man argues, because even the language of Holy Writ cannot be squared in its persuasive power with a geometrical understanding of proof (de Man 1988, 153). This undecidability is what de Man calls allegory. The conflict between “seduction” and “truth” mirrors a distinction he developed in Allegories of Reading between “rhetoric” and “grammar.” In a famous passage in that book, de Man relates a scene from All in the Family in which Archie Bunker's wife, Edith, asks him if he would prefer his bowling shoes laced under or laced over, to which Archie replies “what's the difference?” When Edith begins to explain this difference, Archie becomes agitated; his statement, although it grammatically requests more information, rhetorically denies the need for it and is thus aporetic (de Man 1979, 9–10).5 In this formulation, both Norman and Topliss are correct: Pascal's language is “basically the same as grammar” as Norman argued, and yet paradoxically “restored to figures of rhetoric that had long been thought of as ornaments, their original function as instruments of persuasion” (Topliss 1966, 321). There is something undecidable in Pascal's rhetoric between reason and belief. Rather than leading us to accept the wager as a demonstration of how reason might be applied to God, the second half of this aporia suggests that the wager is a figurative argument for why there can be no such proof – something that Pascal himself hints at when he wrote that because the order of the holy infinitely exceeds the corrupt speech of human beings, “divine truths” could not fall under the arts of persuasion. “God alone,” he wrote, “can place them in the soul” (Pascal 1909, 406–407). If Pascal believed that the “hidden God” lies infinitely beyond the capacity of persuasive language to represent, why write the wager at all? Scholars who, like Topliss, argue that Pascal's work should be analyzed rhetorically share a basic assumption with the grammatical view of Norman and those who treat the wager as a kind of mathematical proof: in short, both view Pascal's central project as one of persuasion. Even de Man's somewhat more subtle reading largely shares this understanding. Pascal, through demonstration, rhetoric, or aporetic uncertainty is guilty of Valéry's charge of attempted persuasion. The wager does not seem to add much in this regard beyond a simple effort to persuade, an appeal to logos with the minor quirk of its mathematical appeal to infinity. Pascal's religious background suggests that this dismissal may be too hasty. As Topliss wrote, that Pascal's style “will not yield up all its secrets” hidden in his “most banal devices,” suggests that the author of the Penseés had his own “impenetrable places” (321). Negative theology and the sublime Dawn Ludwin (2001) makes the case in Blaise Pascal's Quest for the Ineffable that Pascal owed a great debt to the tradition of negative theology, particularly the work of Pseudo-Dionysius,6 which he seems to have read despite his relatively limited reading and citation of other scholarly works (3–4). Negative theology is an ancient tradition in Christian thought with strong parallels in other religions. Its central concern can be framed as the problem of infinity: if God is infinite and exceeds all human understanding, how are we to talk about the divine? Language fails to capture God because it is a fallen thing of human artifice and must necessarily provide a limit where none exists in the case of the divine. Language and its limits are thus central concerns in this line of thinking. Divine experiences, such as Pascal's Night of Fire, might be described, but they can never be fully understood through speech. We can only say what God is not because even the word “infinite” is nothing more than a linguistic marker, a condensation and thus a kind of paradox in itself. Like Pascal, Pseudo-Dionysius described God in striking terms as “light” and “fire,” arguing that although language might show a path, it is only in the silence that exceeds it where God might make itself known (50–56). These metaphors for God do not persuade, but rather lead the audience to the edge of a precipice beyond which the currency of language has no purchase. As Ludwin argues, the rhetorical theory deriving from such a position on God is more consistent with the sublime of Longinus than with the rational persuasion of Aristotle, and it is in these terms that Pascal might be best understood (140–141). The sublime has been partially absorbed into the field of aesthetics, but its origin is squarely rhetorical. For Longinus, powerful rhetorical figures – chiefly metaphor – may circumvent the auditor's reason by the sheer force of the concepts it invokes. Although it is unlikely that Pascal ever read Longinus,7 striking similarities exist in their theories of rhetoric. For Longinus, the greatest writing does not persuade, but “takes the reader out of himself [sic]” by employing and “irresistible force beyond the control of any audience.” Although the individual elements of style gradually accrete in a text to indicate the author's skill, individual tropes are sublime to the extent that they