# 1NC

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#### CP Text: The Global government of Wakanda ought be the forefront of decision-making regarding space policy and establish an application system for property rights on celestial bodies. Reject all applications and revoke all properties that remove asteroids from their natural orbit.

#### The CP solves their offense – a] advantage 1 – eliminates ambiguity over property rights regime AND vibranium solves resource wars b] advantage 2 - their ev.

AC Drmola and Mareš 15 - Jakub Drmola is a PhD student and Miroslav Mareš professor, at the Divison of Security and Strategic Studies, Masaryk University, Czech Republic, "Revisiting the deflection dilemma", *Astronomy & Geophysics*, Volume 56, Issue 5, October 2015, Pages 5.15–5.18, <https://academic.oup.com/astrogeo/article/56/5/5.15/235650>

There are two basic ways to go about moving the resources contained within a given asteroid to the Earth. They can be extracted from the asteroid during its natural orbit and then transported to the Earth, or the entire asteroid might be moved closer to a more convenient location before starting mining. Thus repositioned, it might even be used as a shielded habitat, once hollowed out (Ostro 1999). There are different speculative costs and benefits associated with either option, which would vary with the size, orbit and composition of the asteroid. But, crucially, the second option would entail putting asteroids into orbit around the Earth, the Moon or possibly at one of the Earth’s Lagrangian points. Indeed, NASA has already planned a mission to capture a small asteroid and place it in a high cislunar orbit, where it would serve as a destination for future manned missions and experiments.

#### Theorization of Wakanda as a global government is a shift in power relations that centers wakandan based politics in opposition to the aff’s existing political definitions of power

Williams 18 (Jennifer – Assistant Professor of AFAM @ Loyola Marymount University, “Wakanda Shakes the World,” *Foreign Policy*)

It’s been six weeks since the “Wakanda speech,” and the world is still reeling. The announcement by King T’Challa at the United Nations General Assembly that the Kingdom of Wakanda is not a developing nation of textiles, farms, and shepherds — estimated in the 2016 CIA World Factbook to have a GDP per person of approximately $760 — but a technological superpower has left global leaders and analysts stunned. The term “uber-developed” nation has been coined to describe the country’s widespread use of advanced magnetic levitation trains, flying vehicles, opaque holograms, and spinal cord-healing beads. “Welcome to the Future,” an introductory film produced by Wakanda’s newly founded Ministry of Foreign Affairs, is now the most watched video ever on YouTube. T’Challa himself provides a voice-over describing the country’s semi-mythical history, tracing back to the impact of a vibranium meteorite, and the subsequent foundation of the country by five tribes, giving it the name “Wakanda” — “The Family.” As a camera swoops over brush, the trees themselves seem to glitch, and a futuristic skyline resembling a mixture of New York, Timbuktu, and Cairo appears. The video goes on to detail Wakanda’s claimed hyper-achievements: nanotechnology that allows for replicable organs, an average lifespan in the 100s, and a quality of life for the ordinary citizen that surpasses that enjoyed by the top 1 percent in the United States. If Wakanda’s technology was limited to medicine, global anxiety might be less acute. But Wakanda’s stocks of vibranium, the supermaterial previously used in the construction of “weapons of cosmic destruction,” is arousing particular worry. General Okoye of the River Tribe, taking to the podium after T’Challa’s speech, made the Wakadan position clear. “We will not provide weapons, but instead we will offer our human resources to mediate conflicts. We will only offer vibranium-based technologies to those in need.” Questions were immediately raised about the general’s own famous appearance surfing on the roof of a car in South Korea in a red dress; she quickly replied “it was an impromptu example of the car’s safety features,” and relinquished the microphone. “They use this material casually,” commented U.S. Secretary of State Thaddeus Ross, “How can a tribal nation like this be trusted with such destructive potential?” While the United States reportedly has a back channel to the Wakandan leadership, Russia and China have already arranged high-level summits. Economists are perplexed as to how Wakanda’s shift from supposedly one of the poorest nations in the world to the richest will affect the global economy, especially given Wakanda’s own market-averse policies. In the United States, an emergent migration crisis has prompted a strong response from both Wakandan and U.S. officials. The newly expanded Wakandan Embassy has been besieged by prospective immigrants, the vast majority African-American, while tens of thousands more have written letters requesting asylum. Applicants argue that they are subject to continual persecution in the United States, that their lives are at risk from official violence, and that Wakanda owes a moral duty to provide asylum after its centuries of willfully ignoring atrocities in Africa and among the diaspora. Many African Americans have taken to social media to express their newfound allegiance to Wakanda and adopted the cross-arm over chest salute to demonstrate their loyalty to the Wakandan crown. Fox News, meanwhile, has run 24-hour coverage of “The Wakandan Threat.” Newly appointed Ambassador Nakia of Wakanda’s River Tribe stressed that the country has not opened its borders to outside visitors but urged a visit to their outreach centers. “If you want to experience Wakanda first-hand, the Oakland, California, center will be complete by the end of this month; and we have four other centers that will be completed soon in Salvador, Brazil; Wollongong, Australia; and Al-Fashir, Sudan. “These centers will be hubs of creativity and innovation. Wakandan scientists and scholars will work with the local populations to assist with meeting the needs of the people of those regions,” Nakia said. “Our pioneering nutritional program in Oakland has already achieved startling results. We expect to expand our outreach centers to 20 more cities in the coming years.” In Europe, the revelations about Wakanda have been met with disbelief. German Minister of Economics and Energy Erik Lehnsherr stated that during a trip to assess climate change impact in the continent, he was escorted by the “Border Tribe” members in their purple robes to various small villages and marketplaces. “They were mostly herders, and their way of life seemed simple. Where is this great city of Birnin Zana, the Golden City, of which they speak? Behind a rhino?” he quipped. On returning from an initial visit to Wakanda organized by T’Challa — beginning with a 20-minute trip from Vienna to the African capital, of which T’Challa noted, “We took the scenic route” — Jamaican Observer reporter Joseph Clifton spoke of the country’s technology as “beyond science fiction.” “They let us use these beaded bracelets to communicate with our family. They can interact with any surface — including clothing, food, and plants. Everything. The Kimoyo bead even detected that my white blood cells were effectively killing a virus and asked if I wanted nanobots to assist.” Kamala Khan, an Urdu translator attached to the U.N., was particularly impressed with Wakandan diversity and linguistic flexibility “Many of them already speak at least six languages. Also, the Wakandan people are very concerned about the state of the world — and, while they have immense resources in Wakanda, they remain wary of how private interests could use vibranium technology to further their agendas over the public good.” T’Challa’s follow-up speeches at the U.N. have spurred African leaders to hold an emergency African Union meeting on the role the new Wakanda would assume in relation to its neighbors, and the rest of the continent. Some African leaders have expressed anger over the era of Wakandan secrecy, claiming the country turned its back on the plight of its neighbors. Others are applauding its isolationist policies. South African President Cyril Ramaphosa was among the most outspoken African leaders, noting, “The shift of power relations will center on Africa instead of Western powers.” There have been rumors that African nations will break ties with former colonial powers and turn to Wakanda for aid instead, while the history of covert Wakandan assistance to South Africa’s ANC during the apartheid era has already aroused controversy. Ultimately, the world is asking what the implications of this development are for the global future. What does it mean when an African nation sets the political and technological agenda for the world?

