## 1NC Round 4

### 1

#### We begin with a brief history of warfare, its disappearance and the reappearance of military informatics, logistics and digitalization. Warfare does not disappear for the desire of an ethical field of relations, but simply because it is obsolete. The reappearance of warfare is perpetual upgrading, a battlespace in potentia that predetermines all liberal guises of resistance. Warfare is not an event, it does not take place in some traditional understanding of ‘the happening of events,’ rather warfare is the Archimedean point that produces not just armies, weapons and tactics, but the real world itself. The 1AC’s fantasy of demilitarization, like the crossbows of the Great Italian Wars, is outdated. Warfare is all we know.

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.  
The role of the ballot is to determine the productivity of the 1AC within debate ie they need to prove that there is a connection between their scholarship and the ballot – if not you vote negative on production

#### The internal net benefit is the armchair activism Disad – debate is a mausoleum of theories of power and resistance—ideas that were once alive are now filtered, managed, and expected by the machinations of academia. The proliferation of critical discourse within the debate space gets co-opted by the sign economy and merely circulates within the self-contained deliberation of the debate round. Terminal solvency defense and turn—their resistance is forever buried into the catacombs of empty school rooms. After this debate, we may go get lunch at a fast food joint that uses ingredients produced on the backs of disenfranchised workers in Latin America—they make us complacent by making us forget that we are only producing discourses about discourse in exchange for a ballot and we become complicit with the harms they speak to. 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).

#### 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**

#### Cap collapsing now – most recent ev

**IMT 21** (World Perspectives 2021: a global epoch of revolution is being prepared https://www.marxist.com/a-worldwide-epoch-of-revolution-is-being-prepared.htm International Marxist Tendency 30 July 2021 Accessed 8-13-2021) CSUF JmB + meza Work Week

