### Advantage 1---Space Col

#### Private colonization is coming now --- but it wont be sustainable

**Rauenzahn et al., 20** [Brianna Rauenzahn is a JD candidate at Penn and writer for the regulatory review, Jasmine Wang is a writer for the regulatory review, Jamison Chung, Peter Jacobs, Aaron Kaufman, and Hannah Pugh, 6-6-2020, accessed on 9-12-2021, The Regulatory Review, "Regulating Commercial Space Activity", https://www.theregreview.org/2020/06/06/saturday-seminar-regulating-commercial-space-activity/]/HBisevac

But the transformation of spaceflight from a **public endeavor to a commercial industry** raises questions about how to **regulate the activities of private entities** in space. In 2014, the National Aeronautics and Space Administration (NASA) outsourced the task of transporting its astronauts, granting billion-dollar contracts to SpaceX and Boeing in a program called Commercial Crew. NASA astronauts Doug Hurley and Bob Behnken became the first crew to enter space under this public-private program. Over the next few decades, NASA plans to rely on this commercial partnership to pursue even more **ambitious goals**: returning to the moon and sending astronauts to Mars. But private companies have their own aspirations for outer space. Musk hopes to use SpaceX to start a human colony on Mars. Amazon’s Jeff Bezos also has his sights set on space colonization, and firms such as Bigelow Aerospace and Axiom Space plan to develop their own space stations. Some investors see opportunities in space tourism and mining. But these for-profit goals raise serious concerns about who can claim ownership of space resources and what law will govern private activity in uncharted frontiers. International space law is governed by a 1967 agreement known as the Outer Space Treaty⁠. The treaty allows all nations to use and explore the moon and celestial bodies, prohibits claims of sovereignty, and it requires nations to oversee the activities of private space companies. But existing space law has **not kept up with the growth in the private sector**, and the United States lacks a comprehensive regulatory regime. In anticipation of a growing commercial space industry, some experts and scholars call for more robust regulation. This week’s Saturday Seminar focuses on possible legal frameworks for governing commercial activity in outer space. In a working paper for the Mercatus Center, Laura Montgomery argues that the Federal Aviation Administration (FAA) and other federal agencies overreach their authority when they rely on Article VI of the Outer Space Treaty to deny private actors access to space. Montgomery contends that because Article VI is not self-executing, under existing U.S. Supreme Court precedent, it is not enforceable federal law. She argues that federal regulatory agencies cannot prohibit or regulate private space activities on the basis of enforcing the treaty. Montgomery similarly finds that Congress did not delegate authority to the FAA to deny private actors’ access to space. Instead, the legislative branch determines which activities by private actors “require Article VI authorization and supervision.” In a recent Air Force Law Review article responding to Laura Montgomery’s argument that Article VI of the Outer Space Treaty is unenforceable, the U.S. Department of Defense’s John S. Goehring claims that the United States has a direct responsibility to regulate such activity. Signatories to Article VI of the Outer Space Treaty—including the United States—have an affirmative obligation to authorize and continually supervise both governmental and non-governmental space activities, according to Goehring. Although he agrees with Montgomery that this obligation should not lead to the United States regulating “a musician playing the harp on the moon,” Goehring asserts that “activities such as launch, re-entry, operation and control of objects in orbit” should fall under governmental oversight. Adopting a regulatory view that ignores this obligation could have longstanding national security repercussions, he claims. Congress should encourage responsible behavior in space for the sake of U.S. national security, Goehring argues, rather than undermining Article VI. Daily space system operations often result in the presence of **space debris**, which can include anything from fallout left behind by satellite explosions and collisions to human generated waste from previous space missions. As commercial space traffic increases, the U.S. regulatory system must adapt and build a **strong foundation** for future debris mitigation, Marlon Sorge of the Aerospace Corporation argues. In a recent paper with the Center for Space Policy and Strategy, Sorge asserts that the federal government should re-evaluate its existing regulatory structure to maximize the potential benefits of commercial space activity and focus on debris mitigation. Through his proposed “one-stop-shop” model, Sorge explains that centralizing regulatory functions under one body could enable more efficient coordination between agencies as they tackle the rapid emergence of the commercial space sector. In a recent article in the Journal of Air Law and Commerce, Andrea J. Harrington of the U.S. Air Force Air Command and Staff College argues that there are not enough protections for space-related objects and sites under current international and cultural heritage law. Currently, there are no treaties that directly address the treatment and protection of space-related cultural heritage. U.S. government entities and nonprofits have proposed national protections for the Apollo landing sites, such as NASA’s Recommendations to Space-Faring Entities. Harrington claims that, although important, these recommendations are just “baby steps” since they do not apply to foreign actors. To preserve existing and future space-related cultural heritage, Harrington calls for a multistep process that would culminate in binding bilateral and multilateral treaties, which could eventually lead to the development of broad protections in customary international law. Without strong governing principles, “**outer space could turn into the ‘Wild West’** of the twenty-first century,” Georgetown University Law Center’s Hope Babcock writes in an article published in the Syracuse Law Review. Because people will inevitably capitalize on celestial resources, there ought to be consensus on which property regime should apply, she asserts. Finding that pure private property regimes would encourage competitive behavior that would exacerbate hostilities and inequalities between nations, Babcock argues instead for a modified version of the **public trust doctrine**. Such a regime would incorporate some private property management tools, allowing for sustainable and equitable extraterrestrial development, according to Babcock.

#### Expansion of PTD key to global space sustainable colonization

Babcock 19 [Hope M. Babcock, Professor of Law, Georgetown University Law Center, B.A., Smith College, L.L.B., Yale University; (2019; “ARTICLE: THE PUBLIC TRUST DOCTRINE, OUTER SPACE, AND THE GLOBAL COMMONS: TIME TO CALL HOME ET”; University of Michigan Libraries, Nexis Uni; *Syracuse University Law Review*, Vol. 69]/ISEE

[\*259] The doctrine also appears to be infinitely malleable. Original uses of the doctrine were restricted to only that "aspect of the public domain below the low-water mark on the margin of the sea and the great lakes, the waters over those lands, and the waters within rivers and streams of any consequence," 520and covered only traditional uses of those lands, like fishing and navigation. 521 Over time, the scope and application of the doctrine broadened to protect more public resources and different uses. 522 Thus, the doctrine expanded to protect new trust resources, such as dry sand beaches, inland lakes, groundwater, dry riverbeds, and wildlife, 523and passive uses of those resources, like scientific study. 524The original link to navigable water and tidelands disappeared. 525 Supporters of the [\*260] doctrine successfully advocated that it be applied to "wildlife, parks, cemeteries, and even works of fine art," 526 while arguing more recently its application to the atmosphere. 527

A doctrine that imposes a perpetual duty on the sovereign to preserve trust resources, prevents their alienation for private benefit, assures public access to them, and can be invoked by anyone seems particularly useful as a management tool in outer space. 528The fact that public access to trust resources is so central to the doctrine makes it reflective, not contradictory, of international space law's bar against appropriation of outer space and of the principle of space being the "province of all mankind." 529 It avoids the problems of alienation and exclusion associated with any of the management approaches associated with some form of private property and requires neither the creation of a new administrative authority nor the presence of a close-knit group of like-minded people. 530 Members of the public, both rich and poor, can invoke and enforce the doctrine as easily as the sovereign. 531 It is cost effective to the extent that no separate apparatus is required to implement it, and the doctrine has shown itself to be highly adaptable and innovative as different needs arise. 532 It could also fill the gap in international law with respect to managing celestial property. Therefore, of all the management approaches studied here, the PTD seems the most suited to keep order in space until a regulatory regime is imposed.