#### Wakanda SOLVES every x-risk through vibranium including warming

**Brady 16** (Matt writes for “the science of “ a stem education supporter [“Black Panthers Favorite Metal – Vibranium!” <https://thescienceof.org/vibranium-science/>]//Mberhe

If you live in the Marvel Universe, vibranium makes the world go ‘round. Okay – not literally, but it’s a major player in the Marvel Universe, both comics and cinematic. Thanks to most vibranium in either Marvel Universe being found in the Black Panther’s home nation of Wakanda, the fictional metal has gotten some new attention lately, thanks to Captain America: Civil War and the new Black Panther comic series by Ta-Nehisi Coates and Brian Stelfreeze (available at your local comic shop or digitally at Comixology). Before we dig into some real science about vibranium, a little history: Despite it being known as part of the Black Panther’s larger mythology, vibranium first appeared in Daredevil #13 in early 1966. That version – or isotope – of vibranium was later clarified to be native to Antarctica and was named Anti-Metal, due to its ability to dissolve metal. Wakandan vibranium was revealed as a distinctly different type of metal later in Fantastic Four #53, later in 1966, just after the Black Panther’s introduction in FF #52. Wakandan vibranium is the most common variety, and is referred to as “vibranium” in the Marvel Universe. The cinematic version of the Black Panther - vibranium weave with accents The cinematic version of the Black Panther – vibranium weave with accents Physical property-wise, vibranium absorbs sound and kinetic energy. According to the science of the Marvel Universe, the more energy it absorbs, the stronger its intermolecular bonds get, so therefore the tougher it gets. The energy stored in vibranium can be tapped into by Wakandan technology (and thus it supplies most of the energy needs of the nation), although the upper limit of vibranium’s energy storage is unknown. Yeah – there’s some major hand-waving with the science and the laws of physics there, but we’ll go with it. Most famously, Captain America’s shield is made out of vibranium…okay, technically – the cinematic shield is 100% vibranium, while the comics shield has a long history of being alloyed with adamantium and other metals after replacements are made. Cap’s shield has demonstrated the properties of vibranium by taking a direct hit from Thor’s hammer in The Avengers and cushioning his fall in The Winter Soldier; while Black Panther showed off how vibranium could be woven into the cloth of his costume, as well as forged into retractable claws in Captain America: Civil War. But that’s vibranium in the Marvel Universe. It’s not a real metal in our universe (\*). But is there anything like it? Is there any metal, or combination of metals that exhibits the same properties of vibranium? That’s a little out of our wheelhouse – for that kind of stuff, we’d need something like an Assistant Professor in Mechanical Engineering/Materials Science and Engineering. Lucky for us, we found one that was up for talking to us. Mathaudhu\_shieldSuveen Mathaaudhu is what the title says up there at the Bourns College of Engineering at the University of California Riverside and has a keen interest in the intersection of pop culture and science. He’s won award for engineering communication and talks, writes and designs exhibits about superhero science in comics, television and movies. And vibranium is his favorite metal – so much so that working with a team at North Carolina State University, he developed the highest strength in a magnesium alloy. Basically something in our world that mimics some of vibranium’s properties. The Science Of: Dr. Mathaaudhu, let’s just start off with your thoughts about vibranium and its history through your eyes… Suveen Mathaaudhu: Vibranium! The much misunderstood and mysterious element from the Marvel Universe, and my favorite metal. Here’s some thoughts… The key feature of vibranium is its ability to absorb energy. But as you know, energy cannot be created or destroyed, it has to turn into… something (light, sound, thermal…) at some point. So in reality, it’s ability lies in both the capability to absorb energy, but to release energy in a controlled way. In the Marvel comic universe, it is said that vibranium can store the energy in its bonds and release it as needed. This makes it a near perfect material for many applications. The two applications most people know about would be, of course, Cap’s shield and all the cool stuff it does; the movie states that it is 1/3 the weight of steel (they mean density), and super strong. But less well known is that the element that Tony Stark “discovered” in Iron Man 2 is actually vibranium isotope as well (this was written in the novelization, but not the movie), and thus can supply a tremendous amount of energy to his suit and weapons via releasing of stored energy. This makes sense given that Howard Stark used the vibranium to make Cap’s shield and then was able to map its atomic structure to the map of Stark Park. So, if vibranium really existed, it could be used as both a lightweight structural material – think how light we could make our planes, trains, automobiles, and thus lessen the usage of fuels…and a perfect battery material for powering the world around us. This idea is strongly emphasized in the new Black Panther comic where Black Panther and the people of Wakanda are able to utilize the energy from their underground supply of vibranium, which gets it’s energy from things like earthquakes.

#### Debate’s a storytelling arena they’ve participated in imagination, which is best done through demanding the impossible don’t stick with the possible or probable.

**Anderson 16** Dr. Reynaldo Anderson currently serves as an Associate Professor of Communication and Chair of the Humanities department at Harris-Stowe State University in Saint Louis Missouri. Reynaldo has earned several awards for leadership and teaching excellence and he is currently the Past Chair of the Black Caucus of the National Communication Association (NCA). Reynaldo has not only served as an executive board member of the Missouri Arts Council, he has previously served at an international level working for prison reform with C.U.R.E. International in Douala Cameroon, and as a development ambassador recently assisting in the completion of a library project for the Sekyere Afram Plains district in the country of Ghana. Reynaldo publishes extensively in the area of Afrofuturism, communication studies, and the African diaspora experience. Reynaldo is currently the executive director and co-founder of the Black Speculative Arts Movement (BSAM) a network of artists, curators, intellectuals and activists. Finally, he is the co-editor of the book Afrofuturism 2.0: The Rise of Astro-Blackness published by Lexington books, co-editor of Cosmic Underground: A Grimoire of Black Speculative Discontent published by Cedar Grove Publishing, the forthcoming volume The Black Speculative Art Movement: Black Futurity, Art+Design to be released by Lexington press in 2018, and the co-editor of Black Lives, Black Politics, Black Futures, a forthcoming special issue of TOPIA: Canadian Journal of Cultural Studies. [“AFROFUTURISM 2.0 & THE BLACK SPECULATIVE ART MOVEMENT”]//Mberhe