The nature of perspectives The present document, which should be read in conjunction with the one we produced in September 2020, will be somewhat different to world perspectives documents that we have issued in the past. In previous periods, when events were moving at a more leisurely pace, it was possible to deal, at least in outline, with many different countries. Now, however, the pace of events has accelerated to the point where in order to deal with everything, one would need a whole book. The purpose of perspectives is not to produce a catalogue of revolutionary events, but to uncover the fundamental underlying processes. As Hegel explained in the Introduction to the Philosophy of History: “It is in fact, the wish for rational insight, not the ambition to amass a mere heap of acquisitions, that should be presupposed in every case as possessing the mind of the learner in the study of science.” We are dealing here with general processes, and can only look at a few countries which serve to illustrate most clearly those processes at this stage. Other countries will, of course, be dealt with in separate articles. Dramatic events The year 2021 commenced with dramatic events. The crisis of world capitalism is making waves that are spreading from one country and continent to another. On all sides, there is the same picture of chaos, economic dislocation and class polarisation. The new year barely began before a far-right mob stormed the US Capitol Building in Washington at the urging of former US president, Donald Trump – giving the centre of Western imperialism the appearance of a failed state. These events, coupled with the vastly larger Black Lives Matter protests last summer, show how deep the polarisation of US society has become. In addition to this, big protests in India, Colombia, Chile, Belarus and Russia demonstrated the same process: the masses’ resentment is growing, and the ruling class is failing to govern in the old ways. A global crisis like no other These world perspectives are unlike any other we have dealt with in the past. They are enormously complicated by the pandemic that is hanging like a black cloud over the entire world, subjecting millions to misery, suffering and death. The pandemic still rages out of control. At the moment of writing, there have been more than 100 million cases worldwide, and almost three million deaths. These figures are unprecedented outside a world war. And they continue to rise inexorably. This terrible scourge has had a devastating effect in poor countries around the world and has also seriously affected some of the richest countries. In the USA there are 30 million cases, and the number of deaths has gone over the half a million mark. And Britain has among the highest number of deaths per head of the population: over 4 million cases, and well over 100,000 deaths. The present crisis is therefore not like an ordinary economic crisis. This is literally a life-and-death situation for millions of people. Many of these deaths could have been avoided with proper measures early on. Capitalism cannot solve the problem Capitalism cannot solve the problem: it is itself the problem. This pandemic serves to expose the intolerable divisions between rich and poor. It has revealed the deep fault lines that divide society. The line between those who are condemned to get sick and die, and those who are not. It has laid bare the wastefulness of capitalism, its chaos and inefficiency, and is preparing class struggle in every country in the world. Bourgeois politicians like to use military analogies to describe the present situation. They say we are at war with an invisible enemy, this terrible virus. They conclude that all classes and parties must unite behind the existing government. But a yawning gulf separates words from deeds. The case for a planned economy and international planning is unanswerable. The crisis is worldwide. The virus does not respect frontiers or border controls. The situation demands an international response, the pooling of all scientific knowledge and the mobilisation of all the resources of the planet to coordinate a genuine global plan of action. Instead, we have the unedifying spectacle of the row between Britain and the EU over scarce vaccines, while some of the poorest countries are virtually denied access to any vaccines at all. But why is there a scarcity of vaccines? The problems of vaccine production – to cite just one example – are a reflection of the contradiction between the urgent needs of society and the mechanisms of the market economy. If we were really at war with the virus, governments would mobilise all their resources on this one task. From a purely rational point of view, the best policy would be to ramp up vaccine production as fast as possible. Capacity needs to be expanded, which can only be done by setting up new factories. But the big private vaccine manufacturers have no interest in expanding production massively because they would be financially worse off if they did. If they ramped up production capacity so that the whole world was supplied within six months, the newly built facilities would stand empty immediately afterwards. Profits would then be much lower compared with current scenarios, where existing plants produce at capacity for years to come. Yet another obstacle to mass production of the vaccine is the refusal of Big Pharma to relinquish intellectual property rights over “their own” vaccines (in most cases developed with massive amounts of state funding) so that other companies would be able to produce them cheaply. Pharmaceutical companies are making tens of billions in profits, but problems with both production and supply mean shortages everywhere. In the meantime, millions of lives are at risk. Workers’ lives at risk In their haste to get production (and therefore profits) moving again, politicians and capitalists resort to cutting corners. Workers are sent back to crowded workplaces without adequate protection. This is equivalent to passing a death sentence on many of these workers and their families. All the hopes of the bourgeois politicians were based on the new vaccines. But the rollout of vaccines has been bungled, and the failure to control the spread of the virus – which increases the risk of new vaccine-resistant strains developing – has serious implications, not just for human lives and health, but also for the economy. Economic crisis The present economic crisis is the most severe in 300 years, according to the Bank of England. In 2020, the equivalent of 255 million jobs were lost worldwide, four times more than in 2009. The so-called emerging economies are being dragged down with the rest. India, Brazil, Russia, Turkey are all in crisis. South Korea’s economy shrank last year for the first time in 22 years. That was despite state subsidies worth about $283 billion. In South Africa, unemployment reached 32.5 percent and GDP contracted by 7.2 percent in 2020. This is a greater contraction than in 1931 during the Great Depression, and this in spite of spending the equivalent of 10 percent of GDP in a fiscal stimulus package. The crisis is plunging millions of people ever deeper into poverty. In January 2021, the World Bank estimated that 90 million people will be pushed into extreme poverty. The Economist of 26 September 2020 wrote: “The United Nations is even gloomier. It defines people as poor if they do not have access to things like clean water, electricity, sufficient food and schools for their children. “Working with researchers from Oxford University, it reckons the pandemic could cast 490 million in 70 countries into poverty, reversing almost a decade of gains.” The United Nations’ World Food Programme put it in these terms: “Across 79 countries with WFP operational presence and where data are available, up to 270 million people are estimated to be acutely food insecure or at high risk in 2021, an unprecedented 82 percent increase from pre-pandemic levels.” This alone gives one an idea of the global scale of the crisis. In addition to the effects of the pandemic, the global ecological crisis will likely aggravate this situation, fuelling poverty and food insecurity. Capitalist exploitation of the environment threatens to put key ecological systems on the edge of collapse. We have seen an increase in conflicts over scarce water resources and environmental destruction that will inevitably lead to social instability and massive climate migration. The general instability around the world is organically linked to growing poverty. It is both cause and effect. It is the most fundamental underlying cause of many of the wars and civil wars taking place. Ethiopia is just one example of this. Ethiopia was presented as a model. In the period of 2004 to 2014 its economy was growing by 11 percent a year, and it was seen as a country to invest in. Now it has been thrown into turmoil with the outbreak of fighting in Tigray province, where 3 million people are in need of emergency food relief. This is not an isolated case. The list of countries affected by wars in the past period is very long, and the catalogue of human suffering appalling: Afghanistan: two million deaths; Yemen: 100,000 deaths; the Mexican drug wars have led to over 250,000 killed; the war against the Kurds in Turkey, 45,000 deaths; Somalia, 500,000 deaths; Iraq, at least one million deaths; South Sudan around 400,000 deaths. In Syria, the United Nations estimated the number of deaths at 400,000, but this seems too low. The real figure may never be known but is sure to be 600,000 at least. In the terrible civil wars in the Congo, probably over four million people perished. But there again, nobody knows the real figure. More recently we had the conflict in Nagorno-Karabakh. And so the list goes on and on. Such things are no longer considered suitable for the front pages of newspapers. But they express very clearly what Lenin once said: Capitalism is horror without end. The continued existence of capitalism threatens to create the conditions of barbarism in one country after another. A crisis of the regime From a Marxist point of view, the study of economics is not an abstract academic question. It has a profound effect on the development of consciousness of all classes. Everywhere we look now there is a crisis, not just an economic crisis, but a crisis of the regime. There are clear indications that the crisis is so severe, so deep, that the ruling class is losing control of the traditional instruments they used in the past for running society. As a result, the ruling class finds itself increasingly unable to control events. That is particularly clear in the case of the USA. But it also applies to many other countries. It is sufficient to mention the names of Trump, Boris Johnson and Bolsonaro to underline the point. USA The USA now occupies a central place in world perspectives. For a very long time, revolution in the richest and most powerful nation on earth seemed to be a very distant prospect. But the USA was hit very hard by the world economic crisis and now everything has been turned upside down. 68 million Americans filed for unemployment during the pandemic, and as always it is the poorest and most vulnerable, especially the people of colour, who suffer most. The scourge of unemployment falls most heavily on the shoulders of the youth. A quarter of under-25s have been thrown out of work. Their future has suddenly been taken away. The American dream has become the American nightmare. This dramatic change has forced many people, old and young, to reconsider views that they previously considered sacrosanct and question the very nature of the society in which they live. The rapid rise of Bernie Sanders at one end of the political spectrum and Donald Trump at the other set the red light flashing for the ruling class. This kind of thing was not supposed to happen! Alarmed at the danger posed by this situation, the ruling class was compelled to take emergency measures. Let us remind ourselves that, according to the official dogma of bourgeois economists, the state was not supposed to play any part in economic life. But faced with looming disaster, the ruling class was forced to throw all the accepted economic theories into the dustbin. The same state which, according to free-market theory, should play little or no role in economic life, has now become the only thing propping up the capitalist system. In all countries, starting with the USA, the so-called free market economy is really on a life support system, like a coronavirus patient. Most of the money handed out by the state went straight into the pockets of the rich. But the ruling class feared the political consequences of yet another corporate bailout. They therefore gave grants to every resident and massively boosted unemployment benefits. This cushioned the impact of the crisis on the poorest layers. At some point, these supports will be cut back or withdrawn altogether. We have the paradox of the most terrible poverty in the richest country in the world existing side by side with the most obscene wealth and luxury. By October 2020, more than one in five American households did not reliably have enough money for food. Food banks are proliferating. Inequality and polarisation Levels of inequality have broken all records. The gulf between rich and poor has become transformed into an unbridgeable abyss. In 2020 the wealth of the world’s billionaires grew by $3 .9 trillion. The Nasdaq 100 index is 40 percent higher than before the pandemic. Listed global equities, as of February 2021 had risen in value by $24 trillion since March of 2020. The average chief executive of an S&P 500 company earns 357 times as much as the average non-supervisory worker. The ratio was around 20 in the mid-1960s. It was still 28 at the end of Ronald Reagan’s term in 1989. To quote just one example, Jeff Bezos now makes more money per second than the typical US worker makes in a week. This takes America back to the times of the capitalist robber barons that Theodore Roosevelt denounced before the First World War. And this has an effect. All the demagogy about the ‘national interest’, that ‘we must unite to fight the virus’, ‘we are all in the same boat’, stands exposed as the vilest hypocrisy. The masses are prepared to make sacrifices under certain circumstances. In times of war, people are prepared to unite to fight a common enemy, that is true. They are prepared, at least temporarily, to accept lower living standards and also, to some extent, restrictions on democratic rights. But the gulf separating the haves from the have-nots is deepening the social and political polarisation and creating an explosive mood in society. It undermines all the efforts to create a sensation of national unity and solidarity, which is the main line of defence for the ruling class. Federal Reserve statistics show that the richest tenth in the US had a net worth of $80.7 trillion at the end of 2020. That means 375 percent of GDP and far above historical levels. A five percent tax on that would yield $4 trillion, or one fifth of GDP. It would pay for all the costs of the pandemic. But the rich robber barons have no intention of sharing their plunder. Most of them (including Donald J Trump) show a marked disinclination to paying any tax at all, let alone five percent. The only solution would be the expropriation of the bankers and capitalists. This idea will inevitably gain more and more support, sweeping away the remaining prejudices against socialism and communism, even among those layers of workers who have been bamboozled by the demagogy of Trump. This is already causing concern among the serious strategists of capital. Mary Callaghan Erdoes, head of assets and wealth management for JP Morgan, drew the inevitable conclusion: “You’re going to get a very high risk of extremism coming out of this. We have to find some way to adapt, otherwise we’re in a very dangerous situation.” The assault on the Capitol The attack on the Capitol on 6 January was a graphic indication that what the USA now faces is not a crisis of government, but a crisis of the regime itself. These events were neither a coup nor an insurrection, but they glaringly exposed the raw anger that exists in the depths of society and also the emergence of deep rifts in the state. At bottom, what they indicate is that the polarisation in society has reached a critical point. The institutions of bourgeois democracy are being tested to destruction. There is a burning hatred of the rich and powerful, the bankers, Wall Street and the Washington establishment in general (“the swamp”). This hatred was skilfully channelled by the right-wing demagogue, Donald Trump. Of course, Trump himself is only the most cunning and voracious alligator in the swamp. He is merely pursuing his own interests. But in doing so, he seriously damaged the interests of the ruling class as a whole. He has played with fire and conjured up forces that neither he, nor anyone else, can control. By word and deed, Trump was destroying the legitimacy of bourgeois institutions and creating huge instability. That is why the ruling class and its political representatives everywhere are horrified by his conduct. The impeachment The Democrats tried to impeach Trump, accusing him of organising an insurrection. But they predictably failed to get the Senate to convict him, which would have barred him from standing for public office in future. Most Republican senators would have been very glad to do this. They hate and fear this political upstart. And they knew very well who was behind the events of 6 January. The Republican Senate leader Mitch McConnell delivered a damning verdict on the ex-President, after voting to acquit him. In reality, he and the other Republican senators were terrified of the reaction of Trump’s angry followers if they took that fateful step. They decided that discretion is the better part of valour and, holding their noses, voted not guilty. But if this was an attempted insurrection it was a very poor one. Rather than an insurrection, it resembled a large-scale riot. The mob of angry Trump supporters burst into the Capitol with the obvious connivance of at least some of the guards. But, having easily gained possession of the Holy of Holies of US bourgeois democracy, they had not the faintest idea of what to do with it. The disorganized and leaderless mob milled around aimlessly, trashing anything they took a dislike to and shouting bloodthirsty threats against Democrat Nancy Pelosi, Republican vice-President Mike Pence and Mitch McConnell, who they accused of betraying Trump. Meanwhile, the insurrectionaries’ Commander-in-Chief had conveniently disappeared. If history repeats itself, first as a tragedy and then as a farce, this was a farce of the purest water. In the end, nobody was hanged or sent to the guillotine. Tired out by so much shouting, the “insurrectionists” went home quietly or retired to the nearest bar to get drunk and boast of their courageous exploits, leaving behind nothing more threatening than a pile of rubbish and a few bruised egos. Nevertheless, from the point of view of the ruling class, it set a dangerous precedent for the future. Ray Dalio, founder of the world’s largest hedge fund, Bridgewater Associates, had this to say: “We’re on the brink of a terrible civil war. The US is at a tipping point in which it could go from manageable internal tension to revolution.” The storming of the Capitol was a serious warning to the ruling class. And this will undoubtedly have consequences. Despite a barrage of media hostility, 45 percent of registered Republicans thought that it was justified. But this has to be compared with the far more significant fact that 54 percent of all Americans thought that the burning down of the Minneapolis police precinct was justified. And 10 percent of the whole population took part in the Black Lives Matter protests – 20,000 times more than those who stormed the Capitol. All this shows the rapid growth of social and political polarisation in the United States. The spontaneous uprisings that swept the USA from coast to coast following the murder of George Floyd, and the unparalleled events that preceded and followed the presidential elections marked a turning point in the entire situation. Changes in consciousness The stupid liberals and reformists naturally understand nothing of what is happening. They only see the surface of events, without understanding the deeper currents that are flowing strongly beneath the surface and impelling the waves. They constantly shout about fascism, by which they mean anything they dislike or fear. About the real nature of fascism, they know absolutely nothing. That goes without saying. But by constantly harping on the “danger to democracy” (by which they mean formal bourgeois democracy) they sow confusion and prepare the ground for class collaboration under the flag of “the lesser evil”. Their support for Joe Biden in the USA is a very clear example of this. What we have to take account of is that Trump’s base has a very heterogeneous and contradictory character. It contains a bourgeois wing, headed by Trump himself, and a large number of reactionary petty bourgeois, religious fanatics and openly fascist elements. But we must remember that Trump received 74 million votes in the last election and many of these were working-class people who previously voted for Obama but are disillusioned with the Democrats. When they are interviewed, they say: “Washington doesn’t care about us! We’re the forgotten people!” There are violent swings to the left and also to the right. Nature abhors a vacuum, however, and because of the complete bankruptcy of the reformists, including the left reformists, this mood of anger and frustration has been capitalised upon by right-wing demagogues, so-called populists. In the USA we have the phenomenon of Trumpism. in Brazil we saw the rise of Bolsonaro.

