# 1NC R3

### 1

#### The ROTB is to vote for the debater who performatively and methodologically provides the best account of desire. Debate is structured around the fantasy of progress, dispelling negative signifiers of deviance which results in error replication. Representations preclude the aff – as analysts, we must refuse the construction of the 1AC which avoids serial policy failure and means they can’t weigh case.

Fotaki, Marianna. (Organization Studies Group @ Manchester Business School). “Why do public policies fail so often? Exploring health policy-making as an imaginary and symbolic construction.” June 15, 2010. Sage, 713-716. LHP SG

**While policy makers express societal fantasies projected onto them by their constituencies, various professional groups or patient advocates are in their own ways involved in the construction of unattainable ideals, as they too pursue and legitimize their specific projects.** The role of fantasy in relation to patient choice seems obvious, but can this be generalized across all policy making processes in relation to health or other areas of public policy making? The answer is an unequivocal yes. **The fantasmatic structuration of public policy making is revealed in the difficulty of accepting the limitations that are intrinsic to human predicament and ‘to give up the dream of being all, of living forever, of narcissistic omnipotence and of living in the world that never frustrates our desires’** (Moi, 2004: 869).Health and social care is about dealing with the finitude of our physical bodies. Yet these concerns are no less relevant to the education system, for example, which is unconsciously preoccupied with ensuring the survival of future generations (see Obholzer, 1994) or economic development and the idea of ‘progress’ more generally, all of which enact omnipotent fantasies of the limitless possibilities in their own distinct ways. Being a part of the symbolic order, which is structured in lack and loss, these imaginary pursuits cannot be easily (if at all) translated into workable policy objectives. But where does this all leave policy makers and how can they purposefully integrate Lacanian and Kleinian insights by bringing them to bear on policy formation and implementation? A legitimate question is: if policies are about societal fantasies that cannot be fulfilled, would this not mean that all policies are bound to fail? More fundamentally, aren’t policies meant to address real issues rather than fantasmatic pursuits that cannot be realized? These are important questions as public policies are first and foremost about addressing issues that most of us care about, and a great deal of effort goes into their design and articulation. Therefore, I would not wish to suggest that policies are not about engaging with real problems. In contrast, my proposition is that socially constructed objects of fantasy are stirred up successfully only when policies concern issues that matter. Such is the case of patient choice for example. Yet **if policy-making is not to remain locked in searching for unattainable fantasms** (of choice for all), **originating in the imaginary reflections of the illusory self, we would have to recognize them for what they are. If**, on the other hand, **we carry on mis-taking them for reality, they will continue to mirror the misrecognized vision of ourselves and our society. The unique strength of psychoanalytic thought is that it demonstrates the injustice towards the other and alienation of the subject whenever we cling to impossible fantasies originating in the imaginary** (Leeb, 2008). **The emancipatory potential of psychoanalysis** on the other hand, **lies in its power to highlight** (and dispel) **the imaginary nature of the subjective drive for unity, certainty and stability which underpins various societal projects.** But **psychoanalysis does not only warn us about the consequences of mistaking the infinite desires of the psyche with the finitude of human bodies.** More crucially **it acknowledges the productive role of fantasy, and of its failure, in the social arena.** In so doing**, psychoanalysis presents us with a way of bridging fantasy with reality in our social and political endeavors. The incorporation of psychoanalytic insights**, I have suggested, as a necessary means for rethinking health policy making, is not meant to supplant economic and political explanations of social and organizational life. Instead it **is offered to elucidate the co-existence and subtle interplay between psychic mechanisms and calculating rationality that policy makers**, politicians, professionals and users of services **rely on** to make their decisions. Both theories of Lacanian and Kleinian **psychoanalysis** drawn upon in this article **imply the necessity of recognizing underlying imaginary dynamics as a starting point in the journey towards realistic policy-making. To do so we need firstly to accept the imaginary structuration of the desire to attain the unattainable. This recognition will lead to an** acknowledgement and **acceptance of the intrinsic instability and conflicting nature of the policy-making process**, overcoming the splits between policy design and implementation. In addition to political and financial constraints, policies are simultaneously driven (and limited) by the ambiguity and non-unified subjectivity of those who design them and the users/beneficiaries who are themselves split, enigmatic and multi-dimensional subjects. Such a policy, which is reflective of its context and of itself, would not easily be drawn into seeking simplistic ‘solutions’ reflecting the fantasies of the ego. It would also not become the mirror showing our deepest socially sanctioned desires/fantasies, that we are then encouraged to enact mindlessly.As I have shown, the rhetorical pronouncements of ‘Choice for All’ for example, stand for an injunction to exercise and enjoy (choice) even if it involves the experience of being ill or cared for. The call for the recognition of the fantasmatic structuration of the policy process does not however suggest a blank slate authorization of policies designed without thought as to how they can (not) be implemented in a complex multi-organization such as the National Health Service. As I have argued, **when policies are conceived at ‘a distance’ from** organizational **reality, they** cannot relate to patient requirements and **cannot be translated into** organizational **realities**. This brings me to my second and more important point, about the necessity of re-considering policy-making processes, as an inclusive process involving those who are concerned with policy implementation: health professionals, and users of services. **By engaging users and providers in decision-making and the co-production of services as self-aware subjects rather than as constituencies whose fantasies can be manipulated, there might be a possibility to break through the cycle of policy repetition and blame apportioning.** More importantly, **reconciling failure as an opportunity that keeps desire alive rather than an outcome to be avoided might create an opening for more realistic policy formation.** This in itself is a depressing process as **one must also give up the idealized objects, accepting the impossibility of ever attaining them.** Yet only by accepting the necessity of Samuel Beckett’s injunction to: **‘Try again. Fail again. Fail better’** (Beckett, 1983: 7) may the process of un-encumbering oneself from the ideals that bind our ego begin.A participative policy making process that bridges fantasy and reality is a first step in such a direction. It would foster an engagement of self-aware subjects accepting the burden of their subjectivity and taking responsibility for their ontological predicament without surrendering to it, rather than a responsibilization of individual users of services or professionals. By re-considering the very idea of policy as grounded in an imaginary projection of a soon to be perfect world, we would have to learn to stop demanding such perfection of our politicians, and they would have to stop believing that they could deliver it. The comprehensive interpretation of policy-making at a societal level and through the lens of organizational defences suggested in this article might contribute to a better understanding of the possibilities and limitations of developing patients’ autonomy, beyond normalizing the ‘management of expectations’. It will alsochallenge a linear model of policy-making and policy analysis, which separates design from its implementation, showing it to be inadequate. But for this to happen, **the unconscious motivations that create and undo policies will have to be appreciated. Taking into account the inevitability of fantasy in policy-making and the inevitability of its failure, may not free us once and for all from the tyranny of imaginary pursuits. It might, however, enable a journey towards the discovery of new ways of desiring, engaging and being in organizations and society.**

#### To be a subject requires conformity with the meanings, norms, and traditions of the Symbolic. The illusive nature of the signifier induces Lack, a sense of loss which cannot be overcome by the subject. This dooms political projects, as the failure to overcome lack becomes our object of desire.