Over the last decade, an embryonic movement examining the overlap between race, art, science and design has been stirring and growing beneath the surface. Afrofuturism is the current name for a body of systematic Black speculative thought originating in the 1990s as a response to postmodernity that has blossomed into a global movement the last five years. Although contemporary Black speculative thought has roots at the nexus of 19th century scientific racism, technology, and the struggle for African self-determination and creative expression, it has now matured into an emerging global phenomenon. Afrofuturism 2.0 is the beginning of both a move away and an answer to the Eurocentric perspective of the 20th century’s early formulation of Afrofuturism that wondered if the history of African peoples, especially in North America, had been deliberately erased. Or to put it more plainly, future-looking Black scholars, artists, and activists are not only reclaiming their right to tell their own stories, but also to critique the European/ American digerati class of their narratives about cultural others, past, present and future and, challenging their presumed authsority to be the sole interpreters of Black lives and Black futures. Kodwo Eshun asserts: “Afrofuturism may be characterized as a program for recovering the histories of counter-futures created in a century hostile to Afrodiasporic projection and as a space within which the critical work of manufacturing tools capable of intervention within the current political dispensation may be undertaken” (288). One example of several approaches within this current wave of Afrofuturism is the strategic formulation reflecting Afrofuturism is a critical project with the mission of laying 230 • Reynaldo Anderson OBSIDIAN • 231 the groundwork for a humanity that is not bound up with the ideals of white Enlightenment universalism, critical theory, science or technology (Jones, 2015, Rabaka, 2010, Rollefson, 2008, p. 91). More recently, according to Anderson and Jones: [C]ontemporary expressions of Afrofuturism emerging in the areas of metaphysics, speculative philosophy, religion, visual studies, performance, art and philosophy of science or technology that are described as “2.0,” in response to the emergence of social media and other technological advances since the middle of the last decade. (ix) Additionally, the authors define Afrofuturism 2.0 as: [T]he early twenty-first century technogenesis of Black identity reflecting counter histories, hacking and or appropriating the influence of network software, database logic, cultural analytics, deep remixability, neurosciences, enhancement and augmentation, gender fluidity, posthuman possibility, the speculative sphere, with transdisciplinary applications and has grown into an important Diasporic techno-cultural Pan African movement. (x) Therefore, propelled by new thoughts and creative energy, members of this Black speculative movement have been in creative dialogue with the boundary of space-time, the exterior of the macro-cosmos and the interior of the micro-cosmos. Yet, there is historical precedent for this movement around the concepts of the color line, the color curtain, and the digital divide. In 1903, W. E. B. Du Bois published his great work, The Souls of Black Folk, drawing on the disciplines of sociology, anthropology, autobiography, and history, and made his argument in the era of Jim Crow and imperialism noting: “The problem of the twentieth century is the problem of the color-line, the relation of the darker races of men in Asia and Africa, in America and the islands of the sea” (18). Furthermore, Du Bois suggested, due to their unique experience, African Americans had developed a metaphysical perspective or “Veil” that bestowed a certain insight upon them on life in the West. The Veil was a literary and philosophical translation of the inner life of people of African descent in the Americas (Du Bois, Souls of Black Folk). Two years later, in 1905, Albert Einstein proposed his Special Theory of Relativity that confirmed the relationship between space and time, postulating 232 • Reynaldo Anderson that the laws of physics are invariant in all inertial systems and the speed of light in a vacuum is the same for all observers. Between 1908 and 1910, Du Bois drew upon ideas from natural science, humanities and social science to write a speculative short fiction story, “The Princess Steel.” Du Bois developed this story with a character that invented a Mega-scope that could see across space and time that would amplify his ideas to study the boundary of space-time creatively, “into a means for perceiving material history” (Du Bois, Brown & Rusert 820). The creative ideas of Du Bois and others during this period would be decisive in aesthetic and socio-political formulations of the non-white world of the twentieth century. Later in the twentieth century, Indonesian president Achmed Sukarno and other leaders organized the Bandung conference, a meeting for the Dark World that called for the de-occidentalization of the earth. Kwame Nkrumah, the foremost African leader to promote Pan-Africanism in the post-World War II era was an ardent supporter of this 1955 conference. Author Richard Wright, a conference attendee, reported on the ideas promoted, and discussed them at length in his work The Color Curtain (1956). This event would influence the imagination of activists like Claudia Jones, Malcolm X, Steve Biko, Thomas Sankara, and others, in pursuit of the liberation of the Dark World. Over the course of a generation, many of these radical initiatives would be repressed or betrayed. However, the seeds for a Black speculative movement challenging white racist normativity and Black parochialism, would be sown by creative intellectuals, mystics, and artists like Sun Ra, Fela Kuti, George Clinton, Max Beauvoir, Octavia E. Butler, John Coltrane, Alice Coltrane, Samuel R. Delany, Jimi Hendrix, Jean Michel Basquiat, and many others. At the end of the twentieth century, scholars such as Molefi Kete Asante, Audre Lorde, Chinua Achebe, Ngugiwa Thiong’o, Greg Tate, bell hooks, and Cornel West catalogued the increasing deterioration and anomie of Black cultural production and dislocation in relation to the transition to a neoliberal, multi-national, political-economic matrix. Furthermore, Anna Everett, Alondra Nelson, Paul D. Miller, Alex Weheliye, Kali Tal, and others, via an online forum during the early conceptual development of Afrofuturism, analyzed an emerging global digital divide that reflected technical, economic, and social inequality. This phenomenon was primarily OBSIDIAN • 233 responsible for the interruption of Africa, its Diaspora, and other countries of the global south in attaining optimal growth or enhancement in political, economic, social, or cultural capital. On the other side of the Atlantic, work by Kodwo Eshun as a member the Cybernetic Culture Research Unit (CCRU), and John Akomfrah, co-founder of the Black Audio Film collective, were crucial to the global theoretical genesis of Black cyber-culture. However, during this time and into the early 21st century, several disparate strands of a new creative Africanist matrix emerged, influenced by speculative design and world building, as well as a renewed radicalized socio-political stance, and the social physics of Blackness (the interface of African peoples, myth-forms, technology, behavioral science, ethics, and social world). Indispensable to this manifesto is the groundbreaking work done on the Black speculative phenomenon by Sheree Renée Thomas. In the late 90s, in a hostile environment toward Black speculative work, Thomas gathered obscure documents with the support of interviews from Octavia Butler, Amiri Baraka, Charles Saunders, Samuel R. Delany, and Delany’s then-wife Marilyn Hacker (Thomas). Furthermore, these interviews and information gave Thomas the insight to revisit the term “speculative fiction” and create a project that led to the genesis of her anthology Dark Matter: A Century of Speculative Fiction from the African Diaspora in 2000 and Dark Matter: Reading the Bones in 2004 (Thomas). This manifesto assembles and recognizes the ideas developed between 2005 and 2015 as the inspiration for the Black Speculative Art Movement (BSAM) and the event Unveiling Visions: The Alchemy of The Black Imagination that established its existence. Black speculative art is a creative, aesthetic practice that integrates African diasporic or African metaphysics with science or technology and seeks to interpret, engage, design, or alter reality for the re-imagination of the past, the contested present, and as a catalyst for the future. Moreover, this manifesto explores the question, “What is the responsibility of the Black artist in the 21st century?” Within the Afrofuturist 2.0 frame of inquiry, Tiffany Barber asserts: What is compelling about Afrofuturism is that it is historical in its gesture back to previous debates about social responsibility, radical politics, and black artistic production that surged during the 234 • Reynaldo Anderson Black Arts Movement or BAM of the 60s and 70s. But it rearticulates these debates and expands our understandings of blackness’s multi-dimensionality, the good and the bad, the respectable and the undesirable. Afrofuturism 2.0 and the Black Speculative Arts Movement are indebted to previous movements like BAM, Negritude, The Harlem Renaissance, and other continental and diasporic African speculative movements. Moreover, it is a continuation of the historical behavior within the Veil to engage the philosophies of thinkers such as Du Bois, Wright, Everett, and others in piercing the Color Line, the Color Curtain, and understanding the digital divide in the face of similarly relevant 21st-century challenges. For example, contemporary artists like Kapwani Kiwanga are revisiting the ideas of Kwame Nkrumah to envision an Afro-Galactic future. Moreover, the goals of the BSAM manifesto are structured as a pursuit or open-sourced path of inquiry to transform the anomie or collapse in ethics and dystopia in the Diaspora and African communities that were displaced by the collapse of space-time. Several events between 2005 and 2015 shaped the development of BSAM, including the explosion in social media platforms illustrated by Facebook, Youtube, and Twitter (Van Dijck, 2013), and three seminal publications: The Big Short (Lewis) documenting the global market collapse, Bill Bishop’s The Big Sort, detailing re-segregation of people; and Michelle Alexander’s The New Jim Crow. Tributary events were the election of the United States’ first African American president, Barack Obama, racist reactions and subsequent collapse of the liberal post-racial project, the increased use of crowdfunding and other new technologies to design creative projects, escalating environmental stress, and the New Scramble for Africa (Kimeyi & Zenia). Furthermore, the resurgence of Pan Africanism and outreach to the African Diaspora (now incorporated as the 6th zone) by the African Union; the appearance of state sanctioned deaths of Black people through police brutality, such as the Marikana massacre; and the current global Black social protest response to localized forms of injustice all intensified the current social context. BSAM is not a unified school of thought. BSAM is a loose umbrella term which represents different positions or basis of inquiry: Afrofuturism 2.0 (and its several Africanist manifestations, e.g. OBSIDIAN • 235 Black Quantum Futurism, African Futurism, Afrofuturismo, and Afrofuturista), Astro Blackness, Afro-Surrealism, Afro-Pessimism, Ethno Gothic, Black Digital Humanities, Black (Afro-future female or African centered) Science Fiction, The Black Fantastic, Magical Realism, and The Esoteric. Although these positions may be incompatible in some instances, they overlap around the term speculative and design, and interact around the nexus of technology and ethics. Individuals or organizations whose work represents pillars of BSAM would include and are not limited to: Martin Delany, Paschal B. Randolph, Toni Morrison, Sun Ra, Amiri Baraka,Tananarive Due, Ben Okri, Nnedi Okorafor, W. E. B. Du Bois, The Afrofuturist Affair, Samuel R. Delany, Minister Faust, Jean-Pierre Bekolo, Jarita Holbrook, Milton Davis, Ishmael Reed, Wanuri Kahiu, Sheree Renée Thomas, Andrea Hairston, Janelle Monae, Sanford Biggers, John Jennings, Octavia E. Butler, Octavia’s Brood, Nalo Hopkinson, Cyrus Kabiru, D. Scott Miller, Pamela Phatsimo Sunstrum, Steven Barnes, N.K. Jemison, D. Denenge Akpem, Ytasha Womack, Kapwani Kiwanga, John Akomfrah, and Kodwo Eshun. In the occidental realm, the epistemic boundaries of speculative design is limited largely to objects, how they mediate the human experience and are primarily interpreted through ideas originating with the Frankfurt school of critical theory (a body of thought usually dismissive, in the case of Theodor Adorno, silent or Eurocentric in regards to Black cultural knowledge production and performance). Furthermore, this occidental approach limits the framework of the speculative to Western philosophy and science. For example, Anthony Dunne and Fiona Raby argue that, in relation to speculative design, only the present, probable, preferable, plausible, and possible should be zones of concern, noting: Beyond this lies the zone of fantasy, an area we have little interest in. Fantasy exists in its own world, with few if any links to the world we live in…This is the world of fairy tales, goblins, superheroes, and space opera. (4) However, this approach eschews or avoids alternative speculative cultural worldviews and attempts to establish a system where Europe assumes the teacher position with all others as the recipients and consequently users of this limited perspective. For example, there is historical evidence that demonstrates, via the route of alchemy, that magic is a 236 • Reynaldo Anderson gateway into the study of science. In contrast to Dunn and Raby, Lewis Mumford (Technics and Civilization) previously noted: Between fantasy and exact knowledge, between drama and technology, there is an intermediate station: that of magic. It was in magic that the general conquest of the external environment was decisively instituted. For the magicians not only believed in marvels but audaciously sought to work them: by their straining after the exceptional, the natural philosophers who followed them were first given a clue to the regular. (36–37) An Africanist example of this phenomenon is the work of Max Beauvoir, a trained biochemist and Voudou priest who synthesized these approaches in medical treatments, as a healer and activist. Digital scientist Nettrice Gaskins, building on and moving beyond previous work done by Ron Eglash with African fractals, along with other contemporary scholars, demonstrates the possibilities of re-conceptualizing African Cosmograms as cultural tools to interact with digital technology, augmented space and augmented reality. Moreover, there are implications for culturally situated learning, STEAM, and holistic health. Nnedi Okorafor’s novel Akata Witch reveals the overlap or merger between magic and technology as a case for these implications. Therefore, in contrast to the occidental speculative design approach, BSAM freely embraces the Africanist approach to speculative design and incorporates earthly and unearthly intuitive aspects of Esoterica, Animism, and Magical Realism. This integration generates overlapping zones with other knowledge formations when formulating or conceptualizing theory and practice in relation to material reality.