#### Collapse creates sustainable living

**Powers ’11** (William is a senior fellow at the World Policy Institute. He has worked for more than a decade in development aid and conservation in Latin America, Africa, and Washington.) World Policy Journal, "Finding Enough: Confessions of a secular missionary," Project Muse, AM)

In October 2011, I visited the University of Minnesota's Humphrey Institute of International Affairs to give a talk entitled "What's Your 12 × 12?" In the audience were professionals and intellectuals from more than a dozen developing countries. I was expecting a wholesale rejection of the "voluntary simplicity" concept. After all, these were all successful developing-country elites who were benefiting from rapid economic growth and increasing prosperity. But the **overwhelming consensus** in the room was that reducing consumption is more than a survival imperative. It **is actually a more desirable way to live**. One audience member, a thirty-something man from China, described the contentedness of his childhood, growing up in a 10-foot-by-15-foot house -- the solidarity it brought, the freedom from clutter and distraction. Others spoke of the need to ratchet up living standards, but only to a point that would allow for an intelligent, holistic balance between doing and being -- just enough, and not more, food, shelter, fresh air, family and friendship. At a certain point in my "development" career, I began to question the whole notion of impoverishment. Indeed, most of the so-called "impoverished beneficiaries" of my programs seemed better off than me. They wore bigger smiles. They engaged more easily in the moment. Through their kinship networks and close relationship with the land, they achieved a greater sense of meaning and purpose. I talked with these folks everywhere from the Gambian coast to the Amazon, and the vast majority told me they would not trade their lifestyle -- with its simplicity and rootedness -- for mine, despite the obvious difference in wealth and mobility. I do not mean to glorify material destitution. I've spent many hours with some of the millions of people for whom a 12 × 12 would represent an unattainable level of prosperity -- luxury, even. They live zero-by-zero, with no lush organic gardens, no gently flowing creek, no shelter at all. They live in what you might call the Fourth World -- those anarchic, failed places where community and basic necessities have been decimated by war, famine, and natural disaster. So, when discussing relatively "poorer" countries, I always make a clear, explicit distinction between people living in a state of material destitution and people living healthy subsistence lifestyles. There's a point where one's material life is in balance -- possessing neither too much nor too little. Roughly one-fifth of humanity has too much and is overdeveloped; another fifth or so has too little, and is underdeveloped. Neither of these groups experiences general well-being. The former can rarely experience the simple joy of being. The latter are so destitute that they can't sustain their bodies physically. Fortunately, the third group -- those with enough -- is by far the largest. It is what I redefine as "sustainably developed," ranging from subsistence livelihoods like the Mayans of Guatemala to the economic level of the average Western European in 1990. By this rough calculation, **60 percent of the world lives sustainably**. In other words, if everyone lived as they did, our one planet would suffice to feed, clothe, shelter, and absorb the waste of everyone.

neither that of one party nor of another. It traverses all discourses without them wanting it to.

#### 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

#### 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.

**The incessant productivity of hegemony is a drive toward its own destruction. hegemonic power has surpassed the domain of being referentially related to any material reality and can now only identify with the image of its own destruction.**

**Pope 7**. Professor of Language at York University, Pope, “Baudrillard’s Simulacrum: Of War, Terror, and Obituaries,” October 2007, International Journal of Baudrillard Studies: Volume 4, Number 3

