



Jan/Feb Neg Case

Because private space companies are the only way to guarantee US hegemony and the survival of the human race, I negate the resolution, Resolved: The appropriation of outer space by private entities is unjust.

Framework

Extinction outweighs, and even if not likely, a concern for extinction means taking actions that solve all other impacts and leads to justice.

Sandberg, PhD in computational neuroscience from Stockholm University, 2008.

Anders Sandberg, PhD in computational neuroscience from Stockholm University, et al., "Bulletin of the Atomic Scientists, September 9, 2008. [How can we reduce the risk of human extinction, last accessed on December 8, 2021, Accessed at:

<http://thebulletin.org/web-edition/features/how-can-we-reduce-the-risk-of-human-extinction>] MD

There is a discontinuity between risks that threaten 10 percent or even 99 percent of humanity and those that threaten 100 percent. For disasters killing less than all humanity, there is a good chance that the species could recover. If we value future human generations, then reducing extinction risks should dominate our considerations. Fortunately, most measures to reduce these risks also improve global security against a range of lesser catastrophes, and thus deserve support regardless of how much one worries about extinction. These measures include: Removing nuclear weapons from hair-trigger alert and further reducing their numbers; Placing safeguards on gene synthesis equipment to prevent synthesis of select pathogens; Improving our ability to respond to infectious diseases, including rapid disease surveillance, diagnosis, and control, as well as accelerated drug development; Funding research on asteroid detection and deflection, "hot spot" eruptions, methane hydrate deposits, and other catastrophic natural hazards; Monitoring developments in key disruptive technologies, such as nanotechnology and computational neuroscience, and developing international policies to reduce the risk of catastrophic accidents. Other measures to reduce extinction risks may have less in common with strategies to improve global security, generally. Since a species' survivability is closely related to the extent of its range, perhaps the most effective means of reducing the risk of human extinction is to colonize space sooner, rather than later. Citing, in particular, the threat of new biological weapons, Stephen Hawking has said, "I don't think the human race will survive the next thousand years, unless we spread into space. There are too many accidents that can befall life on a single planet." Similarly, NASA Administrator Michael Griffin has noted, "The history of life on Earth is the history of extinction events, and human expansion into the Solar System is, in the end, fundamentally about the survival of the species."

Contention 1- US Hegemony

The US is at serious risk of losing its space hegemony to China.

Bender, senior national correspondent who covers defense and space of Politico, 2021.

Bryan Bender, "Politico," July 15, 2021. ['Get off our duff': In race to outer space, China is closing fast, last accessed on December 8, 2021, Accessed at:

<https://www.politico.com/newsletters/politico-china-watcher/2021/07/15/get-off-our-duff-in-race-to-outer-space-china-is-closing-fast-493582>] MD

Former Amazon CEO Jeff Bezos is expected to blast into space on Tuesday, nine days behind fellow billionaire Richard Branson. The billionaires have gotten most of the attention but **there's a bigger space race heating up** — one **between the United States and China that could determine the dominant space power of the coming decades**. In policy circles, when you hear talk about the "new space race," it is almost always uttered in the same breath as China — not Russia, which was the United States' main competitor in the first era of the space age. **Beijing has logged a series of head-spinning achievements in the past few years**. It now has a fully manned space station from which Chinese taikonauts just conducted their first space walk. It has retrieved samples from the moon and orbited a remote spacecraft around it. A Chinese rover is operating on the Martian surface alongside two from the United States. Meanwhile, Beijing is designing a reusable heavy-lift launch vehicle like SpaceX's Starship for deep space missions and recently inked a partnership with Russia to build a research base on the moon. Unlike the Cold War race between Washington and Moscow, however, **this expanding competition is** about far more than planting a flag: It's **about seizing the high ground for military advantage and turning space into a commercial engine that could change life on Earth**. The Pentagon recently reported to Congress that Beijing "has devoted significant resources to growing all aspects of its space program, from military space applications to civil applications such as profit-generating launches, scientific endeavors, and space exploration." And a top admiral this month warned that China is "on the march" toward developing offensive weapons that could jam or destroy satellites in orbit. The consequences of China's first anti-satellite test in 2007 still endure, due to the thousands of pieces of space debris it created when destroying one of its own satellites that still pose a threat to spacecraft in low-Earth orbit. How did we get here? Scott Pace, who served as executive secretary of the White House National Space Council in the Trump administration, likes to cite a line from Ernest Hemingway's "The Sun Also Rises" to describe how Beijing