### 2

#### CCP legitimacy high now.

Yvonne Murray 22 (“2021 saw China's Xi Jinping tighten grip on power,” 1/4/22, RTE (Ireland's National Public Service Media), https://www.rte.ie/news/2021/1231/1269202-china-year-in-review/)

In 2021, while most of the world struggled to contain the virus, China kept its borders sealed, stamped out outbreaks with ruthless efficiency and in its zero-Covid bubble, set about turbo charging internal reforms.

It was the year, the Chinese leader, Xi Jinping, declared "the east is rising and the west is in decline". But his confidence was cautious, warning officials not to write off their main rival, the United States.

And as this superpower rivalry deepened, taking on what other countries feared was a distinctly Cold War hue, Taiwan took centre stage. The US President Joe Biden appeared to break with Washington's long-held policy of "strategic ambiguity" (which is meant to keep everyone in the dark as to whether the US would defend Taiwan) by stating the US would indeed come to the island’s defence. His aides later back-pedalled on his comments. When an unprecedented number of Chinese warplanes flew past Taiwan amid Beijing’s threats to take the island, many speculated the invasion was nigh.

And while China continued to look for parity of esteem for its authoritarian form of governance, especially in international institutions built on democratic norms, Taiwan became the touchstone in a global clash of values.

Democracy versus authoritarianism

The clashes came thick and fast. In the Spring, politicians in Europe, ho had criticised human rights abuses in Xinjiang, were hit with sanctions by Beijing. The shelving of the China Investment Agreement as a result, was a clear sign that Sino-European relations had taken a nosedive. In the autumn, Beijing lost a good friend with the exit of Germany’s Chancellor, Angela Merkel.

Then the decision by an EU country, Lithuania, to allow Taiwan to open a representative office under its own name, drew fury from Beijing, culminating in the sudden flight of Lithuanian diplomats out of China. In another dramatic diplomatic incident, Huawei’s senior executive, Meng Wanzhou, reached a deal with US prosecutors in her extradition case, allowing her to return to China. Within hours, the two Canadian citizens, Michael Kovrig and Michael Spavor, detained on spying charges in China were suddenly released - Beijing appearing to make no secret of its hostage diplomacy. Irish businessman Richard O’Halloran, meanwhile, remained detained without charge in Shanghai.

At the same time, the number of foreign journalists inside China, dwindled further. Reporters who tried to hold the one-party state government to account on issues like the re-education camps in Xinjiang, the ongoing erosion of democracy in Hong Kong or the virus origins were frequently called "fake news" and "hostile foreign forces" by a regime now entirely intolerant of scrutiny.

When I fled Beijing with my family in March after years of intimidation and harassment by the authorities, there were no Irish journalists, reporting for Irish outlets, left in China. In our Taipei exile, we joined a burgeoning number of China correspondents forced to cover the superpower from a distance.