disrupt this coherence: “greatness appears suddenly,” Longinus wrote, “like a thunderbolt it carries all before it and reveals the writer's full power in a flash” (4). Like Pseudo-Dionysius's belief that the infinite power of God revealed the fragility of human subjects, Longinus's theory of rhetoric uses language as an appeal to a powerful motive force that exceeds the individual. A sublime trope conceals the proof of its own argument by “startling” the reader by “its own brilliance” (Longinus 1991, 27). The best figures are not even identifiable as such because their disruptive effect draws attention away from artifice altogether, making it appear natural (Longinus 1991, 29). The technical character of the trope is less important than its ability to shock the reader away from mundane language by changing their orientation towards the text and its associated concepts, however briefly. Viewed through this lens, Pascal's wager takes on a different significance. The purpose of the wager is not to provide a rational proof for God or even to compel adherence to the liturgy, but to use the trope of the infinite to disorient and displace subjects by revealing their finitude. The wager's logical structure is obviously flawed, but this fact does not undermine its significance – it is an example of rhetoric beyond persuasion. First, following Longinus, the effect of the trope should be to conceal the proof of its own argument if it is successful, rendering the proof itself relatively unimportant. The important part of the wager is not the finitude of probability in the coin toss, but the overwhelming, literally incomprehensible stakes of the wager. The wager is supposed to shock the reader into an inspired choice that will eventually lead to conversion through repetition, not to complete the process all at once. No part of Pascal's wager has to be compelling on its own, so the 50% probability of God's existence, for example, is arbitrary and irrelevant. The sublime is supposed to circumvent the faculty of reason, rather than appeal to it in an effort of persuasion that ends in a carefully calculated decision to convert. Second, following Pseudo-Dionysius, the weakness of the wager's logic might be precisely its appeal. The secret in the “banal devices” that Topliss diagnoses is that words never succeed in capturing the majesty of God. Pascal's sublime trope does its work through catachresis. As Pseudo-Dionysius (1987) writes, “incongruities are more suitable for lifting our minds up into the domain of the spiritual … the sheer crassness of the signs is a goad so that even the materially inclined cannot accept that it could be permitted or true that the celestial and divine sights could be conveyed by such shameful things” (150). The same characteristic describes the wager. The hitch in its logic – the catachresis resulting from juxtaposing the crude indexical statement of the wager with its divine referent – forces the reader to engage the claim more thoroughly. Valéry's fury at Pascal's base rhetoric might be precisely the point: after all, it did lead the later French critic to write at length about a single sentence in Pascal's work, stewing over the crassness of its persuasion for many years.8 Confusion at the logic of the argument only helps to conceal its non-rational effect: after all, to be angered at its irrationality is to presume that it is supposed to be rational in the first place. Pascal was an “enemy of the human race” (in Valéry's language) to the extent that he wished to dissolve its finitude in the rapture of the divine by catachretic revelation. Even at his most rational and precise, Pascal argued that persuasion had its limits because the rules could never be fully known and individuals would follow their passions (Pascal, 1909). It is more fitting with his indisputable genius that the wager be read as an immensely subtle attempt to shock readers out of complacency rather than an immensely clumsy use of probability by one of Europe's greatest and most diligent mathematicians. Pascal's heirs The purpose of this exercise in reinterpretation is not only to vindicate Pascal the rhetorician. The wager's basic form is perhaps more influential today than it ever has been in past. Since the detonation of the first atomic bomb in 1945, human beings have become aware that their decisions have the potential to destroy the entire species – and many others along with it. The challenges of thinking in terms of existential risk are immense, and many old habits of thought are irrelevant or even counterproductive when making these decisions. The root of this problem is that people are not accustomed to thinking in the appropriate scales. The magnitudes of some potential impacts, such as nuclear war, are so large that our minds are not well equipped to fathom them. If they are not truly “infinite,” they are at least close enough to exert the same effects on our minds. At the same time, probabilities are so low that in conjunction with existential risks they too are hard to grasp (Yudkowsky, 2008). It is this intersection that mirrors Pascal's wager: unpredictable, low chances married