However, the doctrine provides no incentives for development of trust resources; rather, it might be used to limit or curtail that development, making it an imperfect, perhaps even counter-productive solution by itself to the extent that such development might be [\*261] beneficial. 533Modifying the doctrine to allow limited use of private property management approaches, like tradable development claims, might buffer that effect - a form of overlapping hybridity between one type of property, a commons, and a management regime from another, private property, enabled by application of the PTD.

Conclusion

"Only a legal system that accommodates both the human need for resources and the necessary preservation of mankind's common heritage can fulfill these criteria."534 The future is now with regard to the development of outer space and its resources - it is no longer a question of whether humans will engage in these activities, but how soon they will. Technically advanced countries and private commercial enterprises are probing outer space and preparing for landing on an asteroid or the moon to extract their resources. 535Speculators are selling deeds to the moon's surface and preparing to exploit the tourism potential that space offers. 536 But, the legal framework for managing these initiatives is almost nonexistent. 537International treaties came into being before all this activity began in earnest and national laws that might apply are stunted by jurisdictional quandaries like the absence of national boundaries in outer space. 538Thus, there is an urgency to figure out how to control what happens in outer space before its resources are irreparably damaged or permanently monopolized by powerful countries and individuals.

In the absence of regulation, much of the current debate centers on what property regime should be applied in outer space. 539The assumption is that by only allowing private property rights in space, countries and commercial enterprises will undertake the risks and costs of space development. 540However, unless international space law changes, it may prevent this from happening. If it changes, strong management controls will be necessary to prevent destruction or over-consumption of celestial resources, as well as monopolization and competitive behavior by participants, which could lead to hostilities and inequities.

[\*262] This Article examines various private property regimes, including those of less than full fee ownership, to see if any would avoid the conflict with the international prohibition on appropriation of outer space and its resources. It concludes that none will because each retains the right to exclude and each is insensitive to the treaties' equity concerns. In contrast, considering outer space to be common is consistent with international space law in both respects.

Hypothesizing that private property in outer space may yet prevail, this Article investigates different private property management approaches, such as the right of first possession, lotteries, and tradable development rights, to see if any would be cost effective, easy to implement and equitable, and would also prevent over-consumption, monopolization or the slide into rivalrous behavior. The Article concludes that each comes up short in some respect. Social norms as a management tool for property held in common, although compliant with international law, are also not up to the task. Instead, although ancient, the PTD, with its malleability, easy and cost-effective implementation and enforcement, non-consumption principle, and consistency with the goals that animate international space treaties, seems best suited to the task of protecting the public's interests in the global commons that is outer space as it has done for centuries in Earth-bound commons.

But, as its principal terrestrial use has been to protect trust resources from development, the doctrine needs some modification to encourage development of celestial resources. Hence, this Article suggests that modifying the PTD to allow the application of private property management tools, like tradable development rights, will not only allow development, but also will assure that when it happens, it will not be just profitable for a few, but will also be sustainable and equitable.

#### Colonization solves inevitable extinction.

Kovic '19 [Marko; March 2019; co-founder president of the Zurich Institute of Public Affairs Research; "The future of energy," https://osf.io/preprints/socarxiv/aswz9/download]

Existential risks are risks that might lead to the extinction of humankind [1]. Natural existential risks (such as asteroids that might crash into Earth) are basically constant. The risks of a giant asteroid crashing into Earth today is the same as it was 500 years ago. Anthropogenic, man-made existential risks, on the other hand, are growing in number and severity. They are a side-effect of technological progress: The more we develop technologically, the greater man-made existential risks become. Nuclear weapons, to name only one example, are a direct consequence of scientific and technological progress.

There are different approaches to existential risk mitigation. One approach is to develop targeted strategies for specific existential risks. If we want to reduce the existential risk posed by nuclear weapons, then we can and should develop specific strategies for that risk.

Another approach is to develop and pursue what can be called meta-strategies that target all existential risks at once. One of most effective meta-strategies for tackling existential risks in general is space colonization: If we manage to establish permanent and self-sustainable human habitats beyond Earth, then our proverbial existential eggs are not all in one basket anymore. For example, if disaster strikes on Earth, but there are billions of humans living on Venus and Mars, humankind would continue to exist even with Earth-humans gone.

Because of existential risks, a long-term future in which humankind still exists almost certainly has to be a future in which humankind has succeeded in colonizing space. Today, even though we regularly venture into space, we do not yet have space colonization capabilities. There are a number of technological challenges that we need to overcome in order to become capable of space colonization. One of those challenges is energy. There are several reasons why.

### Plan

#### States ought to establish an international public trust obligation towards protection of outer space as a refusal of the appropriation of outer space by private entities.

### Advantage 2---I LAW

#### Applying the doctrine to space embeds it into international law — solves multiple converging crisis in space, seas and Antarctica

**Boudreau, 17** (Thomas Boudreau, Ph.D., Salisbury University, 2017, accessed on 8-15-2021, Environmental and Earth Law Journal (EELJ): Vol. 7 : Iss. 1 , Article 2., "The Earth's Atmosphere As A Global Trust: Establishing Proportionate State Responsibility To Maintain, Restore And Sustain The Global Atmosphere", https://lawpublications.barry.edu/ejejj/vol7/iss1/2/, HBisevac)

In this regard, it is extremely relevant and interesting to note that the Justinian **idea of a public trust and the doctrine of Jus Publicum** is being **cited in a pioneering** and inevitably contested series of current cases in the United States and elsewhere. 62For instance, in very recent and contemporary times, there is a unique and relevant case in the United States Federal Court right now--in 2017--concerning the public trust doctrine. Quoting from the plaintiff's "Our Children's Trust" website (as an advocate in the case): "On November 10, 2016 Judge Ann Aiken issued an opinion and order denying the U.S. government and fossil fuel industry's motions to dismiss a constitutional climate change lawsuit filed by 21 youth. The decision means that the youth, age 9 to 20 and from all over the U.S., now have standing because their rights are at stake, and now their case is headed to trial. The youth had filed their constitutional climate lawsuit against the federal government in the U.S. District Court for the District of Oregon in 2015. Also acting as a plaintiff is world-renowned climate scientist Dr. James E. Hansen, serving as guardian for future generations and his granddaughter. Their complaint asserts that, through the government's [sic] affirmative actions in causing climate change, it has violated the youngest generation's constitutional rights to life, liberty, and [\*60] property, as well as failed to protect essential public trust resources." 63 This Oregon case, when decided at the District level, will undoubtedly be appealed. Even so, this pioneering case in the Federal Court right now indicated that, at the very least, the public trust doctrine is **alive and well**-- though still **contested**--in current Federal United States Courts. 64 Yet, the key point for our purposes is not necessarily the subsequent or contested nature of the public trusts doctrine in domestic jurisdictions. Rather, the key element in this analysis is that the **doctrine exists** in legal theory and practice across a **variety of jurisdictions** and has done so since ancient time. 65As such, it is an extant legal doctrine with an **enduring legal pedigree** in domestic jurisdictions from classical to current times that thus deserves **inclusion** as a key normative principle **in Earth Jurisprudence** as well. 66