McGowan ’16 Todd McGowan (Associate Professor of Film and Television Studies at the University of Vermont). “Capitalism and Desire: The Psychic Cost of Free Markets, Columbia University Press, 2016, pgs. 28-32.

When he writes Beyond the Pleasure Principle in 1920, Freud begins to define the subject through its constitutive loss. From this point on in his thinking, he conceives of the subject as completely determined by loss, as driven toward its own destruction—a process that he misleadingly labels "death drive.” Though there are hints of this breakthrough in earlier works, the radicality of the 1920 revolution should not be understated. In fact, even Freud himself did not fully grasp its radicality, as evidenced by his failed attempt to reduce the subject's repetition of failure and loss to a tendency to return to an inorganic state. Death drive connotes a desire to die, which is why it leads readers of Freud (and even Freud himself) astray. What he is really onto with this concept is that the subject finds satisfaction in repeating loss, that the subject's satisfaction is inextricable from failure. No one sets out consciously to fail, and, even if one did, the act of making failure a goal would immediately transform it into a different form of success. Within consciousness the subject cannot give failure primacy. Consciousness is oriented around projects in which the subject aims at succeeding, and the failures of these projects, from the perspective of consciousness, are only contingent failures the subject can attempt to remedy by trying again or trying harder. Unconsciously, however, the subject depends on failure to satisfy itself. Failure and loss produce the object as absent, and it is only the absence of the object that renders it satisfying. Absence animates the subject, driving it to act, in a way that presence cannot. If we think about who marches in the street, it is those who lack, not those who have, and when those who have do march, it is because the threat of loss manifests itself. Even though they march for the elimination of this lack, it is absence that motivates them to march in the first place. It is also absence or the threat of it that enables us to get out of bed in the morning and go to work. The subject that had no absence in its existence would be unable to act and would lack the impetus even to kill itself. After seeing numerous patients display their attachment to absence and loss, Freud concludes that it holds the key to the subject's form of satisfaction. We can see this play out in sports fandom. Though we consciously root for our favorite team to win, we find more unconscious satisfaction in the persistent struggles of the sports team that we root for than in its unqualified successes. The close game is infinitely more interesting than the blowout because it enables the fan to experience loss while not having loss enter into consciousness. No one wants to root for a team that wins all its games, and if fans flock to the games of teams that win all the time, they go to see the loss (or potential loss) that will disrupt the winning, just like auto racing fans go to see cars crashing (or potentially crashing), though this desire remains unconscious. Even when our favorite team wins a championship, we begin almost immediately to consider how they might fare the next year. This is a way of leaving the terrain of success for that of potential failure. When we achieve the pinnacle of success, we seek out a way to return loss into our existence by imagining a new challenge or embarking on a new project. Loss injects value into the subject's existence and gives it an object that provides satisfaction. Freud's conception of the priority of loss and its repetition troubles other psychoanalysts (like Fairbairn, for instance) because it highlights the impossibility of any satisfaction associated with obtaining the object. After this point, for Freud, one simply cannot have the satisfying object. Any notion of success becomes unthinkable, and one must reconceive satisfaction in terms of how one fails. Failure becomes the only option. On the basis of privileging failure, Freud reimagines the object in a way that challenges both much of the history of philosophy and the psychic demands of capitalism. The object is not an object that the subject hopes to obtain but a limit that the subject encounters. The subject cannot overcome the limit but constitutes itself and its satisfaction through the limit. That is to say, the object that thwarts the subject's efforts at obtaining it retroactively creates the subject around the recalcitrance. The subject seeks out what it cannot obtain and latches itself onto these objects. Its failure with regard to them provides a satisfaction that completely defies the capitalist image of reality. Freud's conception of the object enables us to rethink the famous slogan from May 1968 in France. The mantra of this movement—jouir sans entraves (enjoy without hindrances)—expresses the critique of capitalism’s repressiveness, the critique that dominated much of the twentieth century. The problem with this slogan is that eliminating the barriers to enjoyment would eliminate the source of enjoyment. By slightly changing it to jouir les entraves (enjoy the hindrances), we capture the constitutive importance of the obstacle. Satisfaction exists in the obstacle that the object erects in the face of the subject's efforts to obtain it rather than in the eradication of all obstacles. But this is what the capitalist imperative to accumulate enables us to avoid confronting. The speaking subject satisfies itself through its process of failing to obtain its object, even if this goes unrecognized by the subject itself. The relationship between subjectivity and loss leads the subject to flee this recognition and find asylum in the framework of capitalist accumulation. The subject repeats a constitutive loss because loss is the only way that the speaking subject has to relate to objects, even though capitalism provides the image of an alternative. The signifier confronts the subject with an absence that forms subjectivity and that the subject can never overcome. But the loss that haunts the subject also constitutes the subject, which is why it seeks to repeat this loss. The signifier creates the subject through the act of removing what is most essential for the subject, even though this essential object doesn't exist prior to its removal. From this point on, the subject will remain unable to divorce satisfaction from loss. One might say that through the signifier the subject loses the object into existence. Loss generates the object at the same time that it marks its disappearance, which has a determinative effect on how the subject satisfies itself. The subject may find fleeting pleasure in success and achievement, but its only satisfaction will take the form of the repetition of loss. Subjects undermine themselves and self-sabotage not because they are stubborn or stupid but because this is their path to satisfaction. For the speaking subject, winning is only a detour on the way to losing. Even the winners in the world of the signifier are ultimately on the side of defeat, but just take a longer time to get there than others. When we understand the difference between instinctual beings and speaking subjects, the appeal of thinking about ourselves in terms of instinct rather than subjectivity becomes self-evident. Instinctual beings have the capacity to overcome loss and obtain satisfaction through the object they seek. Instinctual beings can become winners that suffer only contingent failures rather than remaining ensconced in perpetual failure. Instinct holds within it the promise of a satisfaction untainted by loss, a full satiation that, even if it soon disappears, can often be replicated. The being envisions a goal that would provide satisfaction and then either attains the goal or not. Success may be difficult and may not endure, but it's not impossible. But the subject attains satisfaction through the repetition of its inability to obtain its object. Failure is the subject's mode of success. Lacan describes this in one of his most lucid explanations of the structure of subjectivity. In Seminar XI, he separates the subject's goal from its aim and uses a metaphor to explain the aim. He claims, "When you entrust someone with a mission, the aim is not what he brings back, but the itinerary he must take. The aim is the way taken.” The satisfaction of the subject derives from the path that it takes. But what Lacan fails to add here is that this path necessarily involves an encounter with loss: rather than seeking out its object, the subject finds ways to miss it and to ensure that it remains lost. The lost object is constitutively lost, and the satisfaction that it offers depends on it remaining so. The subject has no hope that it might attain its lost object, which is why psychoanalysis must refrain from describing the infant's satisfying relationship with the mother's breast prohibited by the father. It is only in retrospect (or from the perspective of an observer) that this relationship appears perfectly satisfying. Freud first conceives of the appeal of loss in response to his observation of self-destructive actions that appear to violate the pleasure principle. It is the penchant for self-sabotage and self-destruction that leads Freud to speculate about the existence of a death drive that aims at a return to an inorganic state. But we don't have to indulge in this type of hypothesis if we recognize the constitutive role that loss plays in the subject's satisfaction. Without the lost object, the subject would lose what animates it and the source of its enjoyment. The act of self-sabotage, even though it detracts from the subject's pleasure, enables the subject to continue to satisfy itself. In Beyond the Pleasure Principle, Freud theorizes that the negative therapeutic reaction that subverts the psychoanalytic cure is not just the product of resistances. The subject does not want to be cured because it associates healing with the loss of its foundational loss, a prospect much more horrifying that the pain of the neurosis. With the recognition of the constitutive role of loss in the psychic economy, psychoanalysis must alter its conception of the cure. Rather than simply ending repression or even overcoming loss, the cure has to involve changing the subject's relation to its lost object, experiencing the intimate connection between loss and satisfaction.