Many of the obituaries printed some variance of the following quote: “It is almost they who did it, but we who wanted it… Without this deep complicity, the event would not have had such repercussions”.17 Baudrillard **indexes all the disaster movies that have as part of their narratives an attack on the US, and often the World Trade Center itself.** Elsewhere Baudrillard notes that “**if the cohesion of our societies was in the past maintained by the ‘imaginary’ of progress, it is maintained today by the ‘imaginary’ of catastrophe**”.18 Slavoj Zizek alludes to Baudrillard’s argument in noting the “libidinal investment” we had in the attack: “That is the rationale of the often-mentioned association of the attacks with Hollywood disaster movies: **the unthinkable which happened was the object of fantasy**, so that, in a way, **America got what it fantasized about,** and that was the biggest surprise”.19 It is the “biggest surprise” because we do not expect to actually receive, directly, what we fantasize about, and when we are confronted with the core of our fantasy we can only experience it as traumatic. Simply put, our fantasy of terrorism was supposed to remain just that. (The “we” I am repeatedly using is that of a strange sort of “collectivity”: the atomized masses, of which we are all part of some of the time, and none of us all the time. The use of this shifter is intended to affect the shock of recognition, to the extent that is possible given the sort of collectivity indexed.) Though the obituaries implicitly suggested otherwise, Baudrillard was not saying that **on September 11**, 2001, the US got what it deserved, merely that **we cannot simply pretend as though we did not ourselves fantasize the “destruction of a power hegemonic to that degree**”.20 We can certainly try to rewrite the past – that is the very dynamism, after all, of hyperreality – but we can just as well resist this tendency in indexing our having fantasized “9/11” before it actually happened: In this scene, from Die Hard: With a Vengeance (Die Hard III), the Wall Street subway station has just been bombed. Covered in dust, panic-stricken executives run about in images that can now but recall those from lower Manhattan on September 11, 2001. Other executives take a spectatorial position to what is occurring beneath them: Centred in the action of the bomb blast the film cuts to an office that overlooks the scene with its nameless executives – who never become protagonists in the diegesis – and back to the action. A few seconds later we rejoin these executives, whom are now even eating popcorn in taking in this scene from behind the office window. One asks how many fire trucks can be counted, to which another says “you guys, you guys”, suggesting that their questioning is getting in the way of proper spectatorship. Die Hard not only partakes of the fantasy of terrorism, it does so in a reflexive manner. These executives, behind their window, clearly stand in for us, behind the screen. In front of these images we, like these executives, feign a blasé attitude (“it’s nothing we haven’t seen before”), while attentively absorbing them – along with popcorn. Part of the humour of Die Hard: with a Vengeance is the way it exaggerates the nonchalance New Yorkers have to threats of terrorism, but this indifference – and so the reflexivity of this film – was only made possible through the interminable media discourse about terrorism. Behind our blasé attitude, this film suggests, lies enjoyment (and, perhaps, the reason for seeing this film). **When someone** like Baudrillard **confronts us with our own enjoyment, we feign shock and horror**. It is almost a law: **those that come closest to articulating** – and so potentially dissolving – **the kernel of our enjoyment are the most vilified**. Baudrillard, however, simply makes more explicit that around which Hollywood has built countless narratives. Later in the film the arch-terrorist, impersonating a city engineer, comes to survey the damage, and remarks: “Holy toledo! Somebody had fun”. Indexing his own enjoyment, he is also, as the previous scene with the executives makes clear, indexing our own. (The police officer with whom he converses himself references the first attack on the World Trade Center: “You were probably at the World Trade’s. You know what that mess was”.) **Though the US administration might not ponder to any degree the enjoyment of terrorism, they do appreciate Hollywood’s story-telling abilities, routinely consulting them on likely terrorist targets and practices**. But what they are ultimately consulting, of course, is our enjoyment as intuited by various Hollywood functionaries. Despite the extremely few deaths attributed to terrorism, at times in the 1980s, Joseba Zulaika notes, “over 80 per cent of Americans regarded terrorism as an “extreme” danger. In April of 1986, a national survey showed that terrorism was “the number one concern” for Americans”.21 Feeding this fire and/or being fed from it, from 1989 to 1992, four years in which not a single person died from terrorism in the US, 1322 new book titles with the subject “terrorism” emerged.22 One could say, as Zulaika does, that **in producing the discourse of terrorism Americans effectively called it into being**. One would want to know why, however, the discourse was in the first place produced. If one is inclined to answer that it was produced because it was a very effective way to keep audiences captive long enough to sell them to advertisers, one would still want to know why it exerted such power of fascination for these audiences. I would suggest that Baudrillard allows for such an understanding in his discernment of the challenge opened by America, and the American production of this discourse is perhaps a kind of realization of the challenge it had placed to the rest of the world. **America fantasized its own destruction, because it had set up the challenge, the “dare” (as so many American kids say and play every Saturday night). It was only waiting to see who would answer** – and, in its millenarian spirit, when. It is probably not a stretch to say that **the US, and the rest of the Western world, shares a kind of global popular culture – shaped first by the challenge, then by the mass media** (though the challenge is to some extent only articulated through the mass media) – with the terrorists of September 11, 2001. Baudrillard does not suggest, however, that having shared such fantasies entails that we should now feel guilty. In Cool Memories V he writes that simply because we shared a kind of collective unconscious with the terrorists, “it is ridiculous to condemn the ‘collusion’ of the Unconscious with any political act whatever, and hence to submit it to a moral judgement”. To suggest otherwise, he continues, is to “dream of a politically correct Unconscious”.23 Baudrillard once wrote that America “is the only remaining primitive society”24, which drew some attention at the time, and likewise had some obituaries crying foul. For the most part these critics were not aware that such a designation is, for Baudrillard, generally a form of flattery, if it does indeed become here more problematical. Primitive societies are for Baudrillard of the order of symbolic exchange and reversibility, of the pact and the challenge rather than the contract. To some extent he sees this in America: **If you approach this society with the nuances of moral, aesthetic, or critical judgement, you will miss its originality, which comes precisely from its defying judgement and pulling off a prodigious confusion of effects. To side-step that confusion and excess is simply to evade the challenge it throws down to you**… as with dream elements, **you must accept the way they follow one another, even if it seems unintelligible**… The distinctions that are made elsewhere have little meaning here.25 In a way **America has no concern for values enshrined and elaborated upon in European cultures, instead operating in a kind of primitive, ritualistic society, epitomized through driving culture and the rules of the road**. At the same time, however, **the pornographic obscenity of American culture ensures the elision of any secret, any play beyond the materialized object. America is a culture of paradox**: on the one hand, **its affirmative thinking renders it as far from the reversible play of seduction and the challenge as possible, while**, on the other, **its “defying judgement” indexes a society enjoying its lack of referentiality. American culture seems most obviously concerned with securing reality (and hegemony), while on the other it basks in the implosion of (its) power**. This is perhaps a definition for utopia, and Baudrillard accordingly takes up America’s primitive challenge, attempting to render its meaninglessness not through moral, aesthetic, or critical judgement, but through accepting and working through its perennial claim of achieved utopia. Its endless concern to “vindicate itself”26 as such a utopia opens up a senseless challenge – that mistakes itself for reality – to which Baudrillard responds through his “radical thought”. In short, Baudrillard takes up America’s challenge through a form of intellectual terrorism, one which should be rigorously differentiated, of course, from the suicidal act. For Baudrillard, indeed, **the terrorist act was and is not the only possible response to globalization**. Against commodity value, that which treats everything as series of equivalences, Baudrillard turned to anthropology’s discernment of cultures where “things are never exchanged directly one for another”.27 “It was a question”, he wrote, “of attempting to strip the object – but not just the object – of its status as commodity, to restore to it an immediacy, a brute reality which would not have a price put on it”.28 At this point one would no longer be in the realm of the contract, but that of the pact, a “dual, collusive relation”, wherein “the terms are reversible”.29 He suggests that “[i]t is perhaps utopian to claim to pass beyond value, but it is an operative utopia, an attempt to conceive a more radical functioning of things”,30 and one, we might note, that did not necessarily partake of acts of terrorism. He suggests that **we have perhaps “always” been “in a dual morality”: “There might be said to be a moral sphere, that of commodity exchange, and an immoral sphere, that of play or gaming, where all that counts is the event of the game itself and the advent of shared rules**”,31 as in seduction and gambling. **We might live in a fully simulated world, of copies without originals, but nonetheless** Baudrillard writes: “**symbolic exchange has always been at the radical base of things, and… it is on that level that things are decided**… Perhaps we are still in an immense potlatch”.32 Baudrillard claims he is not nostalgic for it, which is perhaps believable to the extent that we are, still, in such potlatch, however much we try to dis-acknowledge it. He does write that we cannot acknowledge it since “without the rituals, without the myths, we no longer have the means to do so”.33 Terrorism attempts to revive such means, but so does, Baudrillard elsewhere suggests, the odd seduction, the life-or-death gamble, and the work of theory. There is, in short, room for hope. III. THE TERROR OF MEANING, THE TERROR OF MEANINGLESSNESS In the wake of September 11, 2001, audiences heard that the motive for the terrorist acts was religious fundamentalism, a “perverted” branch of Islam that calls for jihad against any and all infidels. It is assumed “they” have a deep hatred of American and ‘Western’ “freedoms”. On one hand we are terrified by the sedimentation of meaning accrued through the long-serving Orientalist lens on the cultures of Islam: there is simply too much meaning, and we, along with today’s mass media, are incapable of performing digestion. Baudrillard writes that here “all distinctive marks will become anathema, suspect of masking or even, quite simply, signifying something, and hence potentially terroristic”.34 But perhaps, on the other hand, we (and the media) are ultimately terrified from the realization that there is no meaning to the suicide act itself, that it is but the simple, and stupid, assertion of singularity in the de-sphericized world of global consumption. In this sense I partially disagree with more traditional Leftist accounts of the “complexity” of the conditions that led to September 11. While I would not deny that one can (and in fact should) draw all sorts of historical and political links amongst the actors, none of these links provides any effective meaning to the suicide mission itself. Hollywood’s rendering of flight United 93, in the film of the same name, is perhaps correct in depicting the terrorists as constantly reciting prayers to Allah, but even as such it seems to confirm Zizek’s point that the terrorists only resolved the more fundamental deadlock of their belief in the suicidal act proper.35 Like most believers, religious or otherwise, they were not unquestionably assured as to the intricacies of their faith, but on the contrary acted in “fundamentalist” ways in order to resolve lingering doubt. News analyses and documentaries seem to take a certain relish, for instance, in reporting that suicide bombers believe they are but a bomb blast away from seventy-two virgins, but it is rather highly probable that Muslim fundamentalists do not unfailingly believe this – with the suicide mission itself undertaken as a way of shoring up and confirming this aspect of their belief, among others. From one angle “Islamic fundamentalism” is fundamentally meaningless, as, indeed, are all “leaps of faith”; it is only after the “leap” that the believer can, a posteriori, begin rationalizing his/her belief. The terrorist act, moreover, is a second leap that doubles the meaningless of the original leap of faith. From another angle, that of its situation in its economic and political context, “Islamic fundamentalism” is perhaps deeply meaningful, pointing towards a myriad of injustices in a world-system predicated on the exploitation of the environment and whole nations of people. Meaning here is also terrifying. But the context of Islamic fundamentalism is not discussed in the media. What is “reported” is a strain of religion which believes in the virgins, hates democracy, and wants women to wear veils, and that is willing to sacrifice the self – the foundation of liberal humanist Western societies – to accomplish its goals. In short, **the media is forever circling around the fundamental meaninglessness of the suicide act proper, while eliding the genuine injustices that move millions of people to take up oppositional stances to “Western” capitalist hegemony.** To accusations that he was somehow legitimating terrorism Baudrillard responded, in a Der Spiegel interview republished in this journal: I do not praise murderous attacks — that would be idiotic. Terrorism is not a contemporary form of revolution against oppression and capitalism. No ideology, no struggle for an objective, not even Islamic fundamentalism, can explain it. …I have glorified nothing, accused nobody, justified nothing. One should not confuse the messenger with his message. I have endeavored to analyze the process through which the unbounded expansion of globalization creates the conditions for its own destruction.36 **The attacks were a challenge, to America**, to be sure, **but also to the attempt at meaning**. It is, as the Right righteously insists, foolish to suggest that the attacks were some sort of response to global injustice, as if some sort of meaningful economy was already existent in which the attacks were easily inscribed. But it is also wrong, and for the same reasons, to – again Righteously – suggest that the attacks were directed against our “freedoms” and “way of life”. The suicidal acts were meaningless on two fronts: one, in the simulacra of mass media punditry and 24/7 “real time” coverage; two, in the desperate assertion (and revenge) of singularity in and against the de-sphericized processes of “globalization”. Since globalization is inseparable from the media, the second dimension of meaninglessness cuts to the heart of the first. And that was the point. Admitting that some things may have no meaning is difficult for the intellectual, of course. I am reminded of the moment in Dick Hebdige’s Subculture: The Meaning of Style, when he is trying to come to terms with the “meaning” of the punk appropriation of the swastika. What, after all, could that mean? He comes to the conclusion that there is, in fact, no meaning to be had: The signifier (swastika) had been willfully detached from the concept (Nazism) it conventionally signified, and although it had been re-positioned (as ‘Berlin’) within an alternative subcultural context, its primary value and appeal derived precisely from its lack of meaning: from its potential for deceit. It was exploited as an empty effect… The key to punk style remains elusive. Instead of arriving at the point where we can begin to make sense of the style, we have reached the very place where meaning itself evaporates.37 This seemingly most meaningful symbol – in the words of Stuart Hall, “that sign which, above all other signs, ought to be fixed”38 – turns out to repel meaning. (Punks were more often than not anti-racists.) One would think that this conclusion would give Hebdige some semiotic pause, enough even to reconsider changing the title of his book. Instead, at this very point, he begins exploring the theoretical developments of the Tel Quel brand of semiotics that emphasize the polysemic nature of any given term. At the moment he marks the fundamental nothingness and stupidity of the punk use of the swastika, he immediately goes on to emphasize its excessive and potentially “infinite range of meanings”.39 **He is right, of course, to reject the standard semiotic method of finding a determined or symptomatic meaning behind overt signifiers, but I am uneasy about immediately moving on to emphasize the “productivity” of language.40 Such incessant productivity is, after all, the condition of post-industrial postmodern capitalism**, and it is not at all clear that the punk appropriation of the swastika can be within this so easily subsumed: it may have more to do with a sort of expression of the very demise of any horizon of meaning than of the “pomo” productivity of language. **The endless performativity of “communicative capitalism**”41 – as in branding – **does**, of course, **hollow out meaning, but in the very process of doing so it believes itself full of it**. In wearing the swastika, by contrast, punks were not engaged in anything like branding. Hebdige concludes Subculture by noting how we, as academics, are condemned to “speak excessively about reality”,42 but this only seems to indicate that the productivity of language rests more with the academic than the object in question. It is the same with terrorism. Academics, politicians, and media pundits produce an endless whirligig – a performative productivity – of discourse about it, but the terrorist act, like the punk use of the swastika, is fundamentally meaningless. Rather than partake in this productivity (which is only ultimately in the service of Capital, not least in the production of books to be plugged on talk shows), or, at the least, **rather than justify one’s** (perhaps inevitable) **contributions to** such **productivity, one should rather mark the place where meaning implodes as causative force. This is not meant to advocate resignation**. Concerned academics should, again, continue to draw links between what occurred on September 11, 2001 and its global politico-economic context; there is truthful meaning there (unlike that of the Orientalist discourse). But this truth is ineffectual if it is not supplemented with an apprehension of the meaninglessness of the terrorist act proper; a rigorous separation must be maintained. IV. ABU GHRAIB: UPPING THE ANTE Baudrillard recently wrote of Jorge Luis Borges conjecture that **Hitler was on a suicidal mission, that, in wanting to be defeated, he “collaborated blindly with the inevitable armies that [would] annihilate him”. It is the same today, for “global, comfortable, imperial civilization**”: “[i]n the central solitude of those very people who profit by it, it is unlivable. And all are secretly won over to the forces that will destroy it”.43 In “Pornography of War”, written in response to the revelation and media dissemination of the photographs of prisoner abuse and torture **at Abu Ghraib**, Iraq, Baudrillard suggested that while the terrorist attacks of September 11 inflicted a humiliation on the US from the outside, here **we were confronted with the US exacting such humiliation on itself: “These scenes are the illustration of a power that, having reached its extreme point, no longer knows what to do with itself, of a power now aimless and purposeless since it has no plausible enemy and acts with total impunity**”.44 “**All it can do now”, he continues, “is inflict gratuitous humiliation… And it can only humiliate itself in the process, demean and deny itself in a kind of perverse relentlessness**”.45 I would not deny it. But what if, extrapolating and building on his own arguments from “The Spirit of Terrorism”, torturing the “Iraqi Other” – delusionally linked, for most Americans, with Al Qaeda – was a response, in the realm of the pact and symbolic exchange, to the terrorist attacks of September 11, 2001? If so, this is not simply a matter of the US “electrocuting itself”,46 but also the Other, in a kind of potlatch of humiliation opened up by America itself and responded to in the spectacle that was and is “9/11”. These photos are meant to be seen, and unlike other examples of torture, are signed: “I did this”, says Lyndee England with her stupid grin, “I’m making them pay”. Sent to their colleagues and friends these photos suggest a personalization of the challenge, and one gets the sense – in a wired world – that they were taken with the knowledge that others beyond the originally intended recipients would see them. In this way they England is also saying: “I did this to you (– how will you respond?)” The torturers give themselves the task of “making it personal”, in a sense desperately trying to give body and tangible form to the whole history of European and American humiliation of the Middle East, just as did the terrorists of September 11, 2001. I would contend Baudrillard even says this himself: And what is it, in fact, that we want to make these men confess? What secret are we trying to force out of them? We quite simply want them to tell us how it is – and in the name of what – that they are unafraid of death.47 What made them do what they did on “9/11”? What makes their Palestinian `brethren’ do the same? (Never mind, of course, that the poor Iraqi threatened with electrocution had nothing to do with it, since for racist American prison guards they are all “linked”).48 Zizek suggests that rather than being another expression for voyeurism, **the “scopic drive” is originally the drive to make oneself part of a scene offered up to the gaze of the Other**.49 **We do not begin as observers passively recording a reality in front of us, but are first and foremost embedded within a tableau observed by the gaze**. Paradoxically, then, **one in some manner produces the gaze through the scopic drive, in the activity of exposing oneself**. American torturers realized this in including themselves within their “abject tableaux”, as Baudrillard put it.50 **In the phenomenon of having one’s existence recorded by webcams, TV confessionals, and/or reality TV shows, the true horror is of not being observed. It is almost as if people only feel as though they exist in being so recorded, in producing and being offered up to the gaze; one almost hysterically grounds one’s existence in such iterative recordings**.51 In the case of the Abu Ghraib photographs, American torturers confirm their existence in the same moment that they humiliate those tortured. In having their photos taken alongside their victims these Americans produce the Other, here ever more rendered as the technological apparatus through which these images flow. Is this not the truth of YouTube confessionals, Flickr accounts, and weblogs? **Increasingly anxious that anyone is listening or watching, that there is any sort of collectivity in which one is embedded, one uploads a veritable flow of diarrheic images and words to not only ensure that someone is watching, but that** – as a result – **the Other, Society, is there.** The pictures from Abu Ghraib partake of this logic, while engaging in the realm of challenge and the collusive relation.