IV. JUS PUBLICAN AND INTERNATIONAL LAW: THE GLOBAL COMMONS

The doctrine of Justinian's Jus Publican and public trusts is also **extremely relevant** in international law, especially in terms of already inspiring or regulating--to a greater or lesser extent-- three of the four global commons: **the oceans, outer space and** perhaps even **Antarctica**. 67For instance, the Doctrine of a Public Trust has also been used since the time of Grotius in international law to justify in theory and recognized through ensuing state practice the public nature and the ensuing freedom [\*61] of the seas. 68Yet, Grotius did not write in a historical or legal void. In his classic work, Mare Liberum, 69Grotius was profoundly influenced, in turn, by Roman commentators, jurists and even poets in declaring that the seas beyond territorial limits or control belong to everyone. 70 The oceans have had, and continue to have, a contested status in international law; yet Grotius' compelling arguments concerning the Freedom of the Seas has resonated down through the ages. In fact, the ideas found in Grotius's Mare Liberum can be found much later paraphrased in Ambassador's Pardo's articulation of the "Common Heritage of Humanity (Mankind)" concept that led to the initiation of the new Law of Sea negotiations. 71 In turn, the Convention on the Law of the Sea III (UNCLOS III) ratified in 1982 which states in its Preamble that one of its purposes is to: "develop the principles embodied in resolution 2749 (XXV) of 17 December 1970 in which the General Assembly of the United Nations solemnly declared inter alia that the area of the seabed and ocean floor and the subsoil thereof, beyond the limits of national [\*62] jurisdiction, as well as its resources, are the common heritage of mankind...." 72 Thus, UNCLOS III furthers, in part, the ancient and enduring doctrine of Jus Publicum, and establishes common or public resources and areas owned by all consisting of the areas of the oceans beyond the territorial seas and the areas of the seabed and ocean floor, which are beyond the limits of national jurisdiction; as originally conceived, mining of these areas are to be in parallel with private interests. UNCLOS III also states that the seas' resources, are the "common heritage of mankind" (Hereafter referred to as "Humanity"). Yet, after fully participating in the UNCLOS III negotiations, the United States under the new Regan administration in the early 1980s refused to sign the treaty UNCLOS. So, the United States continues to be outside of the treaty regime and doesn't has permanent seat on the International Seabed authority (ISA) where it would have the right of a veto of any pending action. 73So the legal status UNCLOS III is certainly contested, especially within the United States, though the ratification of the Convention has the full support of the mining interests and all for service branches of the Defense Department. 74Furthermore, there are some inconsistencies and even contractions as well between UNCLOS III and the doctrine of Jus Publicum, especially between its enclosure of more seas under national jurisdiction, as embodied in its concept and [\*63] application of Exclusive Economic zones (EEZ) and the traditional freedom of the seas which is still recognized. 75 The idea of the "Common Heritage of Mankind," is deservedly credited to Ambassador Pardo of Malta when he first spoke before the United Nations in 1967 about the need for a new law of the sea treaty. 76Before the Ambassador's speech, there were previous international treaties negotiated since the end of the World War II that dealt with the freedom of the seas and the oceans. 77Not surprisingly, such has been written in legal circles since Ambassador's speech about the "common heritage" concept and how it may overlap or differ from the Justinian doctrine, especially in the context of the global commons. 78This debate is too complex to fully resolve or even address here; so for the purposes of our present discussion, I will consider these two concepts as largely overlapping though different. For instance, the Jus Publicum doctrine clearly intended-- when created in Justinian Institutes --to includes the recognition and inclusion of a public domain owned by, and **available, to all**, i.e. the legal meaning of "public," as well as to any public property, place or thing.. So, public ownership is clearly not compatible with private ownership of the same place, property or thing, though [\*64] exceptions have been considered in more recent times. 79These exceptions have mostly dealt with the possible private right to use public spaces or places, while the ownership is keep by the "public." 80Furthermore, at the same time, the "Public Trust" doctrine of Justinian has legally evolved to clearly **require active fiduciary duties** in the domestic jurisdictions of states as well to "properties," land, designated places, parks, duties or rights as well. 81UNCLOS seems to incorporate both of these factors--the existence of the public domain as well as fiduciary duties to **preserve**, at least the regime **for future generations** and thus could be possibly and plausibly construed as a trust in a court of law. However, private mining rights are recognized by the Convention as well so this is certainly not a "pure" public trust, and nor should it be. 82From the beginning, UNCLOS was conceived as a [\*65] potential, and now actual, partnership between public and private interests, as well as developing and developed states. 83 The Treaty on Outer Space seeks to regulate another global commons, declaring in Article I that: "The exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of **all countries**, and shall be the province [territory] of all mankind." 84The treaty goes on to **outlaw** the **placement of weapons of mass destruction** in space and to encourage international cooperation in the **exploration** of the moon and other celestial bodies. 85

#### Scenario One---*Bioprospecting*

#### Spillover prevents bioprospecting. Independently, ATS breakdown agitates international tensions. Public Trust influence creates the regulatory framework to make sovereign rights indisputable.