In 2021, it seemed the chasm between China and much of the rest of the world - or to use Chairman Xi’s framing "east and west" - yawned wider.

The home front

But despite the chilly geopolitical atmosphere, on home turf this year the leadership was in a celebratory mood. Pomp and pageantry marked 100 years of the Communist Party in July and the party leader, Xi Jinping, used the moment to deliver a colourful message to his own people and more pointedly to the outside world.

"We will never allow anyone to bully, oppress or subjugate China," he said, to whoops and cheers in Tiananmen Square.

"Anyone who dares try to do that will have their heads bashed bloody against the Great Wall of Steel forged by over 1.4 billion Chinese people," he said.

Domestically, there is no doubt that the pandemic delivered a massive boost for the leadership. The Chinese public, looking at the infection and death rates in advanced democracies, felt a sense of national pride that China had to a large extent remained Covid-free, and the downsides of the policies, such as impact on mental health, received little attention.

However, those Chinese people who tried to document the chaos of the early response to the virus were forgotten. One citizen journalist, Zhang Zhan, is now dying in prison for attempting to report the reality of the Wuhan lockdown, countering the official propaganda. Others simply disappeared.

The government continued to push their own narratives on the origins of the virus, suggesting, alternately, that it came in on frozen food imports from Europe or it was manufactured in a US laboratory - both widely accepted by Chinese citizens and promoted by officials on international social media platforms.

The WHO's heavily choreographed mission to Wuhan resulting in the verdict that a leak from a Wuhan lab was "extremely unlikely" was another victory for the Communist Party. (Although the WHO chief, Tedros Adhanom, swiftly put the lab leak theory back on the table as soon as the team left China.) Common prosperity But behind the outward confidence, China’s leaders spoke of major internal challenges: a demographic crisis, pressing energy and food security issues as well as an unsustainable wealth gap which makes China one of the most unequal societies in the world. They know that the Party’s social contract with its citizens (to stay out of politics while leaders deliver growth and jobs) could suffer in a slowing economy, damaging their legitimacy. 2021 was in many ways a dress rehearsal for 2022

And so, under the banner of "common prosperity," the government enacted a series of crackdowns on technology companies, brought wealthy entrepreneurs to heel, banned expensive online education platforms and reined in the overheated real estate sector.

The government also went after the online gaming industry, which state media labelled "spiritual opium," limiting playing time for teenagers and prompting the American makers of the game Fortnite to pull the plug on their China venture.

With all this set to continue, 2021 was in many ways a dress rehearsal for 2022 - the year in which Xi, often compared to Mao, is expected to enter an unprecedented third term as leader of an unapologetically authoritarian, deeply nationalistic and increasingly powerful regime.

#### China’s “space dream” is key to Xi credibility – plan is a flip flop that undermines legitimacy.

Economic Times 20 [(Economic Times, Indian daily newspaper, internally cites Dean Cheng, Senior Research Fellow at the Heritage Foundation and the Davis Institute for National Security and Foreign Policy, former analyst in the International Security and Space Program at the Office of Technology Assessment, BA in Politics from Princeton University) “China attempting to militarize space as it seeks to modernize its military power,” 8/31/2020] JL

The Jamestown Foundation, a US think-tank, hosted a webinar on August 19 entitled "China's Space Ambitions: Emerging Dimensions of Competition." One presenter, Dean Cheng, Senior Research Fellow at The Heritage Foundation, noted that Beijing's space programme is linked to China's central concept of comprehensive national power. "This is basically how the Chinese think about how they rack and stack, how they compare with other countries."

China recognises that military power is important, but it is not the only factor in being a great power. Cheng drew a parallel with the former USSR, where military power alone did not ensure survival of that communist state. Other comprehensive national power factors are political unity, economic power, diplomatic strength, science and technology, and even culture. "Space touches every one of these aspects in comprehensive national power, and that is a part of why Chinese see space as so important."

Indeed, a strong space industrial complex will generate benefits that ripple through the rest of China's economy. Furthermore, he said space achievements "promote pride within China, especially for the Chinese Communist Party (CCP) ... It's symbolic of how far China has come," he said, and "it gives the CCP legitimacy".

China is pushing into space services, including satellite launches, satellite applications and Earth observation/satellite imagery for others. Satellite customers include Belarus, Laos, Pakistan and Venezuela, for example, attracting hard currency and influence. Cheng said most underestimate the impact this has, as such countries grow almost totally dependent on Chinese equipment, assets and training over time. Incidentally, China could have manufactured back doors into these systems for foreigners to allow it access.

Mark Stokes, Executive Director at the US-based Project 2049 Institute think-tank, said in the same webinar that PLA requirements have always been fundamental to development of Chinese space capabilities. Potential PLA space missions in support of joint warfighting in a crisis include targeting (battlefield surveillance, electronic reconnaissance and ocean surveillance), communications, PNT services (obtaining target data, navigation information, navigation support and timing services), space jamming (encompassing space communications, radar, electro-optical and PNT) and space protection.

Stokes said the end of 2015 was "significant" for Chinese space efforts because consolidation of end-users under the PLA's Strategic Support Force (PLASSF) occurred, specifically within the Space Systems Department. In terms of developing and meeting requirements, the PLASSF is now "much more efficient," the American analyst posited.

Indeed, China created its space force in 2015, just a few months after Russia. After formally establishing its Space Force in December 2019, the US is still getting its equivalent off the ground. Cheng said both China and Russia have been pushing to militarise space, even though such a term is probably meaningless given that 95 per cent of space technology has dual applications for both military and civilian use. Certainly, outer space can no longer be viewed as a sanctuary.

Stokes said that "not much has changed really in terms of the space launch infrastructure and the launch, tracking and control of space ... but they are now integrated with end-users, and that is going to have an effect on making the whole system more efficient."

China has freedom of action in space, and the creation of the PLASSF and consolidation of space/counter-space research, development and acquisition, as well as training and operations, have benefitted from a single integrated command. The PLA's ability to interfere with American military operations in places like Taiwan will continue to grow yearly.

Cheng said, "The Chinese see future war as revolving around joint operations, which are not just land, air and sea forces." They also include the outer space and electronic warfare domains, which are necessary for information dominance." China, therefore, wishes to deny an adversary like the US the use of space, plus it needs to give the Chinese military every advantage.

China has therefore developed the ability to target hostile space-based assets (from the ground or space) and their all-important data-links. Indeed, jamming and electronic warfare complement anti-satellite weapons (which China has already tested), any of which can achieve effective mission kills against US and allied satellites. Stokes has not yet ascertained which agency is responsible for satellite kinetic kills, but it could well be the PLA Rocket Force, which is traditionally very tightly controlled by the Central Military Commission.

A detailed report entitled China's Space and Counter-space Capabilities and Activities, prepared for the US-China Economic and Security Review Commission, was published on March 30. Its authors, Mark Stokes, Gabriel Alvarado, Emily Weinstein and Ian Easton, summarised China's counter-space capabilities as follows.

"China has an operational counter-space capability that will evolve through 2020 and out to 2035. These capabilities include anti-satellite kinetic kill vehicles (KKV) and space electronic countermeasures ... On the non-kinetic side, the PLA has an operational ground-based satellite electronic countermeasures capability designed to disrupt adversary use of satellite communications, navigation, search and rescue, missile early warning and other satellites through use of jamming."

