I affirm resolved: the private appropriation of outer space is unjust.

A private entity is defined as a partnership, corporation, individual, nonprofit organization, company, or**any**other**organized group that is not government affiliated.**

Appropriation is defined in 2013 by the

[VBI Briefs.pdf](file:///C:\Users\22bleemm\Dropbox\Debate%20-%20Nov-Dec%202011\2021%20Space%20Appropriation\5%20-%20Briefs\VBI%20Briefs.pdf)

The first major term in the resolution is appropriation. If you do a quick Google search, you might not find the most impartial definition. For example, Cambridge Dictionary¹, Merriam Webster², and Dictionary.com³ all include definitions of appropriation that in volve taking something for your own use usually without permission. Many affirmatives might jump on this opportunity to put the negative in a tough spot. However, I would strongly encourage you to look at the resolution in its entirety and take context into ac count. For example, this resolution asks a question that probably would ask us to con sider existing law. As a result, we should prioritize legal interpretations of the world and find scenarios that are close enough to claims over new land and resources. Looking at something like The Law Dictionary, we encounter the following: “The act of appro priating , or setting apart; prescribing the destination of a thing; designating the use or application of a fund.”⁴ Even better, finding a definition that is specific to appropriation and space is the most appropriate. As framers of the Outer Space Treaty—which I will explain soon—believed that the appropriation of outer space is “ ‘[as] the exercise of exclusive control or exclusive use’ with a sense of permanence, which limits other nations’ access to it.”

Justice is defined by Aristotle as to give each their due. The primary thing that people are due is freedom because our value as humans comes from our innate rationality and ability to set our own ends. This ability must be respected.

Thus, the value is **freedom**.

To truly value freedom for ALL, we must restrict the freedom of some people and institutions. However, while the government is justified in occasionally limiting freedom, individual people and private entities cannot. This is because the government can represent the general will of the people, as it is not the will of one person but of the whole, this concept is called the omni-lateral will.

Government are able to make decisions from this standpoint.

Arthur Ripstein, 7-22-2009, “Force and Freedom: Kant’s Legal and Political Philosophy” the President and Fellows of Harvard College, <file:///C:/Users/22bleemm/Downloads/Force%20and%20Freedom%20Kants%20Legal%20and%20Political%20Philosophy%20by%20Arthur%20Ripstein%20(z-lib.org).pdf>

Kant’s detailed development of each of these arguments will be considered in Chapter 6. The key to his appeal to seemingly disparate grounds for entering a civil condition is that each of them is required to establish one of the branches of government under the separation of powers as he conceives it. The argument about unilateral judgment introduces the basic principle of public law, and provides an argument for a single legislative authority, capable of making laws from the standpoint of what he calls an [this]“omnilateral will.” The argument about assurance establishes the need for an executive branch, charged with enforcing law. The determinacy argument introduces the need for a judiciary, charged with applying the law to particular cases. Both executive and judicial powers are subject to law, because omnilateral law is the condition of acting together.

Thus, the value criterion is **preserving the omni-lateral will**.

Prefer this value criterion for the following two reasons.

**First**, individual people lack the ability to place obligations on others, so the omni-lateral will is necessary. There needs to be some laws that restrict people’s freedom so they do not violate each others’, but individual people cannot make those rules.

Arthur Ripstein, 7-22-2009, “Force and Freedom: Kant’s Legal and Political Philosophy” the President and Fellows of Harvard College, <file:///C:/Users/22bleemm/Downloads/Force%20and%20Freedom%20Kants%20Legal%20and%20Political%20Philosophy%20by%20Arthur%20Ripstein%20(z-lib.org).pdf>

The three defects are distinct, but have a parallel structure: nobody is under any obligation to defer to the deeds, claims, or judgments of others, unless appropriate institutions are in place. The distinctive powers that each institution must have require that those institutions differ in kind from any sort of private association. A private association can only have such powers as its particular members transfer to it. The powers to authorize one person to change the normative situation of all others, to enforce private rights in the name of all, and to impose closure on private disputes are all powers that no private person could have. The point of each argument is to show that these powers are morally required even though private persons lack them.