#### Interpretation: The affirmative should not be able to fiat that every state, company, and individual follows the laws of the plan Violation: They do – the affirmative makes it so not only does every country sign the OST, but also that zero countries proceed to break the rules later Standards:

#### Real World – we have evidence about specific scenarios in which countries have announced that they will continue to mine – that takes out all of their offense about being able to create tiny “x country says no scenarios”

#### Negative Ground – we lose any and all scenarios in which some country can’t or won’t follow on because the affirmative says the three words “normal means solves” and gets out of the solvency deficit

#### They will say that it is unfair – no it’s not. If the negative says that a non-space fairing country like Indonesia says no, you still vote affirmative because they can solve their impacts – our argument is contextualized to some of the larger countries and their evidence also supports that those countries test the water

#### Normal means has some countries not totally comply and still try to mine in space – it is the affirmative’s role to figure out what the punishment for those actions are

#### Their Jamasmie ev is in the context of the space force escalating tensions which means if they’re right you vote negative on presumption because they can’t solve. Stockdale GS reads blue

1AC Jamasmie 21 Cecilia Jamasmie [Cecilia has covered mining for more than a decade. She is particularly interested in Corporate Social Responsibility (CSR), Diamonds and Latin America. Cecilia has been interviewed by BBC News and CBC among others and has been a guest speaker at mining conventions, including MINExpo 2016 and the World’s Copper Conference 2018. She is also member of the expert panel on Social License to Operate (SLO) at the European project MIREU (Mining and Metallurgic Regions EU). She holds a Master of Journalism from the University of British Columbia, and is based in Nova Scotia.], 2-2-2021, "Experts warn of brewing space mining war among US, China and Russia," MINING, <https://www.mining.com/experts-warn-of-brewing-space-mining-war-among-us-china-and-russia/> DD AG

A brewing war to set a mining base in space is likely to see China and Russia joining forces to keep the US increasing attempts to dominate extra-terrestrial commerce at bay, experts warn. The Trump Administration took an active interest in space, announcing that America would return astronauts to the moon by 2024 and creating the Space Force as the newest branch of the US military.It also proposed global legal framework for mining on the moon, called the Artemis Accords, encouraging citizens to mine the Earth’s natural satellite and other celestial bodies with commercial purposes. The directive classified outer space as a “legally and physically unique domain of human activity” instead of a “global commons,” paving the way for mining the moon without any sort of international treaty. Spearheaded by the US National Aeronautics and Space Administration (NASA), the Artemis Accords were signed in October by Australia, Canada, England, Japan, Luxembourg, Italy and the United Emirates “Unfortunately, the Trump Administration exacerbated a national security threat and risked the economic opportunity it hoped to secure in outer space by failing to engage Russia or China as potential partners,” says Elya Taichman, former legislative director for then-Republican Michelle Lujan Grisham. “Instead, the Artemis Accords have driven China and Russia toward increased cooperation in space out of fear and necessity,” he writes.Russia’s space agency Roscosmos was the first to speak up, likening the policy to colonialism. “There have already been examples in history when one country decided to start seizing territories in its interest — everyone remembers what came of it,” Roscosmos’ deputy general director for international cooperation, Sergey Saveliev, said at the time.China, which made history in 2019 by becoming the first country to land a probe on the far side of the Moon, chose a different approach. Since the Artemis Accords were first announced, Beijing has approached Russia to jointly build a lunar research base. President Xi Jinping has also he made sure China planted its flag on the Moon, which happened in December 2020, more than 50 years after the US reached the lunar surface.