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Issues within the ATS regime There are **elements internal** to the **Antarctic governance regime** itself that may **inhibit achievement** of its aims and pose a threat to the ATS in fulfilling its role as a political stabilizer. The growing membership and dilution from the original mind-set, increased involvement in commercial activities by states and the 8 progression of **sovereignty claims**, including to the Extended Continental Shelf (ECS), all **challenge** the **current governance regime**. The consensus model means decision-making is slow. It also creates difficulties due to the real and potential tensions between claimant states and non-claimant states, ATCPs and non ATCPs, and states and non-state organisations. This tends to mean that political agendas **drive issues**, not good ideas and scientific data. It also leads to a loss of urgency around many issues. Instruments within the ATS are not always consistent, operating independently of one another. Areas of jurisdiction of the Antarctic Treaty and the various instruments often differ. Similarly reconciling international regimes such as the Antarctic Treaty with the United Nations Convention on the Law of the Sea (UNCLOS) will, in the meantime, continue to test the current regime. The required consensus spans cultural, scientific and legal areas. This can be difficult to achieve with varying motivations for Consultative Party membership and national and commercial interests. Clashes of different cultural values and traditions are inevitable with new member states, who often articulate different views of Antarctica than that of the claimant states (Dodds 2012: 84). Whether the ATS can deal with a changing world has been reflected in recent issues related to **bioprospecting** and tourism. These failed to achieve consensus around new protocols, begging consideration of the risk of what might be lost if the ATS is changed too radically. The collapse of the ATS could lead to a **breakdown of cooperation** among states with interests in Antarctica and loss of environmental protection. A **free-for-all** would likely occur with the loss of protection the ATS gives through the freezing of sovereignty of claims, regulation of the marine resources in the Southern Ocean, reducing IUU fishing, and more. This risk should not prevent the striving for improvements to the Antarctic governance regime, so it remains fit to address contemporary challenges, just as the Antarctic Treaty was when originally conceived. The greatest governance challenge facing Antarctica is globally-driven climate change. Global weather and climate operate in an interrelated way with Antarctica’s environmental processes. This is another reason the Antarctic governance regime needs to be both regional (specific to Antarctica as an exceptional place) and global (protecting Antarctica’s **unique resources** and environment, involving the international community, and influencing activity elsewhere in the world that affects Antarctica). 9 2.4 Case Studies CASE STUDY I The Australian Extended Continental Shelf (ECS) On 24 May 2012 Australia made the Seas and Submerged Lands (Limits of Continental Shelf) Proclamation, that defines the outer limits of Australia’s continental shelf. The proclamation describes the 11 million square kilometres of seabed over which Australia can exercise exclusive rights to seabed resources. The area of ECS so defined is greater than the land mass of Australia. Australia was able to make this proclamation because it had fulfilled its obligations under UNCLOS. Two areas of Australia’s ECS extend south of 60° into the Antarctic Treaty area. The largest of these areas is the ECS arising from the Territory of Heard Island and McDonald Islands between Australia and South Africa. The other is from Macquarie Island between Tasmania and Antarctica. The very assertion of the ECS in Antarctica raises concerns about the long term commitment of Australia to the Madrid Protocol, as claiming rights to a continental shelf is in essence a claim to a resource right (Hemmings and Stephens 2010). For this reason it can be argued that an Australian Antarctic Territory ECS would not be a new claim or enlargement of an existing claim but simply an additional area of shelf accruing by virtue of developments of the law of the sea. Although Australia’s claims to maritime zones may have complied with international legal obligations and may eventually be held as legitimate, most significantly Australia has potentially disturbed the delicate compromise created by Article IV of the Antarctic Treaty. This forces the issue of Antarctic sovereignty into the limelight, and how it is to be managed in a way that is consistent with the ATS. The issue of resource rights is pressing especially in regards to the issue of bioprospecting and complicates the ATS approach, posing wider political challenges (Hemming and Stephens 2010). The mere fact that some Antarctic claimants are seeking to secure resource rights raises significant challenges for strategic interests in the greater Antarctic region. CASE STUDY II Bioprospecting Bioprospectors have been drawn to the Antarctic because its extreme environment has led to the evolution of a range of **physiological adaptations** (Jabour-Green and Nicol 2003). Antarctic biological resources are seen as potentially rich sources of raw materials for pharmaceutical and other industries. The interplay between public science and private commercial interest is a matter of ongoing debate in many areas of biological research. The influence of commercialisation on scientific research cannot be ignored. 10 The dilemma in the Antarctic context is that science is subject to management by the ATS while **bioprospecting is not** (Herber 2007). As bioprospecting is an activity with potentially both environmental and resource implications, the Antarctic Treaty parties need to determine a more comprehensive policy position, if not a **regulatory framework**. The Antarctic Treaty and associated agreements have **little to say** specifically on bioprospecting activities within the Treaty area. Consequently, Antarctic bioprospecting has elicited much debate within the Antarctic community. Key issues include benefit sharing between Antarctic Treaty parties, the free availability of scientific data originating in Antarctica, the potential environmental impacts, and how governments develop equitable benefit sharing arrangements and keep up with relevant policy developments. It is also attracting attention in international law because there is a **lack of clarity** in the interplay between sovereign rights over biological resources and intellectual property rights in inventions developed from those resources. Since activities are already being undertaken, patents have been filed and products developed, and there is increasing tension between Parties to come to a consensus on this issue. The situation is even more complex where sovereign **rights are disputed** or absent such as in Antarctica (Jabour-Green and Nicol 2003). Access, ownership and sharing of the benefits of resource exploitation are regulated by UNCLOS. Neither the Antarctic Treaty nor UNCLOS provides specific guidance for regulating bioprospecting, other than by linking together some of the fundamental principles contained within these instruments, such as conservation and rational management. This region is in the administrative custody of the ATS but the status of Antarctic resources is legally unclear. Other international regimes also have application, including the Agreement on Trade-Related Aspects of Intellectual Property, the Convention on Biological Diversity and UNCLOS. Further research is required to provide a solid basis for considering this complex and pressing issue. It encompasses scientific and commercial interests, environmental concerns, ethics and equity, and considerations relating to international law and policy. It also raises the question of the adequacy of the ATS to manage bioprospecting.

#### Bioprospecting causes global war over Antarctica

Doaa **Abdel-Motaal 17**, Doaa Abdel-Motaal was Deputy Chief of Staff of the World Trade Organization (WTO) in Switzerland, and advisor to the head of the organization on environmental issues and climate change. She was also Chief of Staff of the United Nations for International Fund for Agricultural Development (IFAD) in Italy. 2-21-2017, "Averting the Battle for Antarctica," Yale Journal, http://yalejournal.org/article\_post/averting-the-battle-for-antarctica/