**Second**, the idea of freedom is incoherent without an omni lateral will to protect it. According to **Messina 18**

James Messina, Jul 22, 2015, 7-22-2009, “Political Obligations and Provisional Rights: A Study in Kant’s Politics of Freedom” UC San Diego, https://escholarship.org/content/qt6j41p8pm/qt6j41p8pm\_noSplash\_363466e7c17250c151f4f1dae8b77217.pdf?t=pbhsys

As Kant puts it, “a unilateral will cannot serve as a coercive law for everyone with regard to possession that is external and therefore contingent, since that would infringe upon freedom in accordance with universal laws” (MdS 6:256, added emphasis). Kant says that a unilateral will cannot put others under obligation because 55 a unilateral will’s exercise is contingent, and restrictions on freedom must be grounded in necessity. He makes clear that such an obligation must be imposed by a will that is omnilateral, i.e., a will in which the will of all is united for the giving of law. This is, I think, the principal problem with external freedom in the state of nature [is that]: Its exercise appears to impose[s] obligations unilaterally, but genuine obligations must be universal; they must be able to be regarded as legislated by all for all

For new obligations to be placed on people there thus has to be the presence of the omni-lateral will, which is a government. Two observations.

First, it is the aff’s burden to argue that the appropriation of outer space by private entities is unjust. It is not a question of comparative worlds.

Second, the neg cannot only prove that the private appropriation of outer space is necessary, as things can be necessary but that does not make them just. For example, acts of war that harm civilians in the process are not just even if they are necessary.

#### C1) Appropriation puts others under new obligations

Space is functionally the state of nature. There is no government that rules over the land to act as an omni-lateral will to impose obligations on people or institutions. The acquisition of property in outer space is thus inherently unjust as it restricts other people’s freedom to use that property without any organization to justify that violation.

Arthur Ripstein, 7-22-2009, “Force and Freedom: Kant’s Legal and Political Philosophy” the President and Fellows of Harvard College, <file:///C:/Users/22bleemm/Downloads/Force%20and%20Freedom%20Kants%20Legal%20and%20Political%20Philosophy%20by%20Arthur%20Ripstein%20(z-lib.org).pdf>

The original acquisition of property remains distinctive because it does not simply change the world: it places others under new obligations. As we saw in Chapter 4, the basic structure of a property right is if one person owns an object, it is not part of the context which others may change in the exercise of their freedom. Your rights are not violated if people use, damage, or destroy things that are not your property, but they are violated if they interfere with your property in any way. The original acquisition of an object as property changes it from being something that others may use or change at will, or as a foreseeable side effect of their own activities, into something that others are under an obligation not to use, damage, or destroy; it thus places them under a new obligation.

Appropriation of property cannot be just without a government that exists over that property to justify it.

Arthur Ripstein, 7-22-2009, “Force and Freedom: Kant’s Legal and Political Philosophy” the President and Fellows of Harvard College, <file:///C:/Users/22bleemm/Downloads/Force%20and%20Freedom%20Kants%20Legal%20and%20Political%20Philosophy%20by%20Arthur%20Ripstein%20(z-lib.org).pdf>

Acquisition requires taking control, giving a sign, and bringing your act into conformity with a “general will.” Although a person acquiring an object does so on his or her own initiative without consulting others, the power to do so requires an omnilateral will to make the unilateral act binding on others.7 Kant thus treats initial acquisition as a special case of political authority.

The private appropriation of outer space violates the omni-lateral will as there can be no governmental figures to justify appropriation in outer space. According to

International Space: Lessons from Antarctica.” in Science Diplomacy: Antarctica, Science, and the Governance of International Spaces, edited by **Berkman**, Paul Arthur, Lang, Michael A., Walton, David W. H., and Young, Oran R., 133–142. Smithsonian Contributions to Knowledge. **2011**. JDN. https://doi.org/10.5479/si.9781935623069.133

APPROPRIATION AND NONAPPROPRIATION OF INTERNATIONAL SPACES Regarding appropriation and sovereignty, the legal situation of outer space is much clearer than Antarctica’s.13 Article II of the Outer Space Treaty clearly sets a nonappro‑ priation principle.14