to immensely, possibly infinitely, important outcomes.9 Debates about existential risk thus adhere to Pascal's wager in form: at issue is not Pascal's argument for religious debate so much as his deployment of infinite value as a rhetorical device. The most thoroughly studied existential risk is nuclear war. Since the beginning of the Cold War, academics, think-tank employees, and military planners have made an effort to quantify the risks of nuclear conflict and manage it with the tools of reason (Abella 2008 Abella, A. 2008. Soldiers of Reason: The RAND Corporation and the Rise of the American Empire. Orlando, FL: Harcourt. ; Ghamari-Tabrizi 2005 Ghamari-Tabrizi, S. 2005. The Worlds of Herman Kahn: The Intuitive Science of Thermonuclear War. Cambridge: Harvard University Press. ). The arms race appears to be the first consistent use of Pascal's wager to inform arguments on both sides of a single dispute, and may serve as a prototype for later deployments. Roy Sorensen (1994 Sorensen, R. 1994. “Infinite Decision Theory.” In Gambling on God: Essays on Pascal's Wager, edited by J. Jordan, 139–159. Lanham, MD: Rowman and Littlefied. ) reported that a version of Pascal's wager showed up in arms control rallies (141), but its most complete and eloquent formulation is in Jonathan Schell's widely-read book Fate of the Earth. Schell (1982 Schell, J. 1982. The Fate of the Earth. New York: Alfred A. Knopf. ) argues that the consequences of a nuclear war largely are unknown, but due to the possibility that an ensuing nuclear winter might destroy all life on Earth, such a war cannot be risked for any reason. He writes: the mere risk of extinction has a significance that is categorically different from, and immeasurably greater than, that of any other risk, and as we make our decisions we have to take that significance into account…. We have no right to place the possibility of this limitless, eternal defeat on the same footing as risks that we run in the ordinary conduct of our affairs … although the risk of extinction may be fractional, the stake is, humanly speaking, infinite, and a fraction of infinity is still infinity. In other words, once we learn that a holocaust might lead to extinction we have no right to gamble … we have no choice but to address the issue of nuclear weapons as though we knew for a certainty that their use would put an end to our species. (Schell 1982 Schell, J. 1982. The Fate of the Earth. New York: Alfred A. Knopf. , 95) The above passage follows the structure and content of Pascal's wager very closely. First, Schell asserts an infinite value coupled with an uncertain probability, which together result in an infinite expected value for one choice (and therefore, an infinite opportunity cost for another). Like the rewards of Heaven and the consequences of Hell, the virtues of peace and the losses of extinction are unquantifiable. Probability is irrelevant in this calculation because “a fraction of infinity is still infinity.” Second, Schell argues that although the chances of extinction are unknown, we should act as if it is a certain result of nuclear war, just as Pascal attempted not to prove that God exists, but rather that we should act as if this was the truth. It is possible that nuclear winter would not result; it is possible that a nuclear war will not occur; it is possible that the worst-case projections are wrong. Thus, although “scientifically speaking” there is “all the difference in the world between the mere possibility … and the certainty of it, morally they are the same,” which is why we must act “as though we knew for a certainty” that extinction will result from the possession of nuclear arms (Schell 1982 Schell, J. 1982. The Fate of the Earth. New York: Alfred A. Knopf. , 95). Third, Schell appeals not only to the unknown but to the unknowable. The impact of a nuclear war is beyond our comprehension, just as the God of Pascal's negative theology is. The passage cited here comes at the very end of the first part of Fate of the Earth, “Republic of Insects and Grass,” which is an extended description of the potential horrors of nuclear war written lyrically and beautifully, but includes an acknowledgement that nuclear war can be imagined but is indescribable because its witnesses would be dead (Schell 1982 Schell, J. 1982. The Fate of the Earth. New York: Alfred A. Knopf. , 26). It mirrors the many names of God used by Pseudo-Dionysius to impress upon his readers that God is something that must necessarily exceed the human standpoint. Near the conclusion of his “wager” passage, Schell asserts, “we stand before a mystery.” Like Pascal's worshipper gradually humbled before God's revelation, the reader “take[n] outside” of themselves by Longinus's sublime, or the believer “struck by [God's] blazing light,” Schell's audience is to be overwhelmed by his language and made to realize their own finitude. “Our ignorance should dispose us to wonder,” he writes, “and our wonder should make us humble, our humility should inspire us to reverence and caution” (Schell 1982 Schell, J. 1982. The Fate of the Earth. New York: Alfred A. Knopf. , 95). Finally, Schell's