#### Fantasy productions are not neutral models of risk but collusions between capital and state that prevent the change they’ll talk about. The neg rejects this model of beautifying space policy.

**Ormrod 11 -** “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” by James S Ormrod School of Applied Social Science, University of Brighton, Falmer BN1 9PH, Sussex, England; e-mail: j.s.ormrod@brighton.ac.uk Received 17 August 2011; in revised form 19 September 2012 [https://journals.sagepub.com/doi/pdf/10.1068/d16511] // ahs emi

I have highlighted throughout that, where risks are not directly confronted and are uncertain, the operation of economic power becomes more important. One dimension to how power operates under these circumstances has recurred throughout the paper: the ability to create and manage fantasies about catastrophe. The more sophisticated the technologies used to rationalise risk become, the more significant what it cannot model becomes. Various approaches to psychoanalysis have examined how fantasy creates both what is feared (its ‘horrific’ dimension) and the pacifying solution that relieves this fear (its ‘beautific’ dimension). This is true of Kleinian psychoanalysis (eg, Klein, 1946, page 6), but particularly of contemporary Lacanian psychoanalysis, which has dealt with images of catastrophe specifically. This provides tools to explore in more depth Beck’s category of ‘things we are unwilling to know’. The Lacanian social theorist Slavoj Žižek (2008, page xii), for example, adds another category—‘unknown knowns’—to Donald Rumsfeld’s typology of knowledge. Žižek argues that when gaps appear in the symbolic order (in this case rationalising risk discourses) fantasy operates to conceal the true horror of the Lacanian Real; that which cannot be articulated. Žižek (2008, pages 5–6) provides the example of safety demonstrations on aeroplanes. These demonstrations do not serve to pacify our true fears about a crash landing, but to construct the horrific scenario. The true horror remains our inability to know how the crash scenario will play out. Precisely the same is true of NASA’s Environmental Impact Statements, which are known to be fabrications but are still preferred to uncertainty (the UN demands an impossible risk assessment that is probabilistic and geographically limited). Beyond world risk society? 741 The image of a collision cascade in orbit taking out global communications is also a fantasy, as are Haynes’s and McKay’s mutant bacteria. These fantasies each allow us to contemplate uncertainty. But each has a different effect, engineered and selected to function in the interests of those in power. Environmental Impact Assessments provide scenarios that legitimate State acquiescence to capital. They cover over not only science’s failings, but also those of the State and capital in turn. They function to draw activists into what Beck (1995, page 42) describes as “orgies of mathematics and science” that work to prevent a truly reflexive discussion of risk. Whilst informed activists engage with these scenarios as though they were rationalities (and, for example, demand to see more of the information on which they are based), less informed members of the public leave them to it. Collision cascade fantasies and solutions for them in the form of fantastic technologies also sustain a relationship between capital and the State in which disaster and solution must be conceived within the existing regime governing space activities. Not many people have direct economic interests in planetary engineering as yet, bar a marginal group of scientists. Desiring an impossible knowledge, these fantasies give scientists recourse to seek further funding (though more advanced modelling will make the unknown more, not less, terrifying), whilst at the same time making any politicisation of their work seem absurd. Meanwhile, the notion of planetary engineering itself functions as a fantasy sustaining our unsustainable relationship with the Earthly environment. Such fantasies are especially effective in immobilising public concern because of their remote setting in outer space. Space colonisation advocate Kraaft Ehricke (1972) referred to the development of outer space as the ‘benign industrial revolution’ precisely because it removed the negative consequences of industrial activity to a place where they no longer mattered. The same principle underpinned proposals to dump nuclear waste in outer space. Such a manoeuvre is a form of Beck’s “symbolic detoxification”, and the relationship between purity, exclusion, and avoidance has been tackled in the literature on risk (eg, Douglas, 1992; Joffe, 1999).

#### Extinction rhetoric attempts to mediate the infinitude of the Real, but backfires through neocon cooption and indeterminate prescriptions. Scenario planning is an investment in apocalypse that justifies genocidal logic and desires the end of the world.

Matheson 15 Calum Lister Matheson (Professor of Communication at the University of Pittsburgh; PhD, Communication Studies, University of North Carolina). “Desired Ground Zeroes: Nuclear Imagination and the Death Drive.” UNC Chapel Hill Dissertation, 2015, <https://cdr.lib.unc.edu/downloads/sn009z17m?locale=en>. MBPZ