China obtained its first ground-based satellite jammers from Ukraine in the late 1990s, but it has developed its own solutions since then. "The PLA is capable of carrying out electronic countermeasures to disrupt, deny, deceive or degrade space services. Jamming prevents users from receiving intended signals and can be accomplished by attacking uplinks and downlinks.

The PLA and defence industry are developing and deploying jammers capable of targeting satellite communications over a large range of frequencies, including dedicated military communication bands. The PLASSF also has advanced cyber capabilities that could be applied in parallel with counter-space operations."

Nonetheless, the report asserted that the US still assumed a technological lead in space.

"China also is carrying out research, development and testing on potential space-based counter-space systems. The PLASSF and defense industry have carried out advanced satellite maneuvers and are likely testing orbital technologies that could be applied to counter-space operations." The PLASSF Network Systems Department probably oversees satellite jamming operations.

#### Nationalist officials spark intraparty conflict--Xi will launch diversionary war to domestic backlash – escalates in multiple hotspots

Norris 17, William J. Geostrategic Implications of China’s Twin Economic Challenges. CFR Discussion Paper, 2017. (Associate professor of Chinese foreign and security policy at Texas A&M University’s Bush School of Government and Public Service)//Elmer

Populist pressures might tempt the **party leadership** to encourage **diversionary nationalism**. The logic of this concern is straightforward: the Communist Party might seek to **distract a restless domestic population** with **adventurism abroad**.19 The **Xi** administration wants to **appear tough** in its **defense of foreign encroachments** against China’s interests. This need stems from a long-running narrative about how a weak Qing dynasty was unable to defend China in the face of European imperial expansion, epitomized by the Opium Wars and the subsequent treaties imposed on China in the nineteenth century. The party is **particularly sensitive** to **perceptions of weakness** because much of its **claim to legitimacy**—manifested in **Xi’s Chinese Dream** campaign today—stems from the party’s claims of leading the **restoration of Chinese greatness**. For example, the May Fourth Movement, a popular protest in 1919 that helped catalyze the CPC, called into question the legitimacy of the Republic of China government running the country at that time because the regime was seen as not having effectively defended China’s territorial and sovereignty interests at the Versailles Peace Conference. **Diversionary nationalist frictions** would likely occur if the Chinese leadership portrayed a foreign adversary as having made the first move, thus forcing Xi to stand up for China’s interests. An example is the 2012 attempt by the nationalist governor of Tokyo, Shintaro Ishihara, to buy the Senkaku/Diaoyu Islands from a private owner.20 Although the Japanese central government sought to avert a crisis by stepping in to purchase the islands—having them bought and administered by Ishihara’s Tokyo metropolitan government would have dragged Japan into a confrontation with China—China saw this move as part of a deliberate orchestration by Japan to nationalize the islands. Xi seemingly had no choice but to defend China’s claims against an attempt by Japan to consolidate its position on the dispute.21 This issue touched off a period of heated tensions between China and Japan, lasting more than two years.22 Such dynamics are not limited to Japan. Other possible areas of conflict include, but are not necessarily limited to, **Taiwan**, **India**, and the **South China Sea** (especially with the **Philippines** and **Vietnam**). The Chinese government will use such tactics if it believes that the costs are relatively low. Ideally, China would like to appear tough while avoiding material repercussions or a serious diplomatic breakdown. Standing up against foreign encroachment—without facing much blowback—could provide Xi’s administration with a tempting source of noneconomic legitimacy. However, over the next few years, Xi will probably not be actively looking to get embroiled abroad. Cushioning the fallout from slower growth while managing a structural economic transition will be difficult enough. Courting potential international crises that distract the central leadership would make this task even more daunting. Even if the top leadership did not wish to provoke conflict, a smaller budgetary allotment for security could cause **military interests** in China to **deliberately instigate trouble** to **justify** their **claims over increasingly scarce resources**. For example, an air force interested in ensuring its funding for a midair tanker program might find the existence of far-flung territorial disputes to be useful in making its case. Such a case would be made even stronger by a pattern of recent frictions that highlights the necessity of greater air power projection. Budgetary pressures may be partly behind a recent People’s Liberation Army reorganization and headcount reduction. A slowing economy might cause a further deceleration in China’s military spending, thus increasing such pressures as budgetary belts tighten. Challenges to Xi’s Leadership Xi Jinping’s efforts to address economic challenges could fail, unleashing consequences that extend well beyond China’s economic health. For example, an **economic collapse** could give rise to a Vladimir **Putin–like redemption figure** in China. Xi’s approach of centralizing authority over a diverse, complex, and massive social, political, and economic system is a **recipe for brittleness**. Rather than designing a resilient, decentralized governance structure that can gracefully cope with localized failures at particular nodes in a network, a highly centralized architecture **risks catastrophic**, **system-level failure**. Although centralized authority offers the tantalizing chimera of stronger control from the center, it also puts all the responsibility squarely on Xi’s shoulders. With China’s ascension to great power status, the consequences of internecine domestic political battles are increasingly playing out on the world stage. The international significance of China’s domestic politics is a new paradigm for the Chinese leadership, and one can expect an adjustment period during which the outcome of what had previously been relatively insulated domestic political frictions will likely generate **unintended international repercussions**. Such dynamics will influence Chinese foreign policy and security behavior. Domestic arguments over ideology, bureaucratic power struggles, and strategic direction could all have **ripple effects abroad**. Many of China’s party heavyweights still employ a narrow and exclusively domestic political calculus. Such behavior increases the possibility of international implications that are not fully anticipated, **raising the risks** of **strategic miscalculation** on the world stage. For example, the factional power struggles that animated the Cultural Revolution were largely driven by domestic concerns, yet manifested themselves in Chinese foreign policy for more than a decade. During this period, China was not the world’s second largest economy and, for much of this time, did not even have formal representation at the United Nations. If today’s globally interconnected China became engulfed in similar domestic chaos, the effects would be felt worldwide.23 Weakened Fetters of Economic Interdependence If China successfully transitioned away from its export-driven growth model toward a consumption-driven economic engine over the next four or five years, it could no longer feel as constrained by economic interdependence. To the extent that such constraints are loosened, the U.S.-China relationship will be more prone to conflict and friction.24 While China has never been the archetypal liberal economic power bent on benign integration with the global economy, its export-driven growth model produced a strong strategic preference for stability. Although past behavior is not necessarily indicative of future strategic calculus, China’s “economic circuit breaker” logic seems to have held its most aggressive nationalism below the threshold of war since 1979. A China that is both comparatively strong and less dependent on the global economy would be a novel development in modern geopolitics. As China changes the composition of its international economic linkages, global integration could place fewer constraints on it. Whereas China has been highly reliant on the import of raw materials and semifinished goods for reexport, a consumption-driven China could have a different international trade profile. China could still rely on imported goods, but their centrality to the country’s overall economic growth would be altered. Imports of luxury goods, consumer products, international brands, and services may not exert a significant constraining influence, since loss of access to such items may not be seen as strategically vital. If these flows were interrupted or jeopardized, the result would be more akin to an inconvenience than a strategic setback for China’s rise. That said, China is likely to continue to highly depend on imported oil even if the economic end to which that energy resource is directed shifts away from industrial and export production toward domestic consumption.