went from an also-ran to a space juggernaut. A character in the novel asks, "How did you go bankrupt?" The reply: "Gradually, then suddenly." "That could apply to the West's appreciation of China's growing space capabilities and ambitions," says Pace, now director of the Space Policy Institute at George Washington University. How worried should Washington be? If you talk to those studying the national security implications of a preeminent Chinese space power, the U.S. is at serious risk of losing the advantage and putting its military and economic security in jeopardy, if it doesn't get its act together.

US space policy has been founded on private space exploration since 1991 meant to maintain US hegemony. Aff's plan or implications end it. Ending any hope for US hegemony in space.

Henry, MA in International Relations at the University of Massachusetts, Boston, 2018.

Edward C. Henry, "The United States of Sol: Privatization as a tool of American Hegemony in the Solar System, August 31, 2018, Last assessed on December 9, 2021, Accessed at:

https://scholarworks.umb.edu/cgi/viewcontent.cgi?article=1511&context=masters_theses] MD

American outer space exploration has been progressively privatized since the end of the Cold War. The choice of privatization was a strategic geopolitical decision in the interest of maintaining American hegemonic leadership on Earth and in the solar system. American Congressional legislation and presidential speeches in the nearly three decades since the collapse of the Soviet Union and the "victory" of the American neoliberal form of capitalism, show support for the expansion of free-market principles into lower-Earth orbit and beyond. However, this is not a new trend. From the beginning of the American entry into the space race, the goal has been to achieve and maintain the dominant position in outer space. With that in mind, the question is, why did the United States choose to privatize its space exploration efforts to assert American hegemonic leadership? The move towards American privatization of outer space aligns with the American quest for hegemonic leadership. This thesis draws on the historical development of the past 60 years and relies on presidential speeches and congressional legislation to reveal how the American government has justified and explained changing trends in US space policy. The thesis assesses the ability of two key international relations paradigms (realism and Marxism) to help explain the different factors behind this privatization trend and its implications for US power. Prior to the 1991 privatization shift, American leadership, reflected in presidential speeches and Congressional legislation, utilized the language of common heritage to promote American space efforts. Presidents Eisenhower and Kennedy established a framework for scientific advancement in space for the betterment of humanity, but always through American leadership. The first space treaty was signed under President Johnson, who heralded the international treaty as the next step in mitigating global conflict and, at a minimum, preventing the spread of human conflict into orbit and the wider solar system. Americans entered the space race in second place, trailing the Soviet Union in several space "firsts."² Early Soviet achievements included: the first satellite successfully launched into orbit (Sputnik 1, October 1957), the first human launched successfully into orbit (Yuri Gagarin, April 1961), and the first woman to orbit Earth (Valentina Tereshkova, June 1963). The Americans followed Sputnik a year later with the 1958 launch of the Explorer 1 satellite. Alan Shepard, the first American in outer space, followed Gagarin not a month later. The first American women in space, however, would not occur until Sally Ride successfully launched into orbit in 1983. Though the United States started behind, it ultimately won the space race with the successful 1969 Apollo Moon Landing - a crowning achievement for the National Aeronautics and Space Administration (NASA). The Moon served as the ultimate goal of the space race, carrying a significant symbolic weight: "for the United States, coming in first in the moon race would tend to confirm the general disp

osition to believe that once the United States makes up its mind to do something it follows through.”³ By the end of the Cold War, the United States was the clear leader in space technology and low-Earth orbit. If NASA was so successful in achieving American national security goals and enshrining US orbital leadership, why did the federal government push privatization so strongly? Realist scholars of International Relations theory would argue American unilateral action to privatize outer space exploration is a natural act of the hegemon, freed from the constraints of balance of power politics under a bipolar world. Marxists would argue that privatization was deliberate act during the rise of the neoliberal practice of capitalism. By critiquing the rise of neoliberal capital to hegemonic status, Marxism highlights key pieces that are missed by the realist explanations of the privatization of outer space: the role of private property, the influence of commercial interests in American government, and the constructed definition of “freedom” and deregulation.