Various forms of economic activities are gaining ground in Antarctica. Take tourism, for example, which has undergone exponential growth in recent years and is barely regulated by the Antarctic Treaty. In 2013–2014, nearly twenty-eight thousand tourists made landings on the continent, 30 percent of whom were American, 13 percent Australian, and 11 percent Chinese. This represents a doubling since 2000.[xxxii] Or take bioprospecting – the exploitation of Antarctica’s living biological resources. The discovery and commercialization of new products based on Antarctica’s biological riches is starting to flourish, similarly under limited treaty regulation.[xxxiii] Fishing activity continues to expand around the continent. In fact, the term ‘illegal, underreported, and unregulated’ fishing was first coined in the Antarctic to describe the plight of the Southern Ocean.[xxxiv] The world was quick to declare CCAMLR a success when, at the end of October 2016, after five years of negotiations, twenty-four countries and the European Union unanimously agreed to create the world’s biggest marine protected area (MPA) in Antarctica’s Ross Sea. But the famed MPA was carved around fishing interests.[xxxv] Iselin Bank, which is the Ross Sea’s main fishing ground for the lucrative Antarctic toothfish, and which is considered the most important ecological hotspot for seabirds and other wildlife, is not protected in the new reserve. Furthermore, about half of the sanctuary was already protected under other CCAMLR rules, with the MPA in that portion simply capturing the status quo. Clearly the MPA is better than nothing, but the widespread claim that it has succeeded in protecting Antarctica’s waters, is grossly exaggerated. In fact, it is not only the Southern Ocean that is suffering from poor environmental governance but Antarctica as a whole. On a continent with no indigenous habitants, where we are told there is no major commercial activity, and where mining is banned it is highly surprising that parties to the Antarctic Treaty would have only designated 1.5 percent of the continent’s ice-free territory as a protected area.[xxxvi] This statistic alone makes Antarctica the world’s least environmentally protected continent. In neighboring Australia, for example, 18 percent of the country has been declared a protected area. If the race for Antarctica continues to accelerate amid such limited governance, its fragile environment will be in serious peril. Triggers for a Bigger Battle So, will there be a bigger battle for Antarctica? The continent’s warming climate is likely to make its resources more accessible and its landmass potentially habitable. On March 24, 2015, a temperature of positive 17.5 degrees Celsius was recorded at Esperanza weather station on the northern tip of the Antarctic Peninsula, setting a record for the highest temperature ever recorded on the continent.[xxxvii] Antarctica’s climate experts cannot ascertain whether these changes are due to increased greenhouse gas concentrations since weather stations were only established on the continent in the 1950s. What is clear, however, is that the Antarctic Peninsula in particular is warming. As Antarctica warms and starts to become more habitable, many other parts of the globe will become increasingly uninhabitable. This could increase the pressure to develop and exploit the seventh continent. In addition, technological progress is steadily increasing our ability to access and inhabit Antarctica. In November 2015, the Australian Antarctic Division and Royal Australian Air Force flew a C-17A Globemaster to Antarctica.[xxxviii] The aircraft covered 3,450 kilometers in just over five hours carrying 12,340 kilograms of cargo and equipment, making it the largest aircraft to have reached the Wilkins Aerodrome on the western side of the continent. Opened in 2009, Belgium’s Princess Elizabeth Station, which represents state-of-the-art architecture in Antarctica, has successfully harnessed the power of wind and sun to achieve near-full energy autonomy.[xxxix] Similarly, some research stations in Antarctica are now growing their own food.[xl] Clearly the race for Antarctica is about to intensify and the world must prepare itself. It could be triggered by the rise of even bigger human settlements or the extraction of minerals before or after 2048. If such a conflict occurs, it will be one of the most complex and truly international contests for habitable space and mineral resources of modern times***.*** *It* will be a battle in which an entire continent will be up for grabs and which will take place against the complex history of the ATS and the unresolved “Question of Antarctica.” Peace in Antarctica is fragile at best*.*

#### Scenario Two---*Antarctica*

#### Expansion utilizes the “common heritage” principle---that solves multiple risks---revitalizes international law, forwards cooperation over science, and solves resource depletion---every Antarctic war scenario is dead in the water.

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The **common heritage** of mankind can be interpreted differently, for example ”developing countries interpreted it as ‘**common ownership’** (as in res commons) and socialist states as “common access”(Baslar 1998: 349). Baslar concludes that the common heritage of mankind as a theoretical framework should be **based on** the stewardship ethic and **p**ublic **t**rust **d**octrine, and is not to do with the Roman law concept of res (thing). It has already crept into the body of international law and appears in the Moon Treaty (1979) and UNCLOS. It constitutes “an abstract principle addressing general but not specific obligations with respect to the utilization of global commons beyond national jurisdiction” (Baslar 1998: 349). This would be problematic in the governance of Antarctica with the need for specific regulatory bodies, protocols and so on to manage access to and protect its resources. (d) The concept of Antarctica as a **global commons** is gaining favour. It was defined as such by the **W**orld **C**ommission on **E**nvironment and **D**evelopment. This was premised on Antarctica being the integral **driving force** behind global weather and climate that affect the whole planet. Global commons refers to “a region, or group of **valued resources**, protected from **exploitation** in the **interests** of the **global population and future** generations” (Jabour and Weber 2008). The absence of **sovereign rights** in Antarctica **enables governance** by an international treaty regime, utilising the wilderness value of Antarctica and the “common heritage of mankind” principle (Herber 2007: 26 - 34). The global commons concept is broader than the common heritage of mankind, with the activities of peace and science also providing benefits that transcend the boundaries of nations (Herber 2007: 21). There is a conflict between Antarctica as a global commons and it being a common heritage for all mankind. The common heritage concept is one in which Antarctica and its resources can be used by all states, akin to a common property resource with open access. It does not necessarily include the protection and preservation of its special role, or for future generations to enjoy (for example in driving the world’s climate, or sustaining ecosystems that are dependent on it). Those ideas are implied by a commons, where the resource is protected and maintained. A commons also is broader and can include such things as knowledge, culture and heritage values. Herber (2007:43) sees the primary goal of the ATS today as preserving the globally strategic atmospheric, oceanic, and wilderness commons resources of the continent. The interest of all mankind in a global commons gives everyone the **right** to be represented in its **governance**. The term “**tragedy of the commons**” was coined by Hardin (1968) and describes the result of behaviour of individuals acting in their own best self interests and 18 ignoring what is best for the whole group. Like the parable of Hardin’s pasture that was “open to all”, Antarctica conceived as a commons, without an **appropriate governance** regime preventing overuse of its resources, risks the unintentional tragedy of the destruction of the common area. “Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit - in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own interest in a society that believes in the freedom of the commons.” (Hardin 1968: 1244) The definitions of these concepts in the literature (in particular the common heritage of mankind and global commons) are far from clear. This suggests they are essentially contested concepts (Gallie 1956). Jabour (2010: 19) notes that the doctrines of global commons and common heritage of mankind can be inferred from the rhetoric of the Treaty and its subsequent legal instruments through which the use of resources are managed. However, she notes that the ATS does not support either in practice because “activities such as fishing and bioprospecting already return an exclusive reward for effort, with no benefit sharing arrangements”. The concepts of the common heritage of mankind and global commons also sit within a political framework of international treaties and law. This is why the interdependencies between bodies, their jurisdictions and mandates is relevant here, and greater alignment is needed. This applies to bodies within the ATS itself, and between those within the ATS and other international regimes (e.g. UNCLOS also applies in the Southern Ocean). In fact it is the very availability of such international law that could be used to provide access and **benefit** sharing to the **international community**, rather than using the ATS for such a purpose. This would discharge CCAMLR from this responsibility. With respect to bioprospecting, Herber (2006) notes how the UNCLOS provides both national rights to exclusive economic zones (the 200 nautical mile limit) and a global public good connotation for deep seabed mineral resources, with a related potential application to bioprospecting in the deep seabed.