#### You should be skeptical of the their internal links and power predictions of the aff – foreign policy analysts are riddled with bad predictions about conflict – they do this because it gives them a pay check – especially overexaggerating Chinese power

Drezner 21 [Daniel W. 1-15-2021 Foreign Policy Wonks Gone Wild https://foreignpolicy.com/2021/01/15/foreign-policy-predictions-always-bad-worst-international-relations-rewards-catastrophic-thinking/ Accessed 3-7-2021] CSUF JmB NDT 2021

In a world defined by scarcity, there will always be a bountiful harvest of bad predictions about the future. This is true for both foreign policy and Foreign Policy alike. In January 1989, East Germany’s leader, Erich Honecker, declared that the Berlin Wall would still be standing in “50 or even 100 years.” He turned out to be off by 49 to 99 years; the wall crumbled 10 months after his statement. No one writing in the pages of this magazine has been as consequentially wrong as Honecker. Nonetheless, even a cursory perusal of Foreign Policy’s archives reveals some serious errors in foresight. One article in the Winter 1999-2000 issue by the Russia expert Daniel Treisman claimed that Boris Yeltsin’s successor as president of Russia would “find himself blocked in by the realities of Russia’s political game, pushed back toward a set of policies and a style of governing that closely resemble Yeltsin’s.” In retrospect, this seems like a poor description of Vladimir Putin’s style of governance. This is less Treisman’s fault than a consequence of the ever present danger of believing the status quo will persist. Similarly, a 1995 article by the sociologist Jack A. Goldstone asserted that rapid economic growth would not save the Chinese Communist Party (CCP) and that “we can expect a terminal crisis in China within the next 10 to 15 years.” It is safe to say that the CCP has, so far, managed to endure and entrench itself. Goldstone was proved wrong because the past didn’t predict the future; Chinese economic growth accelerated to a historically unprecedented rate. Likewise, in early 2009, the economist William Easterly forecast that the 2008 financial crisis would immiserate those who had just emerged from extreme poverty. Over the next five years, however, growth in the developing world actually outpaced growth in the wealthier economies of the Organization for Economic Cooperation and Development. Predictions that did not come true were by no means limited to the pages of Foreign Policy; the field of international relations is full of them. In the 1970s, the Club of Rome predicted that resource depletion would stunt global prosperity. Instead, the greatest reduction in global extreme poverty began a few years later. In the late 1990s, when petroleum prices were plummeting, some took to these pages to predict the end of OPEC. Instead, the price of oil skyrocketed well past $100 a barrel. This, in turn, led to renewed claims of “peak oil”—the idea that petroleum reserves would near depletion and the industry would go into decline. Fracking and the development of alternative energy systems proved that to be wrong as well. When the Cold War ended, multiple prognosticators predicted geopolitical chaos in Europe and a great-power rivalry between the United States, Europe, and Japan. Oops. The 100th anniversary of the start of World War I led many historians to envisage a replay of those events in the Pacific Rim in 2014. Thankfully, this too did not come to pass. With a surfeit of bad takes, it would be logical to conclude that there have been few good foreign-policy ideas over the same time period. This assumption is incorrect. Consider two examples from the early 1970s. After the 1973 OPEC embargo, the fear of commodity cartels gripped national security analysts. The political scientist Stephen D. Krasner argued in this magazine, however, that oil was the exception. History proved him right. The push by civil rights activists to make human rights a key component of U.S. foreign policy during the Carter administration was one of those ideas that seemed to bear little fruit at the time. This emphasis, however, persisted into the Reagan administration, and the result was the dawn of the third wave of democratization that transformed Latin America, Eastern Europe, and the Pacific Rim. Some ideas that are underappreciated when first proposed acquire momentum over time. A number of concrete foreign-policy ideas have been responsible for tangible improvements in people’s lives. Weirdly, however, these constructive arguments get less attention than famously wrong ones, like Samuel P. Huntington’s proposed clash of civilizations or the neoconservative belief that forcible regime change can contribute to democratization. The past 30 years have demonstrated that wars within civilizations are far more bloody than those between them and that forcible regime change is far more likely to lead to military quagmires than Madisonian republics. For anyone intimately familiar with the marketplace of foreign-policy ideas, this phenomenon should be unsurprising. Scholars like to think that, in the public sphere, good notions drive out bad ones, but that’s not necessarily true. Even foreign-policy experts tend to dwell on spectacularly bad ideas rather than helpful suggestions. Francis Fukuyama has a long, distinguished career of trenchant scholarship, but most foreign-policy observers remember him only for his premature prediction of the “end of history” in the early 1990s—the idea that Cold War ideological confrontation would give way to the triumph of liberal democracy. A review of the worst predictions and most useful ideas of the past half-century reveals a few lessons for the readers of Foreign Policy. The first is that foreign-policy observers are a pessimistic lot. We are awash with doomsaying that has proved no more accurate than a cult member holding a sign declaring “The end is nigh” on the street corner. The second is that when examining trends within countries, the primary source of bad predictions is the fallacy of extrapolation: the belief that the future will be just like the present, only more so. The third is that the most useful ideas are not rooted in grand strategy or doctrine. Sometimes grand narratives get the big things right, but just as often they create cognitive blinders that make it difficult to recognize error. By contrast, small-bore ideas—grounded in concrete, specific, well-defined problems—have made the most tangible contributions to international affairs. To be fair, international relations experts are hardly the only social scientists with a poor record of projecting the future. Economists have also proved extremely bad at forecasting, even though there are some awfully powerful incentives for economists to get things right. What makes foreign-policy analysts different is the bias in their forecasting errors. Economists are overly rosy about the future. This profound “optimism bias” explains the errors of the Bretton Woods institutions. On average, for example, a 10-year macroeconomic forecast from the International Monetary Fund or World Bank overestimates a country’s annual GDP growth by 1.1 percentage points. Political forecasters, however, suffer from a different bias: We are a profoundly pessimistic lot. As the Yale University professor John Lewis Gaddis once delineated in painstaking detail, international relations scholars failed to predict both the peaceful end of the Cold War and the manner of the Soviet collapse. After the breakup of the Soviet Union, realists in particular made overly pessimistic predictions about how the post-Cold War order would affect NATO, nuclear proliferation, violent conflict, and balancing against the United States. In reality, the 20 years after the breakup of the Soviet Union saw dramatic declines in almost every category of political violence. The realist line sounds slightly more accurate now, but prognosticators earn no points for predictions that might come true 30 years late. There are three reasons why foreign-policy analysts are so morose. First, it’s good for business. International relations is a countercyclical profession; bad times in the world are good times for geopolitical analysts—and there are incentives for doomsaying. The growth industry of political risk analysis, the first generation of which emanated from international relations scholarship, is predicated on things going wrong. One high-ranking officer at a prominent risk consultancy once explained the company’s sales pitch as follows: “You scare the shit out of them first. That’s what gets the clients through the front door.” Second, much like the reasons for having insurance on your house or car, it pays to devote greater attention to the extreme negative event. Over the past 50 years, there have been positive events: the end of the Cold War, collapse of apartheid, reduction in extreme poverty, and growing ease of cross-border communication. Nonetheless, both government officials and corporate leaders are compelled to respond to negative shocks like a terrorist attack, a global financial crisis, or a pandemic, which will have a far greater impact on politics and profits than a spate of good news. This is partly because human beings are hard-wired to be wary of threats; governments are, too. As one academic paper recently observed, “States tend to inflate threats, exhibit loss aversion, and learn more from failures than from successes.” Even if the probability of bad events happening is low, warning about them has minimal downside. No officials have ever been punished because they were too prepared for a worst-case contingency. Leaders get punished for sleeping at the wheel far more than they do for appearing too vigilant. Finally, there’s an asymmetry in the marketplace of foreign-policy ideas. It is much safer to predict doom and gloom than to predict that everything will work out fine. Warnings about disaster scenarios that never happen carry less cost to one’s reputation—that is someone just being cautious and prudent—and if you happen to be right, you’re treated as a prophet, as the Foreign Policy columnist and health writer Laurie Garrett recently discovered. History has stigmatized optimistic prognosticators who, in retrospect, turned out to be wrong—see, for example, the caricatures of Norman Angell’s 1909 book, The Great Illusion, which predicted that economic interdependence would make war obsolete, or Fukuyama’s end of history. When in doubt, predict the worst-case scenario. These professional tendencies have led to some bad collective forecasts. The end of U.S. hegemony in world politics has been the hardiest of bad predictions. By my count, in Foreign Policy’s 50 years, the death of U.S. hegemony has been declared after at least six different events: the collapse of the Bretton Woods regime in the early 1970s, the stagflation of the mid-1970s, the late 1980s “twin deficits” crisis, the 2003 invasion of Iraq, the bankruptcy of Lehman Brothers, and the election of Donald Trump. U.S. hegemony will end at some point, but America’s status as a superpower has outlived many of its most pessimistic prognosticators. If forecasters have been too pessimistic about the state of the world, they have been too complacent in their assessments of the great powers. When it comes to country analyses, the natural tendency has been to extrapolate from current trends. Indeed, two political scientists made this very point in these pages in 2012 when characterizing U.S. National Intelligence Council documents: “The reports almost inevitably fall into the trap of treating the conventional wisdom of the present as the blueprint for the future 15 to 20 years down the road.” While this is a natural human tendency, large complex societies have a way of confounding that instinctual view. Sometimes trends do persist, but just as often they stop abruptly or reverse course. Predictions about China are a case in point. Two decades ago, predictions about the future of Chinese politics ran the gamut from democratization to stable authoritarianism. In March 2000, U.S. President Bill Clinton predicted, “The more China liberalizes its economy, the more fully it will liberate the potential of its people. … And when individuals have the power not just to dream but to realize their dreams, they will demand a greater say.” Even more sober analysts noted that by the early 2000s China had seemed to institutionalize the transfer of power, a rarity in authoritarian regimes. Instead, under Xi Jinping, China has transformed into the most personalist regime since the days of Mao Zedong. The fallacy of extrapolation also applies to forecasts about China’s economy. A decade ago, Robert Fogel, a Nobel-winning economist, made waves with a Foreign Policy article predicting that China’s economy would swell to $123 trillion by 2040. He made this prediction simply by assuming that China’s double-digit growth rates from the early 2000s would persist and extrapolating from there. In the decade since, China’s growth rate has slowed significantly—and even those growth figures are likely to be exaggerated. Over the past quarter century, China’s productivity growth has fallen by two-thirds. Now, some experts believe that people should fear a faltering China more than a rising one. China is the standout for bad predictions about national trajectories, but it is hardly alone. U.S. analysts persistently overestimated the capabilities of Soviet Russia during the Cold War. These same analysts underestimated Russian power during the days of Yeltsin. Under Putin, the pendulum has swung back toward exaggerating Russian power. Fifteen years ago, in his book Expert Political Judgment, the political scientist Philip Tetlock warned about the poor predictive ability of most political experts. The discipline’s short-term predictive abilities are lackluster. Worse, the public tends to pay attention to the out-of-the-box prediction that proves correct. The problem is that these kinds of predictions also tend to be wrong more frequently. Tetlock later wrote that these conditions would create a ripe environment for charlatans: “The demand for accurate predictions is insatiable. Reliable suppliers are few and far between. And this gap between demand and supply creates opportunities for unscrupulous suppliers to fill the void by gulling desperate customers into thinking they are getting something no one else knows how to provide.” It would be easy to infer from this that the foreign-policy community has produced nothing but 50 years of bad ideas. Indeed, this is what younger generations tend to think. A recent Rand Corp. report concluded, “A generation of Americans have come of age in an era in which foreign policy setbacks have been more frequent than advances.” Anyone as old as Foreign Policy has some memory of successful foreign policies: containment, the peaceful end of the Cold War, the cessation of ethnic cleansing in the Balkans, beneficial trade agreements, and the expansion of U.S.-created international institutions to the rest of the world. Any American who came of age after the 9/11 terrorist attacks would be hard-pressed to identify similarly successful policies in this century. Any autopsy of this shift is likely to arrive at the same explanation for the cause. Because the U.S. diplomat George F. Kennan’s strategy of containment is now viewed as a smashing foreign-policy success, successive generations of foreign-policy analysts have tried to devise a similar “big idea” in grand strategy that would prove to be just as valuable. The world is a more complex place than it was during the 1950s, however, making it next to impossible for a single grand strategy to suffice. None of the post-Cold War grand strategies, from George W. Bush’s neoconservative democracy-promotion-by-force to Donald Trump’s America First, has served the United States well. This does not mean, however, that there haven’t been any good ideas in foreign policy. A more fine-grained analysis reveals the success of small-bore initiatives. The most significant foreign-policy accomplishment of the post-Cold War era was arguably the Nunn-Lugar program. This program helped ensure the security of the Soviet Union’s nuclear arsenal after the collapse in 1991. Over the next two decades, the program succeeded in preventing both nuclear material and nuclear scientists from furthering proliferation across the globe. Unsurprisingly, as one historian noted, “this success did not get major publicity at the time, and remains largely unknown today outside the expert communities in both countries.” The Barack Obama-era Nuclear Safety Summits might be viewed through a similar lens. Another tangible success has been the President’s Emergency Plan for AIDS Relief (PEPFAR), created by the Bush administration in 2003. It was announced at a time when the HIV epidemic was lowering life spans in sub-Saharan Africa. According to the program’s website, the U.S. government has since invested some $85 billion in the global HIV/AIDS response, saving more than 18 million lives. This is a rare case of the United States doing well by doing good. Global surveys of public attitudes toward the United States since PEPFAR was launched consistently show that recipient countries display more positive attitudes toward America. As infectious disease prevention moves to the top of the global policy queue, the United States should learn from PEPFAR’s success. A final example is the 2014 bilateral climate deal between the United States and China. This might seem like an odd inclusion, since it was soon supplanted by the 2015 Paris climate change accords, which the Trump administration abandoned. But the earlier bilateral deal played a crucial role in paving the way for a more wide-ranging agreement. By getting Beijing to formally pledge to reduce greenhouse gas emissions, the 2014 deal reversed China’s long-standing position that, as a developing country, it should not bear any responsibility to reduce climate change. Once China shifted its approach, it became far easier to cajole developing countries into an international agreement. The takeaway from all this is clear: To stand out, future foreign-policy observers