Loss of US hegemony results in Chinese aggression and miscalculation resulting in war.

Kagan, Stephen and Barbara Friedman Senior Fellow at the Brookings Institution, 2021.

Robert Kagan, Stephen and Barbara Friedman Senior Fellow at the Brookings Institution, “Foreign Affairs,” March/April 2021. [A Superpower, like it or not, last accessed on February 19, 2021, Accessed at: https://www.foreignaffairs.com/articles/united-states/2021-02-16/superpower-it-or-not?utm_medium=newsletters&utm_source=twofa&utm_campaign=A%20Superpower%2C%20Like%20It%20or%20Not&utm_content=20210219&utm_term=FA%20This%20Week%20-%20112017] MD

The question is not whether the United States is still capable of prevailing in a global confrontation, either hot or cold, with China or any other revisionist power. It is. The real question is whether the worst kinds of hostilities can be avoided, whether China and other powers can be encouraged to pursue their aims peacefully, to confine the global competition to the economic and political realms and thus spare themselves and the world from the horrors of the next great war or even the still frightening confrontations of another cold war. The United States cannot avoid such crises

by continuing to adhere to a nineteenth-century view of its national interest. Doing that would produce what it produced in the past: periods of indifference and retrenchment followed by panic, fear, and sudden mobilization. Already, Americans are torn between these two impulses. On the one hand, China now occupies that place in the American mind that Germany and the Soviet Union once held: an ideological opponent that has the ability to strike at American society directly and that has power and ambitions that threaten the United States' position in a key region and perhaps everywhere else, too. On the other hand, many Americans believe that the United States is in decline and that China will inevitably come to dominate Asia. Indeed, the self-perceptions of the Americans and the Chinese are perfectly symmetrical. The Chinese think that the United States' role in their region for the past 75 years has been unnatural and is therefore transient, and so do the Americans. The Chinese believe that the United States is in decline, and so do many Americans. The danger is that as Beijing ramps up efforts to fulfill what it has taken to calling "the Chinese dream," Americans will start to panic. It is in times like this that miscalculations are made.

US-China war results in a nuclear war and the end of civilization and extinction.

Cheong, senior journalist with The Strait Times, 2000.

Ching Cheong, senior journalist with The Strait Times, "No one Gains in war over Taiwan," June 25, 2000. [From Will Taiwan break away: The rise of Taiwanese nationalism, Accessed at:

http://books.google.com/books?id=TocvXqTwiboC&pg=PA3&lpg=PA3&dq=No+One+Gains+in+War+Over+Taiwan&source=bl&ots=UOikACTknH&sig=pt7G3yOv3HKFi02A5HJd_aZUOrY&hl=en&ei=b-OuTpCBMuPq0gGq7_mcDw&sa=X&oi=book_result&ct=result&resnum=4&ved=0CDAQ6AEwAw#v=onepage&q=No%20One%20Gains%20in%20War%20Over%20Taiwan&f=false] MD

According to General Matthew Ridgeway, commander of the US eighth army which fought against the Chinese in the Korean War, the US had at the time thought of using nuclear weapons against China to save the US from military defeat. In his book, The Korean War, a personal account of the military and political aspects of the conflict and its implications on future US foreign policy. Gen Ridgeway said that US was confronted with two choices in Korea-truce or a broadened war, which could have led to the use of nuclear weapons. If the US had to resort to nuclear weaponry to defeat China long before the latter acquired a similar capability, there is a little hope of winning a war against China 50 years later, short of using nuclear weapons. The US estimates that China possesses about 20 nuclear warheads that can destroy major American cities. Beijing also seems prepared to go for the nuclear option. A Chinese military officer disclosed recently that Beijing was considering a review of its "non first use" principle regarding nuclear weapons. Major-General Pan Zhangqiang, president of the military-funded Institute for Strategic Studies, told a gathering at the Woodrow Wilson International Centre for Scholars in Washington that although the government still abided by that principle, there were strong pressures from the military to drop it. He said military leaders considered the use of nuclear weapons mandatory if the country risked dismemberment as a result of foreign intervention. Gen Ridgeway said that should that come to pass, we would see the destruction of civilization. There would be no victors in such a war. While the prospect of a nuclear Armageddon over Taiwan might seem inconceivable, it cannot be ruled out entirely, for China puts sovereignty above everything else. Gen Ridgeway called that the biggest mistake the US made during the Korean War was to assess Chinese actions according to the American way of thinking.