sublime rhetoric is supposed to be an impetus for action. The third section of Fate of the Earth is called “The Choice” and is an explicit call for the abolition of nuclear weapons. The existence of this technology forces a decision, just as the possibility of God does so in Pascal's wager. As in Pascal, for Schell the wager does not merely dislocate its reader – however vital this is to its effect – but also provides a framework for decision under the conditions of uncertainty, perhaps a hallmark of rhetoric itself. Faced with incalculable risks, inaction is not possible. To paraphrase Rush, choosing not to decide is still making a choice. The invocation of infinity does not have to persuade in an Aristotelian sense to serve a purpose. The Old Testament's Abraham was made to feel “but dust and ashes” before the Lord, but the end result of his encounter was clear: follow the divine law. Thus, it is for Schell: our confrontation with finitude breeds humility, reverence, and caution, resulting in support for disarmament without the need for a nuclear Revelation. The paradox of Schell's sublime wager grows out of the necessity for decision. If any fraction of infinity is still infinity, then it becomes impossible to choose between competing options that might stake claims to the same infinitely important outcome. While abolition might prevent a nuclear war from eradicating humanity, through any number of improbable outcomes, it might also cause human extinction, perhaps by triggering devastating non-nuclear wars, another wave of nuclear proliferation, biological war (Payne 2010 Payne, K. 2010. “Disarmament danger.” National Review Online. http://www.nationalreview.com/article/229492/disarmament-danger-keith-b-payne ), or even preventing humanity from deflecting an asteroid collision (Wall 2014 Wall, M. 2014. “How Nuclear Bombs Could Save Earth from Killer Asteroids. Space.com. http://www.space.com/24696-asteroid-strike-nuclear-bombs.html ). When probability is rendered irrelevant by the sign of the infinite, there is no way to distinguish between one outcome and another: all fractions of infinity are infinity. While for Schell the risk of nuclear war mandates a policy of abolition, for advocates of nuclear deterrence, the possibility that disarmament might encourage another power to develop or use nuclear weapons against the defenseless United States mandates the exact opposite: maintenance, perhaps even aggressive expansion, of the nuclear arsenal. Such a position was, in fact, taken by former Vice President Dick Cheney. Ron Suskind reports that in 2001, CIA Director George Tenet briefed Cheney about the possibility that terrorists or hostile nations might develop nuclear weapons with the aid of Pakistani radicals. In response, Cheney proffered the now-infamous “One Percent Doctrine.” “With a low-probability, high impact event like this,” he said, “I'm frankly not sure how to engage. We're going to have to look at it in a completely different way” (qtd. in Suskind 2006 Suskind, R. 2006. The One Percent Doctrine. New York, NY: Simon & Schuster. , 61). That “different way” turned out to mirror Pascal's familiar construction. “If there's a one percent chance that Pakistani scientists are helping al Qaeda build or develop a nuclear weapon, we have to treat it as a certainty in terms of our response … It's not about our analysis, or finding a preponderance of evidence … It's about our response” (qtd. in Suskind 2006 Suskind, R. 2006. The One Percent Doctrine. New York, NY: Simon & Schuster. , 62). The bar for acceptable evidence, as Suskind notes, can be “set so low that the word itself almost didn't apply” (62). As Cheney himself stressed, the doctrine was about response: any probability of an adversary possessing nuclear weapons should be taken as a certainty. The “Cheney Doctrine” thus helped to establish the “Bush Doctrine” of preemptive use of force against enemies potentially armed with “Weapons of Mass Destruction,” itself a somewhat ill-defined term. In the realm of nuclear weapons, this meant that American leaders could contemplate the preemptive use of nuclear arms against potential nuclear adversaries, as detailed in a 2005 draft of the Pentagon's Doctrine for Joint Nuclear Operations (Joint Chiefs of Staff 2005 Joint Chiefs of Staff. 2005. Doctrine for Joint Nuclear Operations (Joint Publication 3-12). http://www.wslfweb.org/docs/doctrine/3\_12fc2.pdf ). The Cheney Doctrine thus brings Schell's logic full circle and exposes the aporia of the wager's need for decision.1010. This problem is also known as Buridan's Ass: an ass, equally hungry and thirsty, dies of privation when forced to choose between a pile of hay and a trough of water because both are exactly equally appealing. View all notes Conclusion The difficulty with Schell's argument (and conversely, with Cheney's) is equivalent to the “many gods” objection to Pascal's wager. Given a range of mutually exclusive options, each representing a potentially infinite impact, there is no longer a way to choose amongst them. For Pascal, that decision boiled down to faith, but the same was true for the Bush administration