#### Hotspots escalate---global nuclear war.

**GH**, 1-17-**2013**, (Gateway House foreign policy think-tank in Mumbai, independent, non-partisan and nonprofit organization makes policy recommendations flowing from serious scholarship in international affairs to the Indian government "Who Will Control the Antarctic?," Fair Observer, http://www.fairobserver.com/region/north\_america/who-will-control-antarctic///)HBJ

Even after 50 years of peaceful multilateral research initiatives, various nations would still like to seize Antarctica. Although annexation of the continent is now difficult, ongoing geopolitics might disable the Antarctic Treaty System (ATS) after it expires in 2048, or even before that date. If Antarctica is seized, either by force or deception, this can lead to a global conflict. The ATS refers to extensive multilateral accords which came into force in 1961. Various countries had vigorously pursued Antarctica during the Second World War to exploit its natural wealth and capture a prominent tactical location. To curb the mounting tensions, Antarctica was secured by accords (collectively termed the ATS) that only permitted peaceful activities; this guiding principle was later applied to the moon and outer space. The ATS emphasises the protection of the continent’s flora and fauna and its mineral and fuel reserves. It also aims to prevent any militarization of Antarctica. Numerous nations have cooperative scientific agreements on Antarctic research and many of them have set up an extensive network of research bases. The present disagreements over the Antarctic, which are likely to escalate, involve three blocs – pre-treaty claimants (PTCs), reserved claimants (RCs), and non-claimants (NCs). The PTCs are nations that have renounced earlier claims after acceding to the ATS. However, Antarctica remains a core issue for each of them and the PTCs are likely to attempt to redeem their lost claims. The RCs did not claim any Antarctic region during or before the 1961 treaties, but have reserved the claims that they will forward during the 2048 review. The NCs have exploration interests, but none have so far claimed regional rights. The PTCs of East Antarctica – a land-mass rich in mineral-fuel resources – are worried about the possibility of their claims being challenged by other nations. Australia (a PTC) runs three permanent stations – Mawson, Davis and Casey – in the so-called Australian Antarctic Territory (AAT). The AAT is rich in manganese ores, iron ores, coal and hydrocarbons. Australia is concerned about the growing activities of Russia and China in the AAT. Russia (an RC) has multiple stations in the AAT since the Soviet Union era. Moscow’s long-standing Antarctic presence makes it difficult for Canberra to protest. China (an NC) was a late entrant to the Antarctic race. It ventured into the AAT by establishing the Zhongshan station at Larsemann Hills in 1989. With meagre experience down south, China was passive in its early Antarctic years. Today, China is a global power with aims of developing a blue-water navy, and it has expressed a desire to exploit Antarctic’s mineral resources. The recently-built Chinese station Kunlun at Dome Argus, the highest location on Antarctica, is an example of Beijing’s ambitious Antarctic programme. Australia’s neighbour New Zealand, (a PTC), has interests in its old claim, the region of Ross Dependency, which is rich in off-shore oil reserves. In the near future, possibly by 2014, a South Korean station, Jang Bogo, will also come up at Ross Dependency. Despite preliminary scientific cooperation between New Zealand and South Korea on the project, the arrival of a competitor has alarmed Wellington. New Zealand is a close ally of the United States – the largest investor in Antarctica since the launch, in 1955, of Operation Deep Freeze, a series of U.S. military missions to study weather, geology and wildlife. New Zealand serves as a gateway to the U.S’s Antarctic missions at McMurdo and Amundsen-Scott stations. The McMurdo station lies in the Ross Dependency and is the largest base on the continent. McMurdo connects with Amundsen-Scott by a compacted snow highway – the McMurdo South Pole Highway. This highway passes adjacent to the Marie Byrd Land, a region that was unclaimed due to its geographical inaccessibility. Although not much is known about the fuel-mineral prospects of Marie Byrd Land, it is a potential claim of the U.S. It can be assumed that Australia, New Zealand and the U.S. will collectively try to defend their interests in East Antarctica. Across the Trans Antarctic Mountains lies the fiercely-contested region of West Antarctica. Despite the ATS suspending all claims until 2048, many contestants maintain physical proximity to strategic islands just above the Antarctic Circle. The French control the French Southern and Antarctic Islands. Australia controls the Heard Island and McDonald Islands, and Norway controls the Bouvet Island. Chile and Argentina are in natural close proximity to the southern land, which gives them quicker access. The United Kingdom governs the disputed Falkland Island and South Georgia and South Sandwich Islands. These islands were the main reason for the Falklands War of 1982 between the UK and Argentina. The control of these islands is an important advance in the UK’s ambitions for the south. The regional claims of Chile, Argentina and the UK (all PTCs) in West Antarctica overlap. The three also have conflicting common interests in Drake Passage, a water body that connects the Atlantic and Pacific Oceans south of South America. The islands to the south give the three nations access to contiguous underwater resources; they may also be the location for naval bases in the event of armed confrontations. The tensions over claims to the Antarctic are intensifying, and leading to newer alliances. After Australia was granted, in May 2012, an expanded seabed (consisting of the Kerguelen Plateau) by the UN Commission on the Limits of the Continental Shelf, the UK has been pushing for similar seabed expansion in the South Atlantic. Such expansions could convert international waters near the Antarctic Circle into exclusive economic zones. It also means that the Southern Ocean will be potentially exploited at latitudes close to the Antarctic Circle, especially in the ice-free Amundsen, Ross and Dumont d’Urville Seas, stealthily moving claimants nearer to the Antarctic mainland. India, non-aligned during the Cold War era, acknowledged the peaceful use of Antarctica. India has three research bases on Antarctica – Dakshin Gangotri (now partly defunct) and Maitri in Queen Maud Land (a Norwegian claim) and the newest Bharati in Princess Elizabeth Land (an Australian claim). So far India has not shown an interest in exploiting Antarctic resources, possibly to avoid any conflict in its littoral region. But the immediate concern for India is the absence of a policy to deal with competing multilateral claims to Antarctica, which may eventually escalate into a confrontation. In addition to the growing competition amongst countries to claim parts of Antarctica, the continent can also become the cause of a global ecological crisis. These are the likely scenarios: 1. Antarctica’s greatest natural resource is its gigantic fresh water reserves. The seabed prospecting rights granted to a few nations will eventually be opposed by adversaries. This will align nations with mutual interests in protecting their respective claims on mainland Antarctica. These polarised blocs could militarise the southern islands and their exclusive economic zones to create a circumpolar blockage in the Southern Ocean and further militarise Antarctica to protect their interests. Such a hostile situation may open a naval theatre in the Southern Ocean that cascades into a war. 2. Persistent high global temperatures will continue to release large volumes of fresh-water drift ice from the approximately 1.55 million square kilometres of coastal Antarctic ice shelves. The ice could be traded by the exclusive economic zones with water-scarce nations, creating a volatile global water economy. A global increase in demand for fresh-water may eventually lead to scavenging of Antarctic ice followed by further exploitation of its mineral-fuel resources. 3. The Southern Ocean plays a major role in thermohaline circulation – a conveyor like circulation of global oceans. The ocean consists of a unique water body called the Antarctic Bottom Water (AABW), the coldest and most oxygen-rich deep water body on Earth, and the ventilator of our planet. Excessive fishing and offshore drilling will decrease the AABW’s oxygen content and increase its temperature, eventually causing thermohaline circulation to shut down. This will aggravate disturbed oceanic winds, intensify El Niño events and lower agricultural yields. If the shutdown is sustained, it will lead to anoxic (depleted in oxygen concentration) oceans, ultimately leading to the extinction of some living organisms. These should be reasons enough for a non-claimant like India to take a lead role in developing global mechanisms to pre-empt any potential Antarctic conflicts well before 2048. A safer Antarctica is an imminent need for the entire world.