Despite some interpretations which are often close to bad faith, the rule is wide, clear, and indisputable: “Outer space, including the moon and other celes‑ tial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.” It applies not only to the bodies but also to the orbits, the “void space,” as Bin Cheng named it.15 Despite this clear wording, some try to dispute this principle. In our time of general private appropriation, they cannot accept a common domain for humanity. Some argue that the limitation is for “national appropriation” and thus does not apply to private persons. It is a misunderstanding of the word “national,” which is not synonym with “state”. If we consider the context, i.e., Article VI of the same treaty, “national activities” expressly include governmental and nongovernmental entities.16 In American English the word “nation” is often used instead of “state,” but, in fact, the “nation” is both the government and the people having the nationality of a state.17 Even if some claims are far from serious, they appear so interesting to the world’s media that they are widely spread and enable some to make a lot of money to the detriment of not only consenting victims but also, and more seriously, of the principle itself. The well‑known claims made by the “Head Cheese,” Dennis Hope, for the Moon and every planet of the solar system are a good example of this distortion of the law and of the evo‑ lution of a fanciful project turning into a money making enterprise.18 Another claim is more interesting from a legal perspective. A U.S. citizen, Gregory W. Nemitz, knowing about a project by NASA to land a space probe on the asteroid Eros, decided to claim it as his property. When NASA landed its spacecraft on the asteroid, he asked for a rent before federal courts of justice.19 The decisions of the courts dismissed this claim but are not quite decisive on the nonappropriation principle itself. On the other hand, the U.S. Department of State had the opportunity to fully clarify the point of claims on asteroids. Responding to Mr. Nemitz’s letters, Ralph L. Braibanti, Director of the Space and Advanced Technology, U.S. Department of State, clearly stated, “Dear Mr. Nemitz. We have reviewed the ‘notice’ dated February 13, 2003, that you sent to the U.S. De‑ partment of State. In the view of the Department, private ownership of an asteroid is precluded by article II of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies. Accordingly, we have concluded that your claim is without legal basis.”

Arthur Ripstein, 7-22-2009, “Force and Freedom: Kant’s Legal and Political Philosophy” the President and Fellows of Harvard College, <file:///C:/Users/22bleemm/Downloads/Force%20and%20Freedom%20Kants%20Legal%20and%20Political%20Philosophy%20by%20Arthur%20Ripstein%20(z-lib.org).pdf>

The role of the public does not turn property into a sort of instrument or by-product of public policy. The basic structure of property is governed by individual purposiveness; as a matter of private right, you can have external objects as your own because of the postulate of private right. A public authority is required to authorize you to acquire things, because that changes the normative situation of others. But authorizing acquisition is not a discretionary purpose that a public authority might decide about based on some assessment of the desirable consequences or balance of benefits and burdens that will result. A public authority could not be entitled to prohibit all acquisition, as doing so would limit human purposiveness as such. It could, in principle, restrict initial acquisition in various ways—for example, setting aside areas as nature preserves for future generations—and it can impose conditions on properly recording acquisitions. Its power to do such things in particular cases, however, can only be exercised consistent with each person’s entitlement to have external objects of choice as his or her own, so it cannot preclude all acquisition.

Kant’s appeal to the idea of a united will makes the object of agreement the rule of law through political institutions, so that individual acts of rule-making are themselves instances of a more general law. The argument is not supposed to show that an agreement has happened, or even that it would be wise or prudent for people to enter into such an agreement so that it would happen under ideal circumstances. It shows only that a form of public authorization on behalf of everyone is required to underwrite private appropriation. Private property requires public right because they are both instances of a single, common problem, which has an irreducibly public element. Rather than trying to reduce the public to the private, Kant’s argument shows that the private is only rightful in the context of the public.

Property rights are impossible to define absent a government.  Without a sovereign government to define property rights and settle disagreements with competing rights claims, private appropriation becomes meaningless and dispute-ridden.

Tom Cambell, xx-xx-2016, “Legal Positivism”, Ashgate Publishing https://books.google.com/books?id=YTGoDQAAQBAJ&pg=PT406&lpg=PT406&dq=in+the+absence+of+legal+authority,+we+must+expect+that+individuals+will+disagree+about+and+justice+and+that+this+disagreement+will+lead+to+violent+conflict.+The+task+of+the+legislature+is+to+put+an+end+to+this+conflict+by+replacing+individual+judgments+with+%E2%80%A6+authoritative+determinations&source=bl&ots=OpIyKWSXnP&sig=ACfU3U0Lfy4Cr-LA9eLe3My\_ift\_Q81NrQ&hl=en&sa=X&ved=2ahUKEwiB\_6u8m6r3AhWXaM0KHQykCNMQ6AF6BAgeEAM#v=onepage&q&f=false

“**in the absence of legal authority,** we must expect that **individuals will disagree about [property rights] and justice and** that **this disagreement will lead to violent conflict. The task of the legislator is to put an end to this conflict by replacing individual judgments with … authoritative determinations”**

Without an agreed and mutual authority, there is no method to answer questions around property without violence.