Contention II- Get off the rock

Human extinction on Earth is inevitable, and space colonization is our only hope. We have a thousand years at most to figure the problems out, so we need to start now.

Malik, Editor-in-Chief of Space.com, 2013.

Tariq Malik, Space.com, April 13, 2013. [Stephen Hawking: Humanity must colonize space to survive, last accessed on December 9, 2021, Accessed at:

<https://www.space.com/20657-stephen-hawking-humanity-survival-space.html>] MD

Famed British cosmologist Stephen Hawking sees only one way for humanity to survive the next millennium: colonize space. And he's probably right. In a lecture Tuesday in Los Angeles, the 71-year-old Stephen Hawking said humanity would likely not survive another 1,000 years "without escaping beyond our fragile planet," according to the Associated Press. Hawking has long been an advocate of space exploration as a way to ensure humanity's survival. Living on a single planet leaves us at risk of self-annihilation through war or accidents, or a cosmic catastrophe like an asteroid strike. Hawking's latest

comments were made at Cedars-Sinai Medical Center after touring a stem cell laboratory that is studying how to combat Lou Gehrig's disease. He's lived with the debilitating neurological disorder, also called amyotrophic lateral sclerosis, for 50 years and can only communicate via a computer attached to his wheelchair.

Aff delays the ability to get off the planet by restricting private companies in space. This dooms the human race.

Smith, NSS Legal Fellow and 3rd year law student at the University of Mississippi with a Space Law Concentration, 2021.

Fisher Smith, "National Space Society," March 31, 2021. [Public-Private Partnership: The way to space, last accessed on December 9, 2021, Accessed at:

<https://space.nss.org/public-private-partnerships-the-way-to-space/>] MD

While past developments in outer space have been led by governments and governmental space agencies, that is no longer true. Private organizations have reignited space exploration and provided a way for humanity to continue to expand and revolutionize technology needed to expand beyond Earth, without many of the hurdles, including cost and regulations, that sometimes hamper government advances. But, the path to the stars is not paved by one or the other. Instead, cooperation, between States, governmental agencies, and private companies, will ensure that we continue to push our boundaries into space.

Extinction outweighs one failure kills us all while other impacts are either reversible or we can come back.

Coghlan, reporter for New Scientist, 2012.

Andy Coghlan, reporter for New Scientist, November 26, 2012. [Mega-risks that could drive us to extinction, last accessed on December 8, 2021, Accessed at:

<http://www.newscientist.com/article/dn22534-megarisks-that-could-drive-us-to-extinction.html>] MD

"We're talking about threats to our very existence stemming from human activity," says Martin Rees, a professor of cosmology and astrophysics at the University of Cambridge. Along with Cambridge philosopher Huw Price and Jaan Tallinn, inventor of Skype, he has founded the Cambridge Project for Existential Risk. Wrong focus Rees says we focus too much on tiny risks that are widespread, such as trace contaminants in food, and too little on massive, one-off risks that could wipe us out. To counteract this, Rees, Price and Tallinn are proposing creating a Centre for the Study of Existential Risk at Cambridge. "We don't think enough about low-probability, high-impact events, where one might be too many," says Rees. "The financial crash is a good example of something not predicted, and there will be other events of that type that have never happened before, but which we need to anticipate," he says. The centre would, hopefully, forestall our extinction by exploring how these mega-risks can be predicted and controlled.

Uniqueness

Space will be key to maintain hegemony in the future, but the US faces multiple challenges.