Later, diagnosed with terminal cancer, von Neumann supposedly converted to Catholicism on his deathbed, convinced by another, long dead, mathematician: Blaise Pascal (Jordan 1). Pascal’s wager, that one should believe in God even if He is very unlikely to exist because the consequences of eternal damnation are infinite (Pascal 67- 9), is the basic structure of the sign of survival that was inverted in the twentieth century to be an argument mandating care for the material world instead. Incubated in the warmth of the Bomb, this sign has metastasized to other areas of apocalyptic fantasy predictions. As its transmogrification from Jonathan Schell’s pacifist anti-nuclear stance to Dick Cheney’s defense of preemption will show, arguments based on the attempt to calculate the incalculable are indeterminate. The excess of tuché frustrates automaton, and this secular version of Pascal’s wager is the broken machinery it leaves behind. Jonathan Schell wrote perhaps the most famous book about nuclear war to be marketed as non-fiction. Fate of the Earth is an attempt to make nuclear war seem real through the unabashed use of sublime language. The first of its three parts is full of beautiful passages about the destruction that a nuclear war might produce before ending in a “republic of insects and grass.” Relying heavily on the assumption that a nuclear winter would follow a war between the USA and USSR and that such an event would cause humanity to go extinct,14 Schell contemplates what the end of the human species might mean and what its possibility suggests for defense policy. Schell, like Kristiakoswky at the Trinity test, thought of nuclear war as the end of humanity. Seeing the world apparently as one for us, he wrote that all value was human value, so a nuclear war would destroy everything meaningful in the known universe (95). Nuclear war must, therefore, be avoided at all costs. Schell wrote: [T]he 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…It represents not the defeat of some purpose, but an abyss in which all human purposes would be drowned for all time. 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 in our particular transient moment of human history…although the risk of extinction may be fractional, the stake is…infinite, and a fraction of infinity is still infinity…morally they are the same, and 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 95) This passage serves as the end of the first part of Fate of the Earth and a transition to the middle section of the book, “The Second Death,” which is about future generations. Schell’s argument is a version of Pascal’s wager where “infinity” takes the place of a Christian God. “Infinity” as a concept is always an attempt to mediate the Real because it replaces something that by definition cannot be resolved in language or understood by human beings in its entirety into a single word, a placeholder to represent with finite bounds something that can never be represented. It is the ultimate license in metonymy since all associations are included within it; no proliferation of meaning is prohibited. Its symbolic function can be compared to the various names of God in negative theology, all of which stand in for something that is acknowledged to be inexpressible (Pseudo-Dionysius 52-53). Some version of Schell’s infinite risk argument was used by anti-nuclear activists in public rallies (Sorensen 141), and also used by others to think about a range of other “existential threats” (e.g., Matheny). A report by the Global Challenges Foundation explicitly focuses on “infinite risks” including nuclear war, describing itself as “the first science-based list of global risks with a potentially infinite impact” (Pamlin and Armstrong 31). Representatives of the Vatican recently used the argument too, signing on to a statement including this line: “as long as nuclear weapons exist, there remains the possibility of a nuclear explosion. Even if the probability is small, given the catastrophic consequences of a nuclear weapon detonating, the risk is unacceptable” (Gagliarducci). Even when the hazard is expressed as “catastrophic,” or quantified with some suitably huge number, it is effectively infinite: as Yudkowsky argues, human beings calculate scale poorly, and a sufficiently large number is not rationally understood. “Human emotions take place within an analog brain,” writes Yudkowsky. “The human brain cannot release enough neurotransmitters to feel emotion a thousand times as strong as the grief of one funeral. A prospective risk going from 10,000,000 deaths to 100,000,000 deaths does not multiply by ten the strength of our determination to stop it. It adds one more zero on paper for our eyes to glaze over, an effect so small that one must usually jump several orders of magnitude to detect the difference experimentally” (16). In the more elegant formulation attributed to Josef Stalin, one death is a tragedy. One million deaths is just a statistic. Our failure to grasp these magnitudes could be called the problem of hrair after the Lapine language of Watership Down. Rabbits in the novel can only count to four. Any larger number, be it five or one thousand, is simply hrair. The word means “a great many; an uncountable number; any number over four” (Adams 475). The language we employ attempts to master and reduce the 103 incomprehensible vastness of time and space to mark difference where comprehension is impossible. Infinity is perhaps the best example, but any very large number serves the same structural function of expressing loss beyond practical measure. Thus, although the Global Challenges Foundation argues that “infinite risk” is not meant in a mathematical sense and that calculations are possible, they are in effect meaningless: the investments of “infinity” exceed our ability to calculate, as indeed the report acknowledges when it argues for a categorically different treatment of these risks (Pamlin and Armstrong 33). This quandary frustrates the attempt to make calculable values that seem to exceed calculation itself. A shadow always remains in the quantification of infinity and the attempt to master it technologically, a remainder that haunts the edges of supposedly perfect reason. This is Martin Heidegger’s concept of the gigantic, something much like the sense of the Real that shines through in the sublime: The gigantic is rather that through which the quantitative becomes a special quality and thus a remarkable kind of greatness... as soon as the gigantic in planning and calculating and adjusting and making secure shifts over out of the quantitative and becomes a special quality, then what is gigantic, and what can seemingly always be calculated completely, becomes, precisely through this, incalculable. This incalculable remains the invisible shadow that is cast around all things everywhere when man [sic] has been transformed into subiectum and the world into picture. (Heidegger 135) Through this shadow the modern world extends itself into “a space withdrawn from representation” and gestures towards something which we are denied to know (Heidegger 136). For Schell, the losses possible in a nuclear war are infinite because they threaten future generations beyond count. Preventing the birth of future individuals is immoral, by this logic, which has some bizarre (and apparently unintended) echoes in the Catholic view on abortion (Schell 116). As no future individuals are cotemporal with those assigning them worth, the value of future generations is symbolic, not unique to the individuals actually “prevented” (Kleinig 196-197). The reason we must not immolate ourselves in nuclear fire, then, is that we must continue to reproduce—the value of each individual lies in that person’s ability to create more individuals. There is no discussion of anything else that we are obligated to do for the future. For Schell, responsibility seems to be a finite obligation to an infinite number of people. This infinite future is frequently represented by the metaphor of the child. In Lyndon Johnson’s infamous “Daisy Girl” campaign ad, a child pulls petals off a daisy, accompanied by a mechanical countdown and interrupted by the familiar mushroom cloud of the Bomb. “These are the stakes,” a man’s voice intones. “To make a world in which all of God’s children can live, or go into the dark. We must either love each other, or we must die” (“Campaign Spot”). Lee Edelman’s words, bitterly describing the Child as a figure for “compulsory investment in the misrecognition of figure,” could have been about the Johnson ad. “And lo and behold,” he writes, “as viewed through the prism of the tears that it always calls forth, the figure of this Child seems to shimmer with the iridescent promise of Noah’s rainbow, serving like the rainbow as the pledge of a covenant that shields us against the persistent threat of apocalypse now—or later” (Edelman 18). Unfortunately for disarmament activists, nuclear strategists have children too, and some, like Jim Lipp, express the value of their own work in the same terms—as a matter of caring for “grandchildren’s grandchildren” through nuclear deterrence (Kaplan 78). The “fraction of infinity” argument has been used by those defending an aggressive defense posture. The George W. Bush administration invaded Iraq citing that country’s possible future development of weapons of mass destruction as a primary casus belli. It is only logical that no time ought to be wasted—every second that the decision for war is delayed increases the chance that a rogue regime could develop nuclear weapons. Any non-zero risk is equivalent to an infinite one. Vice President Dick Cheney went one further, however, establishing the “Cheney Doctrine” in response to nuclear terrorism. Told at a briefing with CIA director George Tenet that Pakistani scientists could potentially be assisting Al Qaeda in the development of nuclear weapons, Cheney responded that if “there’s a one percent chance…we have to treat it as a certainty in terms of our response.” The response must be immediate, regardless of proof: “It’s not about our analysis,” he said, “or finding a preponderance of evidence. It’s about our response” (Suskind 62). Members of the security community often assert that nuclear terrorism is an “existential risk,” a threat to American “civilization” or even the entire species despite the complete lack of evidence to this effect (Mueller 19-20). There is no mathematical way to distinguish between infinite risks. If any fraction of infinity is infinity, then every fractional risk is infinite—Heidegger’s unquantifiable “gigantic” casts its shadow over attempts to calculate. While the last part of Schell’s book is a passionate case for disarmament, the opposite is equally plausible: if there is any chance greater than zero that disarmament opponents are right and American nuclear weapons are deterring a nuclear war (and uncertainty in calculation alone ensures that there must be), then the risk is infinite. The future is compressed entirely into the present, since any action we take now could determine whether that future exists at all and what character it might have. We are enjoined to do everything, right now, as fast as we can, because any delay might cost trillions of deaths—an argument Nick Bostrom has made about space colonization using the same structure of Pascal’s wager used by Schell (Bostrom 3). At the same time, we must be in (literally) perfect stasis and do nothing at all, for any change might be the one that cascades into nuclear war. If we extend this infinite value to human extinction more generally, it might even be imperative that we deliberately cause a nuclear war as soon as possible to destroy industrial civilization and thus prevent the collapse of global ecosystems on which all life depends (Caldwell).15 The logic of infinite loss results in aporia.