The lack of a public authority in outer space means private appropriation is inherently unjust, no matter the practical outcomes.

#### C2) Space Conflict

Private appropriation of outer space causes conflict for two main reasons.

First is that the presence of unclaimed land and resources in outer space leads to conflict.

Klare, Michael T. “The New Geography of Conflict.” *Foreign Affairs*, vol. 80, no. 3, 2001, pp. 49–61, https://doi.org/10.2307/20050150. Accessed 23 Apr. 2022.

Devising ways to peacefully resolve the increasing competition over natural resources is all the more urgent because **many states** continue to **view controlling certain natural resources as a national security requirement -- and something worth fighting for.** In the United States, for example, President Jimmy Carter declared in 1980 that any attempt by hostile powers to cut off the flow of Persian Gulf oil would "be regarded as an assault on the vital interests of the United States of America," which the United States would repel "by any means necessary, including military force." Subsequent presidents have made similar statements, and substantial U.S. forces are now permanently deployed in the Persian Gulf to enforce this policy.

This is because resources are key to a countries wealth; leading to incentive for conflict.

Antony Funnell, 8-1-2018, "Why war in space is 'inevitable'," ABC News, https://www.abc.net.au/news/2018-08-24/conflict-in-space-is-inevitable-expert-warns/10146314

"Where you have resources, where you have competition for those resources, where you have investment of money in the extraction of those resources ... there will be an expectation of security around that investment."

All this “security” is is using violence and war to protect resources, without private appropriation there is no resource extraction that these countries would have to defend through conflict.

Second is a lack of legality.

Loder, Reed Elizabeth. “ASTEROID MINING: ECOLOGICAL JURISPRUDENCE BEYOND EARTH.” *Virginia Environmental Law Journal*, vol. 36, no. 3, 2018, pp. 275–317, https://www.jstor.org/stable/26510760. Accessed 23 Apr. 2022.

Another [a] foreseeable problem is settling disputes among property claimants. Assuming the United States granted particular property rights in asteroid resources under the Space Act— contrary to the Treaty’s prohibition of private ownership by one citizen nation to the exclusion of other**—**American courts would be acting unilaterally and ignoring international obligations in settling internal citizen disputes.82 If other signatories were then to respond in kind by passing legislation permitting their national companies to extract and own resources, those nations would also presumably resolve internal disputes in their own courts. Parallel actions would thus result in inconsistent principles governing outer space activities with no clear mechanism or forum to resolve disputes among mining entities from different countries. Without consensus to establish an international regime to govern the use of outer space,83 as proposed by the ill-fated Moon Treaty, uncertainty of jurisdiction over international space usage would result in chaos at best and a free-for-all at worst.

As private corporations come into contact with each other, their respective nations have no way to settle disputes over property without conflict.

Joseph Lutta (Contact Author), 12-20-2013, "Emerging Trends and Potential in Commercial Exploration of Outer Space: The Need for International Space Law Regulations," SSRN, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2370251

**This legal deficiency in space mining leaves room for cut throat competition among nations which may result in chaos** and environmental concerns and as such the need to reform international regulation.80

Adam Smith, 11-24-2020, "Scientists fear conflicts over the Moon’s resources between governments and companies," Independent, https://www.independent.co.uk/space/moon-government-companies-resources-conflicts-b1761170.html

https://www.independent.co.uk/life-style/gadgets-and-tech/moon-government-companies-resources-conflicts-b1761170.html

"A lot of people think of space as a place of peace and harmony between nations. The problem is there's no law to regulate who gets to use the resources, and there are a significant number of space agencies and others in the private sector that aim to land on the moon within the next five years," said Martin Elvis, astronomer at the Center for Astrophysics | Harvard & Smithsonian and the lead author on the paper, which has been published in [*Philosophical Transactions of the Royal Society A.*](http://dx.doi.org/10.1098/rsta.2019.0563)

"We looked at all the maps of the Moon we could find and found that not very many places had resources of interest, and those that did were very small. That creates a lot of room for conflict over certain resources."