Chatzky, Foreign Service Officer in the US Department of State, et al., 2021.

Andrew Chatzky, Anshu Siripurapu, and Steven J. Markovich, Council on Foreign Relations, September 23, 2021. [Space exploration and US competitiveness, last accessed on December 9, 2021, Accessed at:

<https://www.cfr.org/backgrounder/space-exploration-and-us-competitiveness>] MD

Space policy experts agree that NASA faces considerable challenges, including new budget pressures, aging infrastructure, the rise of competing spacefaring nations, and the lack of a strong national vision for human spaceflight. An independent assessment by the National Research Council in 2012 noted that a crewed mission to Mars “has never received sufficient funding to advance beyond the rhetoric stage.” The Trump administration’s push to create a space force within the military could be a sign that an era of cooperation in space is ending. In response to Trump’s order, Daryl G. Kimball of the Arms Control Association said, “At worst, it is the first step in an accelerated competition between the U.S., China and Russia in the space realm that is going to be more difficult to avert without direct talks about responsible rules of the road.” CFR’s Stewart M. Patrick agrees that “the stage could be set for a Cold War–style space race that overwhelms any multilateral cooperation.” At the same time, policymakers face a growing number of issues around NASA’s present-day purpose and methods. These include how the agency should balance various goals, such as driving scientific discovery, enhancing national security, and developing innovations with commercial benefits; how large a role the private sector should play; and to what extent NASA can be a vehicle for international cooperation and diplomacy. Despite these questions, many experts have advocated sustaining U.S. leadership in space. “I’m convinced that in this century the nations that lead in the world are going to be those that create new knowledge. And one of the places where you have a huge opportunity to create new knowledge will be exploration of the universe, exploration of the solar system, and the building of technology that allows you to do that,” said former congressman and aerospace expert Robert Walker at a CFR meeting on space policy in 2013.

US must maintain lead

Loss of space hegemony risks increased Chinese aggression.

Bender, senior national correspondent who covers defense and space of Politico, 2021.

Bryan Bender, "Politico," July 15, 2021. ['Get off our duff': In race to outer space, China is closing fast, last accessed on December 8, 2021, Accessed at:

<https://www.politico.com/newsletters/politico-china-watcher/2021/07/15/get-off-our-duff-in-race-to-outer-space-china-is-closing-fast-493582>] MD

How did we get here? Scott Pace, who served as executive secretary of the White House National Space Council in the Trump administration, likes to cite a line from Ernest Hemingway's "The Sun Also Rises" to describe how Beijing went from an also-ran to a space juggernaut. A character in the novel asks, "How did you go bankrupt?" The reply: "Gradually, then suddenly." "That could apply to the West's appreciation of China's growing space capabilities and ambitions," says Pace, now director of the Space Policy Institute at George Washington University. Indeed, some of Beijing's space goals for the near future, if they come to fruition, could give it significantly more thrust. "They will test in-space power beaming, land reusable rockets, establish a lunar research station, build a solar power satellite prototype, test lunar 3-D printing, capture a small asteroid and return it to Earth, and fly nuclear powered spacecraft," says retired Air Force Lt. Col. Peter Garretson, a space strategist who is now a senior fellow in defense studies at the American Foreign Policy Council. These ventures are "aimed at creating the building blocks for an Earth-independent supply chain to become an in-space industrial giant and dominant space power," he adds. Will China treat space differently? Pace says he has few illusions that Beijing will treat space any differently than economic and security domains here on Earth. The United States must protect its lead — and even widen it, he says — given Beijing's aggressive behavior in the South China Sea, Hong Kong, Taiwan and in cyberspace. "Will Chinese behavior in commercial space be markedly different than in other commercial sectors?" Pace asks. "Probably not. Will Chinese behavior in outer space be different than in other shared domains, such as the oceans? Maybe."

Nuclear War=Extinction

A nuclear war would outweigh global warming impacts.