### Debris

#### Their Scoles evidence is literally in the context of NASA mining in space, make them read lines from the evidence that assumes otherwise, saying “no it’s not” is not an answer when we read a re-highlighting (blue)

1AC Scoles 15 [Freelance science writer, and a contributing writer at WIRED Science, with articles in places like Popular Science, the New York Times, Scientific American, Vice, Outside, and others.], 5-27-2015, "Dust from asteroid mining spells danger for satellites," New Scientist, <https://www.newscientist.com/article/mg22630235-100-dust-from-asteroid-mining-spells-danger-for-satellites/> DD AG

IF THE gold mine is too far from home, why not move it nearby? It sounds like a fantasy, but would-be miners are already dreaming up ways to drag resource-rich space rocks closer to home. Trouble is, that could threaten the web of satellites around Earth.

Asteroids are not only stepping stones for cosmic colonisation, but may contain metals like gold, platinum, iron and titanium, plus life-sustaining hydrogen and oxygen, and rocket-fuelling ammonia. Space age forty-niners can either try to work an asteroid where it is, or tug it into a more convenient orbit.

NASA chose the second option for its Asteroid Redirect Mission, which aims to pluck a boulder from an asteroid’s surface and relocate it to a stable orbit around the moon. But an asteroid’s gravity is so weak that it’s not hard for surface particles to escape into space. Now a new model warns that debris shed by such transplanted rocks could intrude where many defence and communication satellites live – in geosynchronous orbit.

According to Casey Handmer of the California Institute of Technology in Pasadena and Javier Roa of the Technical University of Madrid in Spain, 5 per cent of the escaped debris will end up in regions traversed by satellites. Over 10 years, it would cross geosynchronous orbit 63 times on average. A satellite in the wrong spot at the wrong time will suffer a damaging high-speed collision with that dust.

The study also looks at the “catastrophic disruption” of an asteroid 5 metres across or bigger. Its total break-up into a pile of rubble would increase the risk to satellites by more than 30 per cent (arxiv.org/abs/1505.03800).

That may not have immediate consequences. But as Earth orbits get more crowded with spent rocket stages and satellites, we will have to worry about cascades of collisions like the one depicted in the movie Gravity.

#### The inevitability of the Kessler syndrome reveals that this debate is only a question of whether we reinvest in the future that is already arriving or take the more radical bet on a new relation with technics.