#### The aff sustains the ‘nuclear priesthood’ of debate – in an attempt to control the absolute contingency of the Real, we repetitively invest in a practice of control over nuclear weapons. The 1AC’s enjoyment of nuclear weapons becomes a form of violent repetition compulsion that turns the case.

Matheson 15 (Calum Matheson is an Assistant Professor of Communication at the University of Pittsburgh, “Desired Ground Zeroes: Nuclear Imagination and the Death Drive,” 6/23/15)

t is worth noting that the Symbolic need not have a permanent structure either. Constellations of tropes are made durable, but not permanent, by what Lundberg calls “affective labor” and I have generally referred to as cathexis. That the belief in determinism persists in some quarters should not discredit the Real or the drive for unmediated experience (i.e., the death drive). Instead, it should highlight our tendency to mistake the durable but artificial structures of the Symbolic for some metaphysical truth of the Real, just as the Bomb is conflated with God. This is also why Lacanian psychoanalysis is consistent with the emerging set of ideas grouped together as speculative realism. Humanity mistakes its reality for the Real, and is only shocked into perspective when the latter is revealed by the inadequacy of the former. As Lacan wrote, To be a psychoanalyst is simply to open your eyes to the evident fact that nothing malfunctions more than human reality…nothing is more stupid than human destiny, that is, that one is always being fooled. Even when one does do something successfully, it is precisely not what one wanted to do. (Psychoses 82) The conflation of Symbolic and Real is at the heart of the Bomb. Jacques Derrida famously wrote that nuclear war is “fabulously textual,” having no existence outside of the system of language, which we might broaden to representation, or better yet, mediation. Derrida argued that because a total nuclear war has not taken place and its coming would obliterate the archive, it can exist only in its “essential rhetoricity” as a “fantasy” or “fable” that has no referent in reality (Derrida 24-27). Some, like Masahide Kato, have criticized Derrida on the grounds that nuclear war has taken place in the form of nuclear testing, part of a larger project of radioactive colonialism and destruction of indigenous peoples (Kato). I read this argument a different way. We do not have to deny that a nuclear war is in some sense ongoing in order to claim that it has never happened. The kind of nuclear war imagined by Kistiakowsky at Trinity can never come to pass because it means the end of everything on Earth. The radioactive destruction of native nations does not qualify as a “total” nuclear war in the minds of strategists and their peace activist Doppelgängers because the war they imagine is beyond any material referent, only hinted at by the presence of the Bomb on Earth. It represents both the Real in its punishing materiality and a speculation that could not exist anywhere but the human imagination. The desire to experience the Real is therefore bound to be frustrated. The final advent of the Bomb always seems imminent but is never realized, so obliteration is endlessly deferred.7 The desire for the Real described in this chapter is thus a source of inevitable failure and frustration. But it is only one part of the death drive. Unable to meet the Real and still remain extant as discrete subjects, taunted by the continuity that lies over the line of taboo, our desires remain. We are dislocated and decentered by the Bomb, but we do not accept our being as dust and ashes. Instead, the subject desirous of the nuclear Real finds its enjoyment in the opposite fantasy: one of power over the conditions of presence and absence, mastery of contingency and the Real itself. This is the dynamic of Freud’s fort-da game, and in context of nuclear war, it manifests itself in the compulsion to repetitively simulate nuclear destruction. Atmospheric nuclear testing ended for the USA in 1963. Ultimately only a relatively small number of people witnessed nuclear explosions anywhere in the world, so inevitably awareness and imagination of the Bomb’s overwhelming presence would spread in an increasingly mediated form. War games as rituals helped to sustain a nuclear priesthood in its (necessarily incomplete) access to the revealed truth of the Bomb after the end of atmospheric nuclear testing left its followers merely longing to “feel the heat.” As these technologies gave form to videogames and ostensibly anti-war simulations, they would democratize access to the Bomb and cement its force as an organizing metaphor for the Real. CHAPTER 2: PLAYING WARGAMES [W]ar and business are conflicts resembling games, and as such, they may be formalized as to constitute games with definite rules. Indeed, I have no reason to suppose that such formalized versions of them are not already being established as models to determine the policies for pressing the Great Push Button and burning the earth clean for a new and less humanly undependable order of things. --Norbert Weiner, God & Golem, Inc. Ipsos Custodes In his “Seminar on the ‘Purloined Letter,’” Jacques Lacan wrote that “it is the symbolic order which is constitutive for the subject,” and that the subject receives “major determination” from “the itinerary of a signifier” (7). One is “possessed” by the signifier, a thrall to its agency: “the signifier’s displacement determines subjects’ acts, destiny, refusals, blindnesses, success, and fate…everything pertaining to the psychological pregiven follows willy-nilly the signifier’s train, like weapons and baggage” (21). One doesn’t have to adopt a fully deterministic attitude towards structure to accept that it is the sign that speaks through us, not vice versa. Human agency does not operate without restriction, but constitutes a negotiation of rules that largely prescribe our behaviors. In the itinerary of an individual life, one can see the influence of accreted structures that give it form. There is perhaps no better example than that of Vice Admiral Tim Giardina. Giardina is the former deputy head of the United States Strategic Command (STRATCOM) at Offutt Air Force Base in Nebraska, the successor to the Strategic Air Command parodied in Dr. Strangelove. In June 