"The biggest problem is that everyone is targeting the same sites and resources: states, private companies, everyone. But they are limited sites and resources. We don't have a second moon to move on to. This is all we have to work with." Alanna Krolikowski, assistant professor of science and technology policy at Missouri University of Science and Technology, and a co-author on the paper, said in a statement.

which compounds the risk, as the more targeted areas private companies are focused on the more likely they come into conflict over those resources.

#### Resource shortages go nuclear.

Klare 13 – Michael T., professor emeritus of peace and world-security studies at Hampshire College and senior visiting fellow at the Arms Control Association in Washington, DC, " How Resource Scarcity and Climate Change Could Produce a Global Explosion", *The Nation*, 4/22/2013, <https://www.thenation.com/article/how-resource-scarcity-and-climate-change-could-produce-global-explosion/> JHW

Resource Shortages and Resource Wars Start with one simple given: the prospect of future scarcities of vital natural resources, including energy, water, land, food and critical minerals. This in itself would guarantee social unrest, geopolitical friction and war. It is important to note that absolute scarcity doesn’t have to be on the horizon in any given resource category for this scenario to kick in. A lack of adequate supplies to meet the needs of a growing, ever more urbanized and industrialized global population is enough. Given the wave of extinctions that scientists are recording, some resources—particular species of fish, animals and trees, for example—will become less abundant in the decades to come, and may even disappear altogether. But key materials for modern civilization like oil, uranium and copper will simply prove harder and more costly to acquire, leading to supply bottlenecks and periodic shortages. Oil—the single most important commodity in the international economy—provides an apt example. Although global oil supplies may actually grow in the coming decades, many experts doubt that they can be expanded sufficiently to meet the needs of a rising global middle class that is, for instance, expected to buy millions of new cars in the near future. In its 2011 World Energy Outlook, the International Energy Agency claimed that an anticipated global oil demand of 104 million barrels per day in 2035 will be satisfied. This, the report suggested, would be thanks in large part to additional supplies of “unconventional oil” (Canadian tar sands, shale oil and so on), as well as 55 million barrels of new oil from fields “yet to be found” and “yet to be developed.” However, many analysts scoff at this optimistic assessment, arguing that rising production costs (for energy that will be ever more difficult and costly to extract), environmental opposition, warfare, corruption and other impediments will make it extremely difficult to achieve increases of this magnitude. In other words, even if production manages for a time to top the 2010 level of 87 million barrels per day, the goal of 104 million barrels will never be reached and the world’s major consumers will face virtual, if not absolute, scarcity. Water provides another potent example. On an annual basis, the supply of drinking water provided by natural precipitation remains more or less constant: about 40,000 cubic kilometers. But much of this precipitation lands on Greenland, Antarctica, Siberia and inner Amazonia where there are very few people, so the supply available to major concentrations of humanity is often surprisingly limited. In many regions with high population levels, water supplies are already relatively sparse. This is especially true of North Africa, Central Asia and the Middle East, where the demand for water continues to grow as a result of rising populations, urbanization and the emergence of new water-intensive industries. The result, even when the supply remains constant, is an environment of increasing scarcity. Wherever you look, the picture is roughly the same: supplies of critical resources may be rising or falling, but rarely do they appear to be outpacing demand, producing a sense of widespread and systemic scarcity. However generated, a perception of scarcity—or imminent scarcity—regularly leads to anxiety, resentment, hostility and contentiousness. This pattern is very well understood, and has been evident throughout human history. In his book Constant Battles, for example, Steven LeBlanc, director of collections for Harvard’s Peabody Museum of Archaeology and Ethnology, notes that many ancient civilizations experienced higher levels of warfare when faced with resource shortages brought about by population growth, crop failures or persistent drought. Jared Diamond, author of the bestseller Collapse, has detected a similar pattern in Mayan civilization and the Anasazi culture of New Mexico’s Chaco Canyon. More recently, concern over adequate food for the home population was a significant factor in Japan’s invasion of Manchuria in 1931 and Germany’s invasions of Poland in 1939 and the Soviet Union in 1941, according to Lizzie Collingham, author of The Taste of War. Although the global supply of most basic commodities has grown enormously since the end of World War II, analysts see the persistence of resource-related conflict in areas where materials remain scarce or there is anxiety about the future reliability of supplies. Many experts believe, for example, that the fighting in Darfur and other war-ravaged areas