in its embrace of impulse and conviction over rationality and evidence (Suskind 2006 Suskind, R. 2006. The One Percent Doctrine. New York, NY: Simon & Schuster. , 308). This same problem affects decisions over other existential threats: perhaps manipulating asteroids to miss the Earth would save us all, but perhaps the technology could be used to cause a strike; perhaps slowing the rate of climate change could prevent warming temperatures and ecological disruption, but perhaps it could cause a new ice age; perhaps space colonization would safeguard the human species, but perhaps it would attract the attention of xenocidal extraterrestrials. Infinite stakes combined with indeterminate probabilities and the necessity of decision is a counsel of despair. Even if, like Pascal's, Schell's wager is not meant to be a logical proof but an appeal to a dislocating sublime force, the problem remains. The rhetorical effect of the infinity trope is part of nuclear deterrence. One accepted mission of the US nuclear arsenal remains as the capacity to “overawe” enemies with the sheer incalculable force of thermonuclear weapons (Oelrich 2005 Oelrich, I. 2005. Missions for Nuclear Weapons after the Cold War (Federation of American Scientists Occasional Paper No. 3). https://courses.physics.illinois.edu/phys280/archive/01282005175922.pdf , 46). The “madman” theory of nuclear deterrence, named for Richard Nixon, relies on projecting the image of irrationality over nuclear decisions to that a rational opponent might believe that they will actually be used in response to aggression, even if the cost to the defender is also very high.1111. To some extent, as Kavka's Toxin Puzzle suggests, all nuclear deterrence is paradoxical: after an attack, nuclear retaliation is no longer a rational choice because one's one destruction can no longer be prevented, so, assuming the rational actors necessary for deterrence to work in the first place, it is required that one intend to do something in the future that one would be irrational to actually intend to do at the time when that decision is required. View all notes This is precisely the logic of doomsday weapons such as cobalt bombs or the Dead Hand: the cost of extinction is so high that it overwhelms any possible gain for an aggressor. Schell's vivid descriptions of the nuclear aftermath may just as well result in a passionate commitment to nuclear deterrence. The same factors that make Schell's appeal powerful also limit the ability to resist Cheney's reinterpretation of the wager. When rational calculation is made subservient to infinite risks, then reasoned arguments fail to diminish the force of sublime rhetoric, just as the various logical objections to Pascal's wager have not eliminated its staying power. The limitless damage of a nuclear war (or imagined terrorist attack) overwhelm reason. John Mueller (2010 Mueller, J. 2010. Atomic Obsession: Nuclear Alarmism from Hiroshima to Al-Qaeda. Oxford: Oxford University Press. ) has done a detailed analysis of the probability of nuclear terrorism that assigns it roughly one in three billion odds (204–206), but the numinous fear of nuclear weapons seems to remain. It is tempting to conclude with Ned O'Gorman claim that the sublime is antithetical to politics. Because the sublime is an overwhelming, illimitable force, no adjective changes it; there is no “political sublime” because one term cannot modify the other. As O'Gorman (2006 O'Gorman, N. 2006. “The Political Sublime: An Oxymoron.” Millennium 34: 889–915. ) writes, “the sublime is a free-floating force, a univocal power, which because of its univocality cannot provide alternatives for change, guide critique, or articulate new horizons. The sublime speaks only unpredicated power” (889). The sublime may be radical in a sense, but it is not politically radical. Rather, it tends toward the conservative because it cannot offer alternatives to the status quo and constitutes a “rhetorical lure” best employed by the elite and powerful (O'Gorman 2006 O'Gorman, N. 2006. “The Political Sublime: An Oxymoron.” Millennium 34: 889–915. , 891). In this reading, the present article is merely a Synodus Horrenda, dragging Pascal forth again as rhetorician rather than a mathematician and condemning him nonetheless. To write off Pascal's wager so quickly would be premature. As Schell and Cheney demonstrate, it is the need for decision that frustrates its possibility and results in aporia. Both men have read the wager grammatically and used it to calculate a decision. They may also present it rhetorically, attempting to impress not the rightness of their judgment but the overwhelming force represented by the infinite losses of a nuclear war. In either case, the wager is still aimed at persuasion but cannot overcome its own paradoxical logos. What is missing is a different aporia on an altogether different level: that identified by de Man as the contradiction of grammar and rhetoric. At issue is a practice for reading the wager, and this contradiction can be seen working in Pascal's original if it is read not as an appeal to believe in a specific God but rather an attempt