#### Solves every conflict.

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Cooperation on the scientific aspects of sensitive issues may sometimes be the only way to initiate a wider political dialogue. The soft power of science, and the universality of scientific methods, can be used to diffuse tensions even in ‘hard power’ scenarios, such as those relating to traditional military threats. For example, technologies to verify nuclear arms control agreements were a rare focus of joint working between the US and USSR during the Cold War.

Lessons from the Cold War are once again highly pertinent. In the run-up to the May 2010 Review Conference of the Nuclear Non-Proliferation Treaty (NPT), nuclear disarmament is firmly back on the international agenda. However, the timescale for disarmament is long, as illustrated by the history of negotiations over the Chemical Weapons Convention. After the Geneva Convention banned the use of chemical weapons in 1925, negotiations for a treaty banning their production and stockpiling did not start until the 1980s, and the convention entered into force only in 1997. Even now, stockpiles of chemical weapons in the US and Russia have yet to be destroyed.

So focusing in 2010 on the challenges of the final stages of a nuclear disarmament process may be premature. A more practical next step could be to establish the scientific requirements for the verification regime necessary to support future stages of negotiation (Pregenzer 2008). In 2008, the Norwegian Minister of Foreign Affairs suggested that a high-level Intergovernmental Panel on Nuclear Disarmament could be established (based on the model of the Intergovernmental Panel on Climate Change). This panel could begin by identifying the scientific and technical aspects of disarmament, and then set out a research agenda necessary to achieve them. International cooperation would be essential, both between nuclear and non-nuclear weapon states, as all would need to have confidence that reductions are taking place. The recent initiative between the UK and Norwegian governments on disarmament verifi cation sets a precedent here, and could be expanded to include additional States (VERTIC 2009).

However, security threats now extend beyond the military domain, with environmental security attracting particular attention (Abbott C, Rogers P & Sloboda S 2007). Essential resources, such as freshwater, cultivable land, crop yields and fish stocks, are likely to become scarcer in many parts of the world, increasing the risk of competition over resources within and between states (UNEP 2009). This could intensify as previously inaccessible regions, such as the Arctic Ocean, open up as a consequence of climate change and ice melt. Substantial parts of the world also risk being left uninhabitable by rising sea levels, reduced freshwater availability or declining agricultural capacity. Many of the regions that are vulnerable to the impacts of these multiple stresses are already the locus of existing instability and conflict (see Figure 2).

5 Conclusions The main conclusions to emerge from the discussions at the Royal Society/AAAS meeting were as follows:

5.1 The three dimensions of science diplomacy The concept of science diplomacy is gaining increasing currency in the US, UK, Japan and elsewhere. It is still a fluid concept, but can usefully be applied to the role of science, technology and innovation in three related areas:

• informing foreign policy objectives with scientific advice (science in diplomacy);   
• facilitating international science cooperation (diplomacy for science);   
• using science cooperation to improve international relations between countries (science for diplomacy).

5.2 Science and universal values Scientific values of rationality, transparency and universality are the same the world over. They can help to underpin good governance and build trust between nations. Science provides a non-ideological environment for the participation and free exchange of ideas between people, regardless of cultural, national or religious backgrounds.

5.3 The soft power of science Science is a source of what Joseph Nye terms ‘soft power’ (Nye 2004). The scientific community often works beyond national boundaries on problems of common interest, so is well placed to support emerging forms of diplomacy that require non-traditional alliances of nations, sectors and non-governmental organisations. If aligned with wider foreign policy goals, these channels of scientific exchange can contribute to coalition building and conflict resolution. Cooperation on the scientific aspects of sensitive issues—such as nuclear nonproliferation—can sometimes provide an effective route to other forms of political dialogue. Similarly the potential of science as an arena for building trust and understanding between countries is gaining traction, particularly in the Middle East and wider Islamic world (see Case study 1).

5.4 Motivations for science diplomacy Science diplomacy seeks to strengthen the symbiosis between the interests and motivations of the scientific and foreign policy communities. For the former, international cooperation is often driven by a desire to access the best people, research facilities or new sources of funding. For the latter, science offers useful networks and channels of communication that can be used to support wider policy goals. Foreign ministries should place greater emphasis on science within their strategies, and draw more extensively on scientific advice in the formation and delivery of policy objectives. In the UK, the appointment of Professor David Clary FRS as the Chief Scientific Adviser at the Foreign and Commonwealth Office creates an important opportunity to integrate science across FCO priorities, and develop stronger linkages with science-related policies in other government departments.

### Framing

#### Util Its good ---

#### 1---Actor spec—

#### a. governments have to aggregate since all collective actions incur tradeoffs that help some and hurt other, means based side constraints freeze action.

#### b. no act omission distinction for governments since policies create permissions and prohibitions so authorizing action cannot be an omission since the state assumes culpability in regulating the public domain, ie voting against something is still acting.

#### c. no intent foresight distinction— governments can’t have intent since they’re made up of multiple actors with separate motivations, ie some congress people might vote for something to gain votes while other actually think the bill is good.

#### Takes out and turns calc indicts, consequentialism might be hard but it’s not impossible, and the alternative is no action which is worse; and actor spec outweighs since different actors have different ethical standings.

#### 2--- Substitutability— only consequentialism explains necessary enablers.

Sinnott-Armstrong 92— Walter Sinnott-Armstrong, [Professor of practical ethics] 1992, “An Argument for Consequentialism” Dartmouth College Philosophical Perspectives