Alan **Robock**, professor of climatology at Rutgers University, "Huffington Post," January 31, **2015**. [Nuclear weapons are much more dangerous than global warming, Accessed at: http://www.huffingtonpost.com/alan-robock/nuclear-weapons-are-much-_b_6227220.html] MD

Skeptical Science is a great website that debunks global warming deniers. But their home page has a box counting up the amount of energy trapped by greenhouse gases in units of Hiroshima atomic bomb energy. While strictly correct, in the sense that the amount of energy released by the horrendous, genocidal attack on Hiroshima, Japan, on August 6, 1945, the equivalent of the explosion of 15,000 tons of TNT, is the same as that accumulated at Earth's surface every fourth of a second by anthropogenic greenhouse gases, I find that this trivializes the horror of nuclear war. I am not writing this to criticize global warming theory. I have been doing climate research for 40 years, since Professor Edward Lorenz recommended the study of climate as a Ph.D. topic for me in 1974. In 1978 I published the first transient climate model simulation of the warming response to increasing CO₂ (Internally and externally caused climate change. J. Atmos. Sci., 35, 1111-1122). And I often explain the problem in the 10 words of Yale's Anthony Leiserowitz: "It's real. It's us. Scientists agree. It's bad. There's hope." But we do not need to shock and mislead people with the effects of nuclear weapons to solve this problem. **Nuclear bombs do more than release thermal energy, and their potential impact on climate far outweighs anything else humans could do to our climate. The blast, fires, and radioactivity would kill millions of people if dropped on modern cities.** The direct casualties from just three weapons of the size used on Hiroshima, exploding on U.S. cities would cause more casualties than the U.S. experienced in World War II. But the smoke from the fires would cause the largest impact on humans. I described the climatic effects of nuclear war and the continuing nuclear winter problem in a previous Huffington Post blog. To summarize, the current Russian and American nuclear arsenals can still produce a nuclear winter, with temperatures plummeting below freezing in the summer, sentencing most of the world to famine and starvation. Even a war between two new nuclear powers, say India and Pakistan, could put a billion people could be at risk of starvation from the agricultural impacts of the smoke from the fires that could be generated. Nuclear weapons are useless. They would never be used on purpose by the major powers, but could be used by accident. Some countries might use them in a moment of panic, or in response to imagined threats and insults, or in a fit of religious hysteria. The arsenals of nuclear weapons states set a bad example for the world, encouraging proliferation. And they could kill us all.

Private enterprise grows because of appropriation

The ability to profit from resources in space drives private space companies, so even if they aren't now, they want the ability to profit off their find. Without it, space exploration would see a serious decline.

Basulto, reporter The Washington Post, 2015.

Dominic Basulto, "The Washington Post," 2015. [How Property rights in outer space may lead to a scramble to exploit the moon's resources, last accessed on December 9, 2021, Accessed at: <https://www.washingtonpost.com/news/innovations/wp/2015/11/18/how-property-rights-in-outer-space-may-lead-to-a-scramble-to-exploit-the-moons-resources/>] MD

Nearly 50 years ago, of course, we didn't know anything about the economic potential of space and nobody was seriously talking about humans as an interplanetary species. Certainly, there were not any private companies angling for a piece of the action. Space exploration was solely the preserve of sovereign governments and we referred to astronauts as the "envoys of mankind." The prevailing sentiment, as expressed in the Outer Space Treaty, was that outer space should belong to all of humanity, not just the first nation to venture into space and plant a flag on the surface of a celestial body. What's happening now, in essence, is a sea change in how we think about outer space. To convince private commercial space exploration companies to invest millions of dollars, there have to be economic incentives involved. In short, financial backers of these companies have to be able to realize a profit from their investments if innovation is going to happen. That's the reality. Richards cites the rights of fishing boats in international waters as an economic template for the SPACE Act, "The ships are owned by companies flying flags of nations under which laws they are bound: they have a right to peacefully fish in international waters that they don't own; but they have a right of ownership of the fish once obtained." The fishing analogy is a useful one. It suggests that we're simply extending the same economic principles used on Earth to the moon and beyond, not creating new principles. Seafaring nations are now spacefaring nations. Moon Express even refers to the moon as "the eighth continent", suggesting that people should think about the moon the same way they think about the other seven continents on the planet. And Planetary Resources, an asteroid mining company, refers to the "off-planet economy."