2013, Giardina was caught using 74 counterfeit poker chips at a local casino. It was revealed in the ensuing investigation that Giardina had spent almost 1,100 hours gambling in an eighteen-month period. He was such a common sight that other casino regulars remembered him as “Navy Tim,” and recalled comments he had made about the polygraph requirements for U.S. nuclear forces (he was quoted as saying that the purpose is really to find out if one is “having sex with animals or something really crazy”). Giardina was banned from several casinos but continued to play even after being caught with counterfeit chips.8 Following an investigation by the Naval Criminal Investigative Service, he was removed from his post, demoted to Rear Admiral, and reassigned to Washington (Burns). It is not illegal for Navy officers to gamble. Vice Admiral Giardina’s habitual compulsion to play poker did not seem to have any effect on his official duties. Giardina had to be punished not because his actions are out of line with the ethos of the Strategic Command, but precisely because they are not. Giardina enjoyed gambling in poker, but in forging fake chips, he seemed to enjoy gambling on gambling: his was a kind of “meta-gambling,” taking risks on the rules that regulate risks.9 In doing so, Giardina exposed what Slavoj Žižek calls the “obscene supplement” of his system. Ideological fantasies are maintained by disavowing their central, obscene foundation, a gesture necessary to the function of the fantasy but impossible to acknowledge, for the lack of distance would collapse the whole edifice (Žižek 35-36). Admiral Cecil Haney, commander of STRATCOM, said in recent Congressional testimony that the core mission of the organization remains to deter attack on the United States. This means minimizing pervasive uncertainty and risk. In Admiral Haney’s words, “America’s nuclear deterrent force provides enduring value to the nation. It has been a constant thread in the geopolitical fabric of an uncertain world, providing a moderating influence on generations of world leaders” (U.S. Senate Comm. on Armed Services, Statement 7). More directly, it is necessary to identify “where we are taking risk and where we cannot accept further risk” (U.S. Senate Comm. on Armed Services, Statement 6). “Risk” and “uncertainty” appear constantly in Haney’s statement, which is a statement for minimizing chance and developing “contingency plans” to control the consequences of unforeseen events. The disturbance of Symbolic order by the contingency of the Real is met with an attempt to restore order, to respond to chance with law. Lacan describes this dynamic as the interplay of tuché and automaton: Where do we meet this real? For what we have in the discovery of psycho-analysis is an encounter, an essential encounter—and appointment to which we are always called with a real that eludes us… First, the tuché, which we have borrowed…from Aristotle, who uses it in his search for cause. We have translated it as the encounter with the real. The real is beyond the automaton, the return, the coming-back, the insistence of the signs, by which we see ourselves governed by the pleasure principle. The real is that which always lies behind the automaton…it is this that is the object of [Freud’s] concern. (Lacan, Four Fundamental Concepts, 53-54, italics in original) This is the central element of the repetition compulsion. Driven to make our encounter with the Real, we are perpetually disappointed, but the Symbolic world of reality abhors a vacuum. Automaton describes the endless attempts to reach the Real which are doomed to failure but cannot be surrendered, so are repeated again and again. These repetitive behaviors thus develop an aspect of order, and are, paradoxically, orderly 76 attempts to reach the chaos of contingency. They are also linked by Lacan gambling, death, and signification (“Purloined Letter” 28-29). Nuclear deterrence can be read in this frame as an attempt to secure the world against the contingency of the Real, the uncertainty of nuclear war. It is the STRATCOM automaton’s answer to the chaos of the Bomb’s tuché. But the attempt to restore order has at its heart a desire to encounter the Real. In a history of nuclear defense intellectuals, Fred Kaplan described them in the 1980s at the height of their power having come with the mission “to impose order,” but lacking any means to control the wild abandon of the Bomb in a hypothetical war for which there was no precedent, “in the end, chaos still prevailed” (Kaplan 391). Desire is the motive force, and that what we desire cannot be attained is what requires repetition. When the chaos of tuché reigns, automaton does not surrender, but comes to be an end in itself, a site of investment. Repetition itself becomes enjoyable. In repeatedly simulating nuclear war, defense intellectuals who could not experience the Real of nuclear violence could enjoy the illusion of mastery over the terror and fascination inspired by the Real by appearing to simulate the conditions of presence and absence—in this case, the presence of the world-for-us and its absence in the Bomb’s inferno. Langdon Winner distinguishes between risk (a term prevalent in both nuclear war and poker) and threat or hazard on these grounds: risk always has an implied benefit to it, an element of desire and an opportunity for control (145). There is little empirical basis for nuclear war simulations and the calculations of probability they rely on, so nuclear war plans always require a good deal of faith, and thus to adopt them is a risk—a calculation of both hazard and reward (Ghamari-Tabrizi 8). Their parameters are set arbitrarily by the personnel who design them. In other words, they are games of 77 chance in which we also manipulate the rules. This is the obscene supplement of nuclear deterrence that Vice Admiral Giardina could not be allowed to reveal: we don’t just repeat nuclear simulations again and again because we think that they will someday be perfect. War games are fun, and we don’t always care about the rules. Poker, after all, was rumored to be the genesis of game theory at the RAND Corporation, prominent modelers of nuclear war, and was a favorite pastime of the defense intellectuals who sought to tame the world with human reason (Arbella 51-53).