#### **US–China war goes nuclear – crisis mis-management ensures conventional escalation – extinction.**

Kulacki 20 [Dr. Gregory Kulacki focuses on cross-cultural communication between the United States and China on nuclear and space arms control and is the China Project Manager for the Global Security Program at the Union of Concerned Scientists, 2020. Would China Use Nuclear Weapons First In A War With The United States?, Thediplomat.com, https://thediplomat.com/2020/04/would-china-use-nuclear-weapons-first-in-a-war-with-the-united-states/] srey

Admiral Charles A. Richard, the head of the U.S. Strategic Command, recently told the Senate Armed Service Committee he “could drive a truck” through the holes in China’s no first use policy. But when Senator John Hawley (R-MO) asked him why he said that, Commander Richard backtracked, described China’s policy as “very opaque” and said his assessment was based on “very little” information. That’s surprising. **China** has been exceptionally **clear** **about** its **intentions** **on** the possible **first** **use** **of** **nuclear** **weapons**. On the day of its first nuclear test on October 16, 1964, China declared it “will never at any time or under any circumstances be the first to use nuclear weapons.” That **unambiguous** **statement** **has** **been** a **cornerstone** **of** **Chinese** **nuclear** **weapons** policy for 56 years and has been repeated frequently in authoritative Chinese publications for domestic and international audiences, including a highly classified training manual for the operators of China’s nuclear forces. Richard should know about those publications, particularly the training manual. A U.S. Department of Defense translation has been circulating within the U.S. nuclear weapons policy community for more than a decade. The commander’s comments to the committee indicate a familiarity with the most controversial section of the manual, which, in the eyes of some U.S. analysts, indicates there may be some circumstances where **China** **would** **use** **nuclear** **weapons** **first** **in** a **war** **with** **the** **U**nited **S**tates. This U.S. misperception is understandable, especially given the difficulties the Defense Department encountered translating the text into English. The language, carefully considered in the context of the entire book, articulates a strong reaffirmation of China’s no first use policy. But it also reveals **Chinese** military planners are **struggling** **with** **crisis** **management** **and** **considering** **steps** **that** could **create** **ambiguity** **with** **disastrous** **consequences**. Towards the end of the 405-page text on the operations of China’s strategic rocket forces, in a chapter entitled, “Second Artillery Deterrence Operations,” the authors explain what China’s nuclear forces train to do if **“**a strong military power possessing nuclear‐armed missiles and an absolute advantage in high‐tech conventional weapons is carrying out intense and continuous attacks against our major strategic targets and we have no good military strategy to resist the enemy.**”** The military power they’re talking about is the United States. The authors indicate China’s nuclear missile forces train to take specific steps, including increasing readiness and conducting launch exercises, to “dissuade the continuation of the strong enemy’s conventional attacks.” The manual refers to these steps as an “adjustment” to China’s nuclear policy and a “lowering” of China’s threshold for brandishing its nuclear forces. Chinese leaders would only take these steps in extreme circumstances. The text highlights several triggers such as U.S. conventional bombing of China’s nuclear and hydroelectric power plants, heavy conventional bombing of large cities like Beijing and Shanghai, or other acts of **conventional** **warfare** **that** “**seriously** **threatened**” the “safety and **survival**” of the nation. U.S. Misunderstanding Richard seems to believe this planned adjustment in China’s nuclear posture means China is **preparing** **to** **use** **nuclear** **weapons** first under these circumstances. He told Hawley that there are a “number of situations where they may conclude that first use has occurred that do not meet our definition of first use.” The head of the U.S. Strategic Command appears to assume, as do other U.S. analysts, that the **Chinese** would **interpret** **these** types of U.S. conventional **attacks** **as** **equivalent** **to** a **U.S. first use** **of** **nuclear** **weapons** against China. But that’s not what the text says. “Lowering the threshold” refers to China putting its nuclear weapons on alert — it does not indicate Chinese leaders might lower their threshold for deciding to use nuclear weapons in a crisis. Nor does the text indicate Chinese nuclear forces are training to launch nuclear weapons first in a war with the United States. China, unlike the United States, keeps its nuclear forces off-alert. Its warheads are not mated to its missiles. China’s nuclear-armed submarines are not continuously at sea on armed patrols. The manual describes how China’s nuclear warheads and the missiles that deliver them are controlled by two separate chains of command. Chinese missileers train to bring them together and launch them after China has been attacked with nuclear weapons. All of these behaviors are consistent with a no first use policy. The “adjustment” Chinese nuclear forces are preparing to make if the United States is bombing China with impunity is to place China’s nuclear forces in a state of readiness similar to the state the nuclear forces of the United States are in all the time. This step is intended not only to end the bombing, but also to convince U.S. decision-makers they cannot expect to destroy China’s nuclear retaliatory capability if the crisis escalates. Chinese Miscalculation Unfortunately, alerting Chinese nuclear forces at such a moment could have terrifying consequences. Given the relatively small size of China’s nuclear force, a U.S. president might be tempted to try to limit the possible damage from a Chinese nuclear attack by destroying as many of China’s nuclear weapons as possible before they’re launched, especially if the head of the U.S. Strategic Command told the president China was preparing to strike first. One study concluded that if the United States used nuclear weapons to attempt to knock out a small fraction of the Chinese ICBMs that could reach the United States it may kill tens of millions of Chinese civilians. The authors of the text assume alerting China’s nuclear forces would “create a great shock in the enemy’s psyche.” That’s a fair assumption. But they also assume this shock could “dissuade the continuation of the strong enemy’s conventional attacks against our major strategic targets.” That’s highly questionable. There is a **substantial** **risk** **the** **U**nited **S**tates **would** **respond** **to** this implicit **Chinese** **threat** **to** **use** **nuclear** **weapons** **by** **escalating**, rather than halting, its **conventional** **attacks**. If China’s nuclear forces were targeted, it would put even greater strain on the operators of China’s nuclear forces. A **slippery** **slope** **to** **nuclear** **war** Chinese military planners are aware that attempting to coerce the United States into halting conventional bombardment by alerting their nuclear forces could fail. They also know it might trigger a nuclear war.

### 3

#### Morality must be derived a priori: Is/ought gap – experience only tells us what is since we can only perceive what is, not what ought to be. But it’s impossible to derive an ought from descriptive premises, so there needs to be additional a priori premises to make a moral theory.

#### The existence of conditional goodness requires the unconditional human worth—that means we must treat others as ends in themselves.

Korsgaard 83 (Christine M., [American philosopher and Arthur Kingsley Porter Professor of Philosophy at Harvard University whose main scholarly interests are in moral philosophy and its history “Two Distinctions in Goodness,” The Philosophical Review Vol. 92, No. 2 (Apr. 1983), pp. 169-195, JSTOR) TDI

The argument shows how Kant's idea of justification works. It can be read as a kind of regress upon the conditions, starting from an important assumption. The assumption is that when a rational being makes a choice or undertakes an action, [they] supposes the object to be good, and its pursuit to be justified. At least, if there is a categorical imperative there must be objectively good ends, for then there are necessary actions and so necessary ends (G 45-46/427-428 and Doctrine of Virtue 43-44/384-385). In order for there to be any objectively good ends, however, there must be something that is unconditionally good and so can serve as a sufficient condition of their goodness. Kant considers what this might be**:** it cannot be an object of inclination, for those have only a conditional worth, "for if the inclinations and the needs founded on them did not exist, their object would be without worth" (G 46/428). It cannot be the inclinations themselves because a rational being would rather be free from them. Nor can it be external things, which serve only as means. So, Kant asserts, the unconditionally valuable thing must be "humanity" or "rational nature," which he defines as "the power set to an end" (G 56/437 and DV 51/392). Kant explains that regarding your existence as a rational being as an end in itself is a "subjective principle of human action." By this I understand him to mean that we must regard ourselves as capable of conferring value upon the objects of our choice, the ends that we set, because we must regard our ends as good. But since "every other rational being thinks of his existence by the same rational ground which holds also for myself' (G 47/429), we must regard others as capable of conferring value by reason of their rational choices and so also as ends in themselves. Treating another as an end in itself thus involves making that person's ends as far as possible your own (G 49/430). The ends that are chosen by any rational being, possessed of the humanity or rational nature that is fully realized in a good will, take on the status of objective goods. They are not intrinsically valuable, but they are objectively valuable in the sense that every rational being has a reason to promote or realize t hem. For this reason it is our duty to promote the happiness of others-the ends that they choose-and, in general, to make the highest good our end.