A moral reason to do an act is consequential if and only if the reason depends only on the consequences of either doing the act or not doing the act. For example, a moral reason not to hit someone is that this will hurt her or him. A moral reason to turn your car to the left might be that, if you do not do so, you will run over and kill someone. A moral reason to feed a starving child is that the child will lose important mental or physical abilities if you do not feed it. All such reasons are consequential reasons. All other moral reasons are non-consequential. Thus, a moral reason to do an act is non-consequential if and only if the reason depends even partly on some property that the act has independently of its consequences. For example, an act can be a lie regardless of what happens as a result of the lie (since some lies are not believed), and some moral theories claim that that property of being a lie provides amoral reason not to tell a lie regardless of the consequences of this lie. Similarly, the fact that an act fulfills a promise is often seen as a moral reason to do the act, even though the act has that property of fulfilling a promise independently ofits consequences. All such moral reasons are non-consequential. In order to avoid so many negations, I will also call them 'deontological'. This distinction would not make sense if we did not restrict the notion of consequences. If I promise to mow the lawn, then one consequence of my mowing might seem to be that my promise is fulfilled. One way to avoid this problem is to specify that the consequences of an act must be distinct from the act itself. My act of fulfilling my promise and my act of mowing are not distinct, because they are done by the same bodily movements.10 Thus, my fulfilling my promise is not a consequence of my mowing. A consequence of an act need not be later in time than the act, since causation can be simultaneous, but the consequence must at least be different from the act. Even with this clarification, it is still hard to classify some moral reasons as consequential or deontological,11 but I will stick to examples that are clear. In accordance with this distinction between kinds of moral reasons, I can now distinguish different kinds of moral theories. I will say that a moral theory is consequentialist if and only if it implies that all basic moral reasons are consequential. A moral theory is then non-consequentialist or deontological if it includes any basic moral reasons which are not consequential. 5. Against Deontology So defined, the class of deontological moral theories is very large and diverse. This makes it hard to say anything in general about it. Nonetheless, I will argue that no deontological moral theory can explain why moral substitutability holds. My argument applies to all deontological theories because it depends only on what is common to them all, namely, the claim that some basic moral reasons are not consequential. Some deontological theories allow very many weighty moral reasons that are consequential, and these theories might be able to explain why moral substitutability holds for some of their moral reasons: the consequential ones. But even these theories cannot explain why moral substitutability holds for all moral reasons, including the non-consequential reasons that make the theory deontological. The failure of deontological moral theories to explain moral substitutability in the very cases that make them deontological is a reason to reject all deontological moral theories. I cannot discuss every deontological moral theory, so I will discuss only a few paradigm examples and show why they cannot explain moral substitutability. After this, I will argue that similar problems are bound to arise for all other deontological theories by their very nature. The simplest deontological theory is the pluralistic intuitionism of Prichard and Ross. Ross writes that, when someone promises to do something, 'This we consider obligatory in its own nature, just because it is a fulfillment of a promise, and not because of its consequences.'12 Such deontologists claim in effect that, if I promise to mow the grass, there is a moral reason for me to mow the grass, and this moral reason is constituted by the fact that mowing the grass fulfills my promise. This reason exists regardless of the consequences of mowing the grass, even though it might be overridden by certain bad consequences. However, if this is why I have a moral reason to mow the grass, then, even if I cannot mow the grass without starting my mower, and starting the mower would enable me to mow the grass, it still would not follow that I have any moral reason to start my mower, since I did not promise to start my mower, and starting my mower does not fulfill my promise. Thus, a moral theory cannot explain moral substitutability if it claims that properties like this provide moral reasons.

#### 3--- Weighability— only consequentialism explains degrees of wrongness— you can only explain why breaking a promise to take a dying person to the hospital is worse than breaking a promise to meet for lunch by appealing to consequences.

#### 4--- Use epistemic modesty— that’s the probability of the framework being true times the magnitude of an impact under it.

#### a. substantively true: maximizes the probability of the most moral value; arguments against a framework mitigate offense under it but that mitigation is contingent, half the debate shouldn’t be thrown out just since someone’s 1% ahead on fwk.

#### b. clash: discourages debaters from ignoring contention level debate which means we get education about phil and the topic— topical ed outweighs since we only have 2 months for each topic; this is drop the arg.

#### 5---Evaluate consequences – not doing so is morally bankrupt

Daase and Friesendorf 10 (Daase; Christopher Daase; professor at the Goethe University Frankfurt and head of the program area International Organizations and International Law at the Peace Research Institute Frankfurt; Friesendorf; Cornelius Friesendorf; lecturer at the Goethe University Frankfurt and research fellow at the Peace Research Institute Frankfurt; “Rethinking Security Governance: the problem of unintended consequences”; Routledge; 2010; pp 205-207; <http://202.166.170.213:8080/xmlui/bitstream/handle/123456789/1343/Rethinking%20Security%20Governance%20The%20problem%20of%20unintended%20consequences%20by%20Christopher%20Daase.pdf?sequence=1&isAllowed=y#page=99>) [DTD]

Avoiding negative unintended consequences of security governance This book largely reflects an analytical understanding of security governance, not a normative one. Scholars like Anne-Marie Slaughter laud security governance as the most viable way of dealing with today’s problems (Slaughter 2004). This book, in contrast, started off from an agnostic point of view, describing security governance as a new mode of problem-solving and leaving open the question as to whether security governance efforts fulfill or frustrate policy objectives, and whether unintended consequences are positive or negative. But now, with the empirical results at hand, we move from the analytical to the normative. The chapters of this book have shown that many unintended consequences are negative, undermining the security of states, groups, and individuals (while at the same time creating new winners). This section briefly explores ways of avoiding negative unintended consequences of security governance. Not doing so would be the equivalent of researching climate change, nuclear technology, tourism, and many other issues that have negative consequences, without discussing opportunities for improvement. Offering clues is not the same as prescribing magic pills. For the issues discussed in this book, and for many other pressing contemporary problems, no magic pills are available, unfortunately. If traditional foreign policy causes negative unintended consequences (one example is the security dilemma during the Cold War), so does security governance. The chapters of this book may make sobering reading for anyone espousing security governance as the best contemporary policy mode. Even refined security governance tools such as targeted sanctions are not immune to unintended consequences, as Mikael Eriksson shows. There are many obstacles to avoiding costly unintended consequences of security governance. As the double effect phenomenon illustrates, unintended consequences are often the result of trade-offs. Also, analysts of unintended consequences have the benefit of hindsight; it is always easy to criticize afterwards. In contrast, policymakers must take decisions under conditions of insufficient and/or contradictory information and time pressure. Adding to these difficulties, there are political constraints, including public opinion, campaigns of opposition parties and transnational activist coalitions, and diverging interests among security governance stakeholders. Not doing anything may sometimes be better than doing something. But policymakers cannot be completely passive in the face of pressing problems, even if they wanted to. Also, one cannot do nothing: not intervening in an ongoing war has numerous political, economic, humanitarian, and normative unintended consequences. The “do no harm” principle should inform not only development work, but security governance as well (Aoi et al. 2007b: 274–275). But translating this mantra into practice is anything but easy. Complacency is another problem. Future generations in affluent countries will feel the effects of climate change, and poor people in poor countries are doing so already. Yet, most governments and ordinary citizens are unwilling to take drastic measures, such as change their lifestyles, in order to help slow down climate change. Hence, the “tragedy of the commons” will continue to haunt humanity (Hardin 1968). Short-term thinking and acting is not only, and not even primarily, a problem in “underdeveloped” countries. The short life cycle of democratically elected governments provides incentives to prioritize short-term gains over long-term costs – and many unintended consequences are visible only in the long run. As this book shows, international interventions to reduce the risk of violence, whether through sanctions, financial instruments, or the deployment of international security forces, yield unintended consequences. To avoid such consequences, preventing conflict in the first place would be the most logical approach. However, democratic systems provide few incentives for systematic conflict prevention (Schnabel 2002). The same mistakes are therefore repeated time and again (on the failure to learn from experience from past international rule of law efforts, see Carothers 2006