#### Vote neg to embrace the politics of the sublime—the alt salvages value to life in the aesthetic grandeur of the day to day. This doesn’t guide policy, but rather questions the libidinal investments that enable nuclear deterrence—solves case.

Matheson 2 Calum Lister Matheson (Professor of Communication at the University of Pittsburgh; PhD, Communication Studies, University of North Carolina). “Desired Ground Zeroes: Nuclear Imagination and the Death Drive.” UNC Chapel Hill Dissertation, 2015, <https://cdr.lib.unc.edu/downloads/sn009z17m?locale=en>. MBPZ

Nuclear strategists treated human survival like poker, but to seek a justification for this policy is closer to Three-card Monte. The investment in survival cannot be rational. Despite the immense importance we attach to it, at bottom, there is nothing but a void. Why survive at all? This might be one of the last truly forbidden questions to which we have failed to generate an answer. If there is some cosmic plan for humanity in the Real, it eludes us. Any assertion of value—that we are intelligent life, that death brings suffering, that we are obliged to future generations, and so forth—simply leads to another “why,” in the kind of game toddlers routinely play. Efforts to avoid nuclear war, both through deterrence and disarmament, rely on supposedly rational means to reach a goal that is fundamentally irrational. One reaction has been “virulent nihilism,” as in Nick Land’s book of that name, or Thomas Liggotti’s declaration that human existence is “malignantly useless” and consciousness a “long con.” Ray Brassier, who wrote an introduction to Ligotti’s book, expresses similar sentiments in Nihil Unbound. There is even a Voluntary Human Extinction Movement (VHEMT, pronounced “vehement”) and a Church of Euthanasia which councils suicide and cannibalism, amongst other solutions. If there is no reason for survival, why bother? Why keep looking for something we will never find? The insights of the death drive seem to lead to a very bleak conclusion: we cannot live in the Real, at least not in a way meaningful to others. We are condemned to seek after an object that we cannot have, endlessly falling short, endlessly cracking the artifice of the Symbolic walls that contain us, and, seeing the light filter through, repairing them rather than tearing them down. It is in this place of despair from which we should understand the politics of the sublime. Because it is an inevitable byproduct of discontinuous subjectivity, the death drive cannot be wished away. We will probably always desire continuity that we cannot have and the object from which we are rent by our separation from the world as a whole. What the sublime offers is a reconfiguration of desire. We defer enjoyment questing after objects and ignore sacrifices in the meantime, whether it is global poverty tolerated for the sake of a middle-class material comfort or radioactive contamination for the sake of peace-through-strength. Todd McGowan argues that a recognition of the death drive might not remake the material structure of society—at least not immediately—but that it could have a profound effect on the way we understand enjoyment. Instead of seeking to overcome every limit as an obstacle to enjoyment (as I have argued we do with the limits of language in the Real), we have to enjoy the limits themselves as obstacles to the movement of the drive. Desire may be inevitable, but we can change the way we orient ourselves towards the frustrations and repetitions of the drive, learning to enjoy the partial challenges of our limits instead of deferring enjoyment for the achievement of some utopian state that we will never reach (McGowan, conclusion). Some of this enjoyment can already be identified in survivalism, for example, when preppers camp in the wilderness, practice skills they imagine using, or grow their own food. The problem is essentially temporal. What makes survivalism coalesce around violence is the understanding that the world needs to end for society to be remade. Suddenly prepping becomes just work, utility in Bataille’s sense, means to an end. Although there is obviously enjoyment in the sense of affective investment in the practices and tropes of survival, it remains organized around the “big payoff” of a world-shattering disaster, and thus enjoyment is mostly deferred and attachment forms to the disaster itself, fabulously textual as it may be. What ruins the game of fort-da is the same thing that ruins other rule-bound games. As Roger Caillois argues, the assumption that games must then result in something else, some “real world” benefit, turns them into work. To avoid the “corruption” of games, play must be an end in itself, something useless in the sense of Bataille’s sovereign poetry (Caillois 44). The sublime is a language suited for this change. The sense of being in the presence of silence, an active force that exceeds language, breeds both terror and fascination, but what results from this desire might be otherwise. Instead of deferring enjoyment for the eventual mastery of all contingent experience in mediation, the sublime draws a limit to the value of language used for productive work. That limit can be a source of enjoyment instead of (solely) frustration. Realizing that the Real cannot be mediated into the Symbolic does not have to mean that our attempts to do so have failed. Bataille’s distinction between poetry and other language revolves around the basic observation that poetry, in his sense, does not aim to do anything by organizing the world differently. It is expression without utility (“Hegel, Death, and Sacrifice” 25). The sublime is not a sufficient principle for any politics. It is useful instead to reveal the investments that cause political solutions to fail and repeat themselves serially. Ned O’Gorman’s argument that the sublime can have no politics because it cannot make practical differentiations is correct if one understands politics to be about the allocation of scarce resources and rhetoric to be about this conception of politics (“Political Sublime” 889). As Bataille defines it, politics is concerned with the handling of excess, not scarcity (Accursed Share 24-26). The teratology of rhetoric I suggest as a supplement is directed towards excess rather than scarcity. Nuclear war is a problem of excess in a double sense: the excess of reality that is the Real, and the excess of energy that thermonuclear processes provide for warfare. Concern for the sublime should lead us to seek the places where the excess of the general economy tears through the scarcity of the particular economy. Doing so, and observing the distortions that appear in the Symbolic, is a step towards tracking the motions of desire that stitch together the tropes of nuclear myth. Sublime language will not help much in figuring out the details of nuclear arms verification measures—or which Russian ICBM fields to target, for that matter. Instead, it should help us to accept the limits of our ability to map the world and reincorporate its breakdowns, and to appreciate these inevitable failures for what they are. An often overlooked theme in Longinus’s On the Sublime is the futility of accumulation for its own sake. Longinus decried what he saw as the decline of rhetoric into something meant to achieve specific goals rather than be admired for its own sake. The pursuit of wealth, power, and pleasure are not the only goals of rhetoric, and cannot be its only aim. We must enjoy sublime language for its own sake, not only for what it can get us. This is not desire without restriction, for “surely if our selfish desires were altogether freed from prison, as I were, and let loose upon our neighbors, they would scorch the earth with their evils,” because we perpetually desire something more beyond our grasp and thus cannot be satisfied (58). Words—mediation in general, we might now say—must be something to be enjoyed as artifice because “they are in truth the mind’s peculiar light” (41). The sublime’s most dangerous manifestations occur in attempts to control contingency with rational order and calculate the incalculable. The political implication of teratology is that we should sometimes resist this violent recuperation and leave some mysteries alone. To change our relationship towards the death drive means to accept that artifice can be enjoyed for its own sake, not just as a promissory note for the absent Real. There may be no ultimate, objective value for the human species that we can discover in the Real, but this does not need to be a council of despair. Instead of inventing reasons that the species must survive, we should admit that we have no good reason at all to do so. We don’t need one. If all values are arbitrary, then there is no reason not to live, assuming that we want to do so. To live without a reason is precisely the kind of sovereignty Bataille seeks through poetry, a sovereign life rather than a commitment to individual survival as a means to a perpetually deferred end. Learning to accept limits, even enjoy their impediment to the drive, is perhaps necessary but not sufficient to change our orientation towards nuclear warfare and the imagination of human extinction. To require rational answers to the ultimate questions raised by the Bomb is to play the wrong kind of game.

# Case

### Link Wall

“extinction no matter the probability” in CX – performative offense - 0.00001% chance would rationalize ay arbitrary action of gov to stop

### Top Level

#### Overview – our ROTB comes first as a sequencing question to theirs:

#### [1] Our framework acts as a meta level constraint to theirs as theirs operates within the Lack – only symbolic rupture is able to create the agential capacity that serves as the prerequisite to their fwk in the first place

#### [2] Objectivity is impossible – signifiers such as pain or pleasure fundamentally have no meaning as only the aff explains their generation via differentiation – means their fwk collapses to ours

#### [3] Fiat is illusory - debate isn’t internal to real world change—spreading, extinction impacts, theory, and 10-word plans all prove that debate doesn’t emulate Congress nor spillover

#### [4] Simulation DA – simulation mirrors Pentagon war games that were played not in pursuit of knowledge but in pursuit of desires.

#### [5] Agency DA—the aff, like war generals, comes to overidentify their position and enjoy the ability to control the world, fiating extinction in and out of existence—link turns framework since they don’t produce activists

### Framing

#### Vote neg on presumption, util is arbitrary—

#### A] Open question problem—I can always ask “is pleasure good?” which proves that pleasure not analytically equivalent to goodness

#### B] Sadomasochists enjoy pain and sociopaths experience emotion distinctly—hedonism reduces human experience

#### C] Aggregation—there are infinite consequences spanning across time and space—our actions are cosmically insignificant

#### Negates – there are infinite more ways to presume a statement false than true.

### Advantage – Debris

#### Non UQ – squo debris thumps – BD reads blue

Orwig 16 [(Jessica, MS in science and tech journalism from Texas A&M, BS in astronomy and physics from Ohio State) “Russia says a growing problem in space could be enough to spark a war,” Insider,’ January 26, 2016, <https://www.businessinsider.com/russia-says-space-junk-could-spark-war-2016-1>] TDI

NASA has already [warned that](https://www.businessinsider.com/space-junk-at-critical-density-2015-9) the large amount of space junk around our planet is growing beyond our control, but now a team of Russian scientists has cited another potentially unforeseen consequence of that debris: War.

Scientists estimate that anywhere from 500,000 to 600,000 pieces of human-made space debris between 0.4 and 4 inches in size are currently orbiting the Earth and traveling at speeds over [17,000 miles per hour](https://www.nasa.gov/mission_pages/station/news/orbital_debris.html).

If one of those pieces smashed into a military satellite it "may provoke political or even armed conflict between space-faring nations," Vitaly Adushkin, a researcher for the Institute of Geosphere Dynamics at the Russian Academy of Sciences, reported in a paper set to be published in the peer-reviewed journal [Acta Astronautica](https://www.sciencedirect.com/science/article/pii/S0094576515303416), which is sponsored by the International Academy of Astronautics.