to disrupt the obstacles that lead some people not to believe in any power beyond themselves. Pascal himself was not converted by this proof nor any other, but by the revelation of his “night of fire.” His wager is not a rational argument or a rhetorical device, but rather a rhetorical device illustrating the limits both of rationality and rhetoric. The point of the coin flip is to demonstrate that no rational decision is possible. Faith and fidelity constitute a moral life. Pascal argues that piety comes through repeated practice, but this practice itself is a means to realize the scope of what exceeds the human, not an end in itself. This conception of the sublime is not political according to O'Gorman's definition, where the “sine qua non of all politics except the totalitarian is differentiation” (2006, 891). As the juxtaposition of Schell's and Cheney's uses of the wager shows, the political result of sublime rhetoric is by no means determined by its use. To say that these figures do not assist one in making instrumental choices between different political goals is not to suggest that the sublime may still have radical – and not necessarily conservative – potential if “political” is not synonymous with “politics.” As Jean-Luc Nancy (2008 Nancy, J.-L. 2008. Philosophical Chronicles. New York: Fordham University Press. ) argues, nothing requires that the two terms be identical and we should be conscious of our linguistic choice between them (27–28). The political can be understood as an orientation to community, an attitude rather than being “dissolved in the sociotechnical element of forces and needs” (Nancy 1991 Nancy, J.-L. 1991. The Inoperative Community. Minneapolis, MN: University of Minnesota Press. , 40). The sublime may not aid directly in politics, but it may help to develop a conception of the political by revealing the limits of our capacity to order and to comprehend our social world. To dislocate the reader by illustrating the limit of knowledge is to call into question the inevitability of social structures that we have built and inherited. Nothing about the sublime need favor the elite and powerful. Oft forgotten in Longinus's writing is an attack on avarice and material accumulation as measures of value. Longinus argues that “wealth, honors, reputation, absolute power, and all things which are accompanied by much external and theatrical pomp” cannot be noble because to “despise them is in itself no mean blessing” (9). There is a contradiction inherent in any set of social values that idolizes the rich because they are rich and also values those who forgo material benefits because they are hollow and superficial. Why is it, Longinus asks, that although there is “no dearth” of people “who are persuasive, interested in public affairs, shrewd, skillful, and certainly delightful speakers,” there are so few who are truly outstanding? His answer is that the love of money “is a disease that shrinks a man [sic].” “I cannot see how we can honor wealth without limit or, and this is nearer the truth, make it our god, without admitting into our souls those kindred evils that inevitably follow it” (Longinus 1991, 57). Rather than proscribe an instrumental solution like those shrewd speakers occupied with public affairs might, Longinus seeks to identify the attachments that serve as the conditions of possibility for corruption. “For surely if our selfish desires were altogether freed from prison, as it were, and let loose upon our neighbors, they would scorch the earth with their evils” (Longinus 1991, 58). The “worst bane” is that nothing is done for its own sake, he argues, but only because it serves as a means to an end (58) – which is close to Nancy's concern about dissolving the political into the “sociotechnical element” of politics. The sublime's inattention to differentiation might be read as a critique of instrumental politics and accumulation. Configured this way, Pascal's wager, like Longinus's sublime and Pseudo-Dionysius's negative theology, displays the presence of something beyond the technical capacities of reason to resolve and reveals the arbitrariness of power as it is exercised in an unequal society. In disorienting its readers, the sublime is a check on hubris rather than the basis for programmatic action. At the very least, the sublime is important for argument research because its use continues, for better or for worse, and exploring the collective psychology underpinning its appeal might be a more effective means of countering its dangerous uses than rational debunking alone allows. O'Gorman's critique is a useful corrective for those who might use the concept as a kind of universal solvent that obviates the need for day-to-day political choices or provisional commitments. But the genius of Pascal's wager as a rhetorical trope is its capacity to remind us that the quotidian decisions of politics, vital as they are, do not exhaust the political itself. What we value in community has no satisfying objective basis, but is something we must deliberate collectively in an age when technological progress makes a literal Night of Fire all too possible.