of North Africa has been driven, at least in part, by competition among desert tribes for access to scarce water supplies, exacerbated in some cases by rising population levels. “In Darfur,” says a 2009 report from the UN Environment Programme on the role of natural resources in the conflict, “recurrent drought, increasing demographic pressures, and political marginalization are among the forces that have pushed the region into a spiral of lawlessness and violence that has led to 300,000 deaths and the displacement of more than two million people since 2003.” Anxiety over future supplies is often also a factor in conflicts that break out over access to oil or control of contested undersea reserves of oil and natural gas. In 1979, for instance, when the Islamic revolution in Iran overthrew the Shah and the Soviets invaded Afghanistan, Washington began to fear that someday it might be denied access to Persian Gulf oil. At that point, President Jimmy Carter promptly announced what came to be called the Carter Doctrine. In his 1980 State of the Union Address, Carter affirmed that any move to impede the flow of oil from the Gulf would be viewed as a threat to America’s “vital interests” and would be repelled by “any means necessary, including military force.” In 1990, this principle was invoked by President George H.W. Bush to justify intervention in the first Persian Gulf War, just as his son would use it, in part, to justify the 2003 invasion of Iraq. Today, it remains the basis for US plans to employ force to stop the Iranians from closing the Strait of Hormuz, the strategic waterway connecting the Persian Gulf to the Indian Ocean through which about 35 percent of the world’s seaborne oil commerce passes. Recently, a set of resource conflicts have been rising toward the boiling point between China and its neighbors in Southeast Asia when it comes to control of offshore oil and gas reserves in the South China Sea. Although the resulting naval clashes have yet to result in a loss of life, a strong possibility of military escalation exists. A similar situation has also arisen in the East China Sea, where China and Japan are jousting for control over similarly valuable undersea reserves. Meanwhile, in the South Atlantic Ocean, Argentina and Britain are once again squabbling over the Falkland Islands (called Las Malvinas by the Argentinians) because oil has been discovered in surrounding waters. By all accounts, resource-driven potential conflicts like these will only multiply in the years ahead as demand rises, supplies dwindle and more of what remains will be found in disputed areas. In a 2012 study titled Resources Futures, the respected British think-tank Chatham House expressed particular concern about possible resource wars over water, especially in areas like the Nile and Jordan River basins where several groups or countries must share the same river for the majority of their water supplies and few possess the wherewithal to develop alternatives. “Against this backdrop of tight supplies and competition, issues related to water rights, prices, and pollution are becoming contentious,” the report noted. “In areas with limited capacity to govern shared resources, balance competing demands, and mobilize new investments, tensions over water may erupt into more open confrontations.” Heading for a Resource-Shock World Tensions like these would be destined to grow by themselves because in so many areas supplies of key resources will not be able to keep up with demand. As it happens, though, they are not “by themselves.” On this planet, a second major force has entered the equation in a significant way. With the growing reality of climate change, everything becomes a lot more terrifying. Normally, when we consider the impact of climate change, we think primarily about the environment—the melting Arctic ice cap or Greenland ice shield, rising global sea levels, intensifying storms, expanding desert and endangered or disappearing species like the polar bear. But a growing number of experts are coming to realize that the most potent effects of climate change will be experienced by humans directly through the impairment or wholesale destruction of habitats upon which we rely for food production, industrial activities or simply to live. Essentially, climate change will wreak its havoc on us by constraining our access to the basics of life: vital resources that include food, water, land and energy. This will be devastating to human life, even as it significantly increases the danger of resource conflicts of all sorts erupting. We already know enough about the future effects of climate change to predict the following with reasonable confidence: \* Rising sea levels will in the next half-century erase many coastal areas, destroying large cities, critical infrastructure (including roads, railroads, ports, airports, pipelines, refineries and power plants) and prime agricultural land. \* Diminished rainfall and prolonged droughts will turn once-verdant croplands into dust bowls, reducing food output and turning millions into “climate refugees.” \* More severe storms and intense heat waves will kill crops, trigger forest fires, cause floods and destroy critical infrastructure. No one can predict how much food, land, water and energy will be lost as a result of this onslaught (and other climate-change effects that are harder to predict or even possibly imagine), but the cumulative effect will undoubtedly be staggering. In Resources Futures, Chatham House offers a particularly dire warning when it