#### Public sector mining thumps.

NASA 19 [“NASA Invests in Tech Concepts Aimed at Exploring Lunar Craters, Mining Asteroids,” NASA, June 11, 2019, <https://www.nasa.gov/press-release/nasa-invests-in-tech-concepts-aimed-at-exploring-lunar-craters-mining-asteroids>] TDI

NASA Invests in Tech Concepts Aimed at Exploring Lunar Craters, Mining Asteroids

Robotically surveying lunar craters in record time and mining resources in space could help NASA establish a sustained human presence at the Moon – part of the agency’s broader [Moon to Mars exploration](https://www.nasa.gov/specials/moon2mars/) approach. Two mission concepts to explore these capabilities have been selected as the first-ever Phase III studies within the [NASA Innovative Advanced Concepts](https://www.nasa.gov/niac) (NIAC) program.

“We are pursuing new technologies across our development portfolio that could help make deep space exploration more Earth-independent by utilizing resources on the Moon and beyond,” said Jim Reuter, associate administrator of NASA’s Space Technology Mission Directorate. “These NIAC Phase III selections are a component of that forward-looking research and we hope new insights will help us achieve more firsts in space.”

The Phase III proposals outline an aerospace architecture, including a mission concept, that is innovative and could change what’s possible in space. Each selection will receive as much as $2 million. Over the course of two years, researchers will refine the concept design and explore aspects of implementing the new technology. The inaugural Phase III selections are:

Robotic Technologies Enabling the Exploration of Lunar Pits

William Whittaker, Carnegie Mellon University, Pittsburgh

This mission concept, called Skylight, proposes technologies to rapidly survey and model lunar craters. This mission would use high-resolution images to create 3D model of craters. The data would be used to determine whether a crater can be explored by human or robotic missions. The information could also be used to characterize ice on the Moon, a crucial capability for the sustained surface operations of NASA’s Artemis program. On Earth, the technology could be used to autonomously monitor mines and quarries.

[Mini Bee Prototype to Demonstrate the Apis Mission Architecture and Optical Mining Technology](https://www.nasa.gov/directorates/spacetech/niac/2019_Phase_I_Phase_II/Mini_Bee_Prototype)

Joel Sercel, TransAstra Corporation, Lake View Terrace, California

This flight demonstration mission concept proposes a method of asteroid resource harvesting called optical mining. Optical mining is an approach for excavating an asteroid and extracting water and other volatiles into an inflatable bag. Called Mini Bee, the mission concept aims to prove optical mining, in conjunction with other innovative spacecraft systems, can be used to obtain propellant in space. The proposed architecture includes resource prospecting, extraction and delivery.

#### Tracking debris exists now and solves collisions.

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

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

#### The debris propagation model is a process not an event---timeframe is decades and intervening actors check. Err neg -- this is Kessler, the guy who made that model.

**Burns Interviewing Kessler ’13** Corrinne Burns, interviewing Donald Kessler, who made up the concept. [Space junk apocalypse: just like Gravity? 11-15-2013, https://www.theguardian.com/science/blog/2013/nov/15/space-junk-apocalypse-gravity]//BPS

Now? Are we in trouble? Not yet. Kessler syndrome isn't an acute phenomenon, as depicted in the movie – it's a slow, decades-long process. "It'll happen throughout the next 100 years – we have time to deal with it," Kessler says. "The time between collisions will become shorter – it's around 10 years at the moment. In 20 years' time, the time between collisions could be reduced to five years." Fortunately, communications satellites are, in the main, situated high up in geosynchronous orbit (GEO), whereas the risk of collisions lies mainly in the much lower, and more crowded, low Earth orbit (LEO). But that doesn't mean we can relax. "We've got to get a handle on it – we need to prevent the cascade process from speeding up." And the only way to do that is, he says, to begin actively removing junk from space. Charlotte Bewick agrees. She's a mission concepts engineer with the German space technology company OHB System, with special expertise in space junk – specifically, how we can capture it and bring it back to Earth. While agreeing with Kessler that the movie scenario is exaggerated, she remains concerned. "Fragments of junk can naturally re-enter the atmosphere [and so be removed from orbit]. But we're at the stage where the rate of creation of new debris fragments is higher than the rate of natural removal. The orbits most at risk harbour important space assets – satellites for weather forecasting, oil spill and bush fire detection, and polar ice monitoring." Bewick highlights the case of Envisat, a defunct 8,000kg spacecraft circling Earth in an orbit that is very popular with space agencies and, hence, pretty crowded. "If Envisat collides with a piece of debris or a micrometeorite, the fragments could render the whole orbital region unusable." So can we get the junk down, I asked Massimiliano Vasile, part of the Mechanical & Aerospace Department at the University of Strathclyde and co-ordinator of the Stardust network. He told me defunct satellites in the high GEO region have, for some time, been shifted to higher "graveyard orbits" to keep them out of the way. But that's not an option for items in low Earth orbit. For this, he tells me, researchers are looking seriously into active debris removal – in-orbit capture techniques like harpooning, netting and tethering, the use of contactless systems like ion-beams or lasers, and even onboard robotics to position the junk away from high-risk orbital regions. As for middle Earth orbit – well, ideas are welcome, he says. We're in no immediate danger from Kessler syndrome – but it's not a problem that's going away. Despite Gravity's artistic license, Donald Kessler is pleased to see the phenomenon represented on the big screen. "It is very improbable that events would play out as they did in the film," he says. "But if it raises awareness, then that's great."

### Advantage – Competition

#### Congestion induces restraint, not aggression.

Bowen 18 [Bleddyn, Lecturer in International Relations at the University of Leicester; ELN; 20 Februrary 2018; “The Art of Space Deterrence,” <https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/>] brett

Fourth, the ubiquity of space infrastructure and the fragility of the space environment may create a degree of existential deterrence. As space is so useful to modern economies and military forces, a large-scale disruption of space infrastructure may be so intuitively escalatory to decision-makers that there may be a natural caution against a wholesale assault on a state’s entire space capabilities because the consequences of doing so approach the mentalities of total war, or nuclear responses if a society begins tearing itself apart because of the collapse of optimised energy grids and just-in-time supply chains. In addition, the problem of space debris and the political-legal hurdles to conducting debris clean-up operations mean that even a handful of explosive events in space can render a region of Earth orbit unusable for everyone. This could caution a country like China from excessive kinetic intercept missions because its own military and economy is increasingly reliant on outer space, but perhaps not a country like North Korea which does not rely on space. The usefulness, sensitivity, and fragility of space may have some existential deterrent effect. China’s catastrophic anti-satellite weapons test in 2007 is a valuable lesson for all on the potentially devastating effect of kinetic warfare in orbit.

#### Their ev overhypes escalation---be suspect.

Bowen 18 [Bleddyn, Lecturer in International Relations at the University of Leicester; ELN; 20 Februrary 2018; “The Art of Space Deterrence,” <https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/>] brett

Space is often an afterthought or a miscellaneous ancillary in the grand strategic views of top-level decision-makers

ns in the context of development and the Global South.