**Reno 2018** (Joshua Ozias Reno, Associate Professor of Anthropology at Binghamton University. PhD from the University of Michigan, “Making Time with Amateur Astronomers and Orbital Space Debris: Attunement and the Matter of Temporality” in *Journal of Contemporary Archaeology* 5.1 (2018) 4–18)DR 19

For one thing, space debris is potentially dangerous to spacecraft. Space debris is partly assessed by treating returning spacecraft in a way they were never intended for: as a “hypervelocity impact capture medium”, as they are dented more by artificial objects than natural meteorites (Bernhard et al. 1997). The impetus for tracking and modeling space debris thus comes from the temporal possibilities they threaten. Alice Gorman (2015) describes space debris as an emergent assemblage that takes on new spatio-temporal properties, even when compared with other objects orbiting the Earth. This is most clearly represented in the idea of the Kessler Syndrome (Kessler and Cour-Palais 1978). This theory predicts a “cascade of random collisions that create so much debris the Earth is enveloped and cut off from space” (Gorman 2015, 42). This includes **a feedback process whereby objects continually collide and spread out**, **converting Earth orbits**, especially in LEO, **into** **a hazardous environment filled with tiny fragments**. Space debris would circle eternally overhead like a cloud of bullets awaiting a target, trapping us in fear on the surface. Gorman points out that it is unclear that such a dire situation has emerged or necessarily will. Whether it is likely to take hold or not, the Kessler Syndrome actually reflects anxiety about the unexpected and emergent spacetime of materials orbiting the Earth. The time they threaten is increasingly incorporated into fantasies of space travel. For example, this provided an element of horror in the recent and very successful science-fiction film Gravity (2013), where space debris was depicted as a monstrous threat – like a swarm of abiotic locusts – that cycled the Earth with an alien regularity: without warning they descend and annihilate spacecraft or slaughter hapless astronauts. It may be that these risks are being somewhat amplified by filmmakers and space agencies; yet, the threat of damage from orbital space debris is at least somewhat real. The ISS had to perform approximately eight evasive maneuvers during its first decade of operation in order to avoid collisions with debris. Calculations are normally performed at least three times a day to determine risks of collision over the subsequent 72 hours; if the chance of collision with a large enough object is determined to be greater than one in ten thousand, then maneuvers are planned and executed (see Johnson and Klinkrad 2009). Here is an account of a recent incident, written by representatives from the ESA and NASA assigned to space debris: The last collision avoidance maneuver by ISS occurred on 27 August 2008 when a fragment from the Kosmos 2421 spacecraft was projected to pose a collision risk of 1 in 72, i.e., 0.014 […]. This piece of debris was one of more than 500 cataloged debris released from Kosmos 2421 during three major fragmentation events from March to June 2008. At the time of these fragmentations, Kosmos 2421 was only about 60 km above the orbit of the ISS. As these debris decayed down through the ISS orbit, the number of potentially threatening conjunctions each month increased by a factor of three. (Johnson and Klinkrad 2009, 5) Occasionally, these objects also fall from the sky, as occurred in December of 2016 when a large object came seemingly out of nowhere and smashed a man’s van in Milwaukee, Wisconsin (Lemoine 2016). Wisconsin is also where a fragment of Sputnik 4 crashed down from the sky in 1962. The occasion is still celebrated in one town as “Sputnikfest”, including a pageant to determine the annual “Miss Space Debris” (David 2013). According to Dickens and Ormrod (2007, 153), space debris **is arguably even more meaningful as both** barrier **and bridge to desirable futures**. **These hoped-for futures involve**, for instance, further **exploration and exploitation beyond LEO** and **into the very valuable and legally contested domain of geostationary orbit**, **where satellites can more easily analyze** from and transmit data to the entire planet (Collis 2009). This also includes NewSpace initiatives that seek to extend capitalism and empire beyond the limits of the Earth, whether to mine asteroids or colonize Mars (Dickens and Ormrod 2007; Dickens 2009). **These initiatives** provide a clear motivation to clean up the polluted and risk-filled environment in the vicinity of Earth. From this admittedly interested perspective, the presence of space debris limits the utilization of LEO, MEO and GEO, **creating risks for** any state and/or capital investment. Insofar as space debris influences assessments concerning the utilization of outer space for various ends, it directly mediates the futures that space agencies and industries imagine **possible** and **desirable**.

#### Divorsky is in the context of every satellite getting destroyed at the same time which is not their impact – that means no internal link and you vote negative.

#### Debris:

#### 1] No Kessler

Drmola and Hubik 18 [Jakub Drmola, Division of Security and Strategic Studies, Department of Political Science at the Faculty of Social Sciences of Masaryk University. Tomas Hubik, Department of Theoretical Computer Science and Mathematical Logic, Faculty of Mathematics and Physics, Charles University. Kessler Syndrome: System Dynamics Model. Space Policy Volumes 44–45, August 2018, Pages 29-39. https://www.sciencedirect.com/science/article/pii/S0265964617300966?via%3Dihub]

The baseline scenario represents a continuation of the current trends, which are simply extended into the future. An average 1% growth rate of yearly launches of new satellites (starting at 89) is assumed, together with constant success rate in satellites’ ability to actively avoid collisions with debris and other satellites, constant lifetime, and failure rate. This basic model lacks any sudden events or major policy changes that would markedly influence the debris propagation. However, it serves both as a foundation for all the following scenarios and as a basis of comparison to see what the impact would be. Given high uncertainty regarding future state of the satellite industry (how many satellites will be launched per year, of what type and size, etc.), we elected to limit our simulations to 50 years. The model can certainly continue beyond this point, but the associated unknowns make the simulations progressively less useful. Running this model for its full 50 years (2016–2066) yields the expected result of perpetually growing amount of debris in the LEO. One can observe nearly 2-fold increase in the large debris (over 10 cm) and 3-fold increase in small debris (less than 1 cm) quantities (Fig. 5). The oscillations visible in the graph are caused by the aforementioned solar cycles which influence the rate of reentry for all simulated populations except the still active (i.e. powered) satellites. Also please note that throughout the article, the graphs use quite different scales for debris populations because of the considerable variations between scenarios. Using any single scale for all graphs would render some of them unintelligible. We can see that this increase in numbers still does not result in realization of the Kessler syndrome as most of the satellites being launched remain intact for their full expected service life. However, it comes with a considerable increase in risk to satellites, which is manifested by their higher yearly losses, making satellites operations riskier and more expensive for governments and private companies alike. This increased amount of debris in LEO combined with the larger number of active satellites makes it approximately twice as likely that an active satellite will suffer a disabling hit or a total disintegration during its lifetime. It should be noted that this risk might possibly be offset by future improvements in satellite reliability, debris tracking, and navigation [17].

#### No Escalation over Satellites:

#### 1] Planning Priorities

Bowen 18 Bleddyn Bowen 2-20-2018 “The Art of Space Deterrence” <https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/> (Lecturer in International Relations at the University of Leicester)//Elmer

Space is often an afterthought or a miscellaneous ancillary in the grand strategic views of top-level decision-makers. A president may not care that one satellite may be lost or go dark; it may cause panic and Twitter-based hysteria for the space community, of course. But the terrestrial context and consequences, as well as the political stakes and symbolism of any exchange of hostilities in space matters more. The political and media dimension can magnify or minimise the perceived consequences of losing specific satellites out of all proportion to their actual strategic effect.

#### 2] Military Precedent

Zarybnisky 18, Eric J. Celestial Deterrence: Deterring Aggression in the Global Commons of Space. Naval War College Newport United States, 2018. (Senior Materiel Leader at United States Air Force)//Elmer

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

#### 3] Collision risk is very small

Fange 17 Daniel Von Fange 17, Web Application Engineer, Founder and Owner of LeanCoder, Full Stack, Polyglot Web Developer, “Kessler Syndrome is Over Hyped”, 5/21/2017, http://braino.org/essays/kessler\_syndrome\_is\_over\_hyped/

The orbital area around earth can be broken down into four regions. Low LEO - Up to about 400km. Things that orbit here burn up in the earth’s atmosphere quickly - between a few months to two years. The space station operates at the high end of this range. It loses about a kilometer of altitude a month and if not pushed higher every few months, would soon burn up. For all practical purposes, Low LEO doesn’t matter for Kessler Syndrome. If Low LEO was ever full of space junk, we’d just wait a year and a half, and the problem would be over. High LEO - 400km to 2000km. This where most heavy satellites and most space junk orbits. The air is thin enough here that satellites only go down slowly, and they have a much farther distance to fall. It can take 50 years for stuff here to get down. This is where Kessler Syndrome could be an issue. Mid Orbit - GPS satellites and other navigation satellites travel here in lonely, long lives. The volume of space is so huge, and the number of satellites so few, that we don’t need to worry about Kessler here. GEO - If you put a satellite far enough out from earth, the speed that the satellite travels around the earth will match the speed of the surface of the earth rotating under it. From the ground, the satellite will appear to hang motionless. Usually the geostationary orbit is used by big weather satellites and big TV broadcasting satellites. (This apparent motionlessness is why satellite TV dishes can be mounted pointing in a fixed direction. You can find approximate south just by looking around at the dishes in your northern hemisphere neighborhood.) For Kessler purposes, GEO orbit is roughly a ring 384,400 km around. However, all the satellites here are moving the same direction at the same speed - debris doesn’t get free velocity from the speed of the satellites. Also, it’s quite expensive to get a satellite here, and so there aren’t many, only about one satellite per 1000km of the ring. Kessler is not a problem here. How bad could Kessler Syndrome in High LEO be? Let’s imagine a worst case scenario. An evil alien intelligence chops up everything in High LEO, turning it into 1cm cubes of death orbiting at 1000km, spread as evenly across the surface of this sphere as orbital mechanics would allow. Is humanity cut off from space? I’m guessing the world has launched about 10,000 tons of satellites total. For guessing purposes, I’ll assume 2,500 tons of satellites and junk currently in High LEO. If satellites are made of aluminum, with a density of 2.70 g/cm3, then that’s 839,985,870 1cm cubes. A sphere for an orbit of 1,000km has a surface area of 682,752,000 square KM. So there would be one cube of junk per .81 square KM. If a rocket traveled through that, its odds of hitting that cube are tiny - less than 1 in 10,000.

### Framing