comes to the threat of diminished precipitation to rain-fed agriculture. “By 2020,” the report says, “yields from rain-fed agriculture could be reduced by up to 50%” in some areas. The highest rates of loss are expected to be in Africa, where reliance on rain-fed farming is greatest, but agriculture in China, India, Pakistan and Central Asia is also likely to be severely affected. Heat waves, droughts and other effects of climate change will also reduce the flow of many vital rivers, diminishing water supplies for irrigation, hydro-electricity power facilities and nuclear reactors (which need massive amounts of water for cooling purposes). The melting of glaciers, especially in the Andes in Latin America and the Himalayas in South Asia, will also rob communities and cities of crucial water supplies. An expected increase in the frequency of hurricanes and typhoons will pose a growing threat to offshore oil rigs, coastal refineries, transmission lines and other components of the global energy system. The melting of the Arctic ice cap will open that region to oil and gas exploration, but an increase in iceberg activity will make all efforts to exploit that region’s energy supplies perilous and exceedingly costly. Longer growing seasons in the north, especially Siberia and Canada’s northern provinces, might compensate to some degree for the desiccation of croplands in more southerly latitudes. However, moving the global agricultural system (and the world’s farmers) northward from abandoned farmlands in the United States, Mexico, Brazil, India, China, Argentina and Australia would be a daunting prospect. It is safe to assume that climate change, especially when combined with growing supply shortages, will result in a significant reduction in the planet’s vital resources, augmenting the kinds of pressures that have historically led to conflict, even under better circumstances. In this way, according to the Chatham House report, climate change is best understood as a “threat multiplier…a key factor exacerbating existing resource vulnerability” in states already prone to such disorders. Like other experts on the subject, Chatham House’s analysts claim, for example, that climate change will reduce crop output in many areas, sending global food prices soaring and triggering unrest among those already pushed to the limit under existing conditions. “Increased frequency and severity of extreme weather events, such as droughts, heat waves and floods, will also result in much larger and frequent local harvest shocks around the world….These shocks will affect global food prices whenever key centers of agricultural production area are hit—further amplifying global food price volatility.” This, in turn, will increase the likelihood of civil unrest. When, for instance, a brutal heat wave decimated Russia’s wheat crop during the summer of 2010, the global price of wheat (and so of that staple of life, bread) began an inexorable upward climb, reaching particularly high levels in North Africa and the Middle East. With local governments unwilling or unable to help desperate populations, anger over impossible-to-afford food merged with resentment toward autocratic regimes to trigger the massive popular outburst we know as the Arab Spring. Many such explosions are likely in the future, Chatham House suggests, if current trends continue as climate change and resource scarcity meld into a single reality in our world. A single provocative question from that group should haunt us all: “Are we on the cusp of a new world order dominated by struggles over access to affordable resources?” For the US intelligence community, which appears to have been influenced by the report, the response was blunt. In March, for the first time, Director of National Intelligence James R. Clapper listed “competition and scarcity involving natural resources” as a national security threat on a par with global terrorism, cyberwar and nuclear proliferation. “Many countries important to the United States are vulnerable to natural resource shocks that degrade economic development, frustrate attempts to democratize, raise the risk of regime-threatening instability, and aggravate regional tensions,” he wrote in his prepared statement for the Senate Select Committee on Intelligence. “Extreme weather events (floods, droughts, heat waves) will increasingly disrupt food and energy markets, exacerbating state weakness, forcing human migrations, and triggering riots, civil disobedience, and vandalism.” There was a new phrase embedded in his comments: “resource shocks.” It catches something of the world we’re barreling toward, and the language is striking for an intelligence community that, like the government it serves, has largely played down or ignored the dangers of climate change. For the first time, senior government analysts may be coming to appreciate what energy experts, resource analysts and scientists have long been warning about: the unbridled consumption of the world’s natural resources, combined with the advent of extreme climate change, could produce a global explosion of human chaos and conflict. We are now heading directly into a resource-shock world.

Conflict infringes on people’s freedoms because first, people can’t be free to set their own ends if they are dead, and secondly because war causes emergency crackdowns and regulations that restrict people’s freedoms unnecessarily. Plus, governments are the actors of the omni-lateral will and conflict endangers their stability, thus not preserving the value criterion or value.