#### Next, any moral rule faces the problem of regress – I can keep asking “why should I follow this.” Regress collapses to skep since no one can generate obligations absent grounds for accepting them. Only reason solves since asking “why reason?” asks for a reason for reasons, which concedes its authority.

#### Thus, moral law must be universal—our judgements can’t only apply to ourselves any more than 2+2=4 can be true only for me.

#### Thus, the standard is consistency with the categorical imperative.

#### Contention –

#### 1] Libertarianism mandates a market-oriented approach to space—that negates

Broker 20 [(Tyler, work has been published in the Gonzaga Law Review, the Albany Law Review and the University of Memphis Law Review.) “Space Law Can Only Be Libertarian Minded,” Above the Law, 1-14-20, <https://abovethelaw.com/2020/01/space-law-can-only-be-libertarian-minded/>] TDI

The impact on human daily life from a transition to the virtually unlimited resource reality of space cannot be overstated. However, when it comes to the law, a minimalist, dare I say libertarian, approach appears as the only applicable system. In the words of NASA, “2020 promises to be a big year for space exploration.” Yet, as Rand Simberg points out in Reason magazine, it is actually private American investment that is currently moving space exploration to “a pace unseen since the 1960s.” According to Simberg, due to this increase in private investment “We are now on the verge of getting affordable private access to orbit for large masses of payload and people.” The impact of that type of affordable travel into space might sound sensational to some, but in reality the benefits that space can offer are far greater than any benefit currently attributed to any major policy proposal being discussed at the national level. The sheer amount of resources available within our current reach/capabilities simply speaks for itself. However, although those new realities will, as Simberg says, “bring to the fore a lot of ideological issues that up to now were just theoretical,” I believe it will also eliminate many economic and legal distinctions we currently utilize today. For example, the sheer number of resources we can already obtain in space means that in the rapidly near future, the distinction between a nonpublic good or a public good will be rendered meaningless. In other words, because the resources available within our solar system exist in such quantities, all goods will become nonrivalrous in their consumption and nonexcludable in their distribution. This would mean government engagement in the public provision of a nonpublic good, even at the trivial level, or what Kevin Williamson defines as socialism, is rendered meaningless or impossible. In fact, in space, I fail to see how any government could even try to legally compel collectivism in the way Simberg fears. Similar to many economic distinctions, however, it appears that many laws, both the good and the bad, will also be rendered meaningless as soon as we begin to utilize the resources within our solar system. For example, if every human being is given access to the resources that allows them to replicate anything anyone else has, or replace anything “taken” from them instantly, what would be the point of theft laws? If you had virtually infinite space in which you can build what we would now call luxurious livable quarters, all without exploiting human labor or fragile Earth ecosystems when you do it, what sense would most property, employment, or commercial law make? Again, this is not a pipe dream, no matter how much our population grows for the next several millennia, the amount of resources within our solar system can sustain such an existence for every human being. Rather than panicking about the future, we should try embracing it, or at least meaningfully preparing for it. Currently, the Outer Space Treaty, or as some call it “the Magna Carta of Space,” is silent on the issue of whether private individuals or corporate entities can own territory in space. Regardless of whether governments allow it, however, private citizens are currently obtaining the ability to travel there, and if human history is any indicator, private homesteading will follow, flag or no flag. We Americans know this is how a Wild West starts, where most regulation becomes the impractical pipe dream. But again, this would be a Wild West where the exploitation of human labor and fragile Earth ecosystem makes no economic sense, where every single human can be granted access to resources that even the wealthiest among us now would envy, and where innovation and imagination become the only things we would recognize as currency. Only a libertarian-type system, that guarantees basic individual rights to life, liberty, and the pursuit of happiness could be valued and therefore human fidelity to a set of laws made possible, in such an existence.

#### 2] Space appropriation and exploration originates from private companies such as Space X and Blue Origin. Preventing such is a restriction on the ability of companies to set and pursue their ends and these companies gain contracts with the government for projects which turns promise breaking offense.

## Case

### UV

#### Aff gets one 1ar shell: Strat skew—multiple shells make the 2nr impossible by spreading it out too much to win any one layer—the 2nr will always undercover something and can’t win.

### Framework

### AT: Space War

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

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

Despite the theorized potential for the achievement of the terrestrial dominance throughout the utilization of the ultimate high ground and the ease of destruction of space-based assets by the potential space weaponry, the utilization of space weapons is with current technology and no effective means to protect them far from fulfilling this potential (Steinberg 2012, p. 255). In current global international political and technological setting, the utility of space weapons is very limited, even if we accept that the ultimate high ground presents the potential to get a decisive tangible military advantage (which is unclear). This stands among the reasons for the lack of their utilization so far. Last but not the least, it must be pointed out that the states also develop passive defense systems designed to protect the satellites on orbit or critical capabilities they provide. These further decrease the utility of space weapons. These systems include larger maneuvering capacities, launching of decoys, preparation of spare satellites that are ready for launch in case of ASAT attack on its twin on orbit, or attempts to decrease the visibility of satellites using paint or materials less visible from radars (Moltz 2014, p. 31). Finally, we must look at the main obstacles of connection of the outer space and warfare. The first set of barriers is comprised of physical obstructions. As has been presented in the previous chapter, the outer space is very challenging domain to operate in. Environmental factors still present the largest threat to any space military capabilities if compared to any man-made threats (Rendleman 2013, p. 79). A following issue that hinders military operations in the outer space is the predictability of orbital movement. If the reconnaissance satellite's orbit is known, the terrestrial actor might attempt to hide some critical capabilities-an option that is countered by new surveillance techniques (spectrometers, etc.) (Norris 2010, p. 196)-but the hide-and-seek game is on. This same principle is, however, in place for any other space asset-any nation with basic tracking capabilities may quickly detect whether the military asset or weapon is located above its territory or on the other side of the planet and thus mitigate the possible strategic impact of space weapons not aiming at mass destruction. Another possibility is to attempt to destroy the weapon in orbit. Given the level of development for the ASAT technology, it seems that they will prevail over any possible weapon system for the time to come. Next issue, directly connected to the first one, is the utilization of weak physical protection of space objects that need to be as light as possible to reach the orbit and to be able to withstand harsh conditions of the domain. This means that their protection against ASAT weapons is very limited, and, whereas some avoidance techniques are being discussed, they are of limited use in case of ASAT attack. We can thus add to the issue of predictability also the issue of easy destructibility of space weapons and other military hardware (Dolman 2005, p. 40;

### AT: Collisions

#### 1] No ev that says that the impacts of collisions would cause extinction. New impact ev in the 1AR justifies new 2nr ev.