## 1

#### The standard is maximizing expected wellbeing.

#### 1] Actor spec—governments must use util because they don’t have intentions and are constantly dealing with tradeoffs—outweighs since different agents have different obligations—takes out calc indicts since they are empirically denied.

#### 2] Death is bad and outweighs – a] agents can’t act if they fear for their bodily security which constrains every ethical theory, b] it destroys the subject itself – kills any ability to achieve value in ethics since life is a prerequisite which means it’s a side constraint since we can’t reach the end goal of ethics without life

#### 3] Pleasure and pain are the starting point for moral reasoning—they’re our most baseline desires and the only things that explain the intrinsic value of objects or actions

Moen 16, Ole Martin (PhD, Research Fellow in Philosophy at University of Oslo). "An Argument for Hedonism." Journal of Value Inquiry 50.2 (2016): 267.

Let us start by observing, empirically, that **a widely shared judgment about intrinsic value** and disvalue **is that pleasure is intrinsically valuable and pain is intrinsically disvaluable**. On virtually any proposed list of intrinsic values and disvalues (we will look at some of them below), pleasure is included among the intrinsic values and pain among the intrinsic disvalues. This inclusion makes intuitive sense, moreover, for **there is something undeniably good about the way pleasure feels and something undeniably bad about the way pain feels**, and neither the goodness of pleasure nor the badness of pain seems to be exhausted by the further effects that these experiences might have. “Pleasure” and “pain” **are** here **understood inclusively**, as encompassing anything hedonically positive and anything hedonically negative. 2 The special value statuses of pleasure and pain are manifested in how we treat these experiences in our everyday reasoning about values. If you tell me that you are heading for the convenience store**, I might ask: “What for**?” This is a reasonable question, for when you go to the convenience store you usually do so, not merely for the sake of going to the convenience store, but for the sake of achieving something further that you deem to be valuable. You might answer, for example: “To buy soda.” This answer makes sense, for soda is a nice thing and you can get it at the convenience store. I might further inquire, however: “What is buying the soda good for?” This further question can also be a reasonable one, for it need not be obvious why you want the soda. You might answer: “Well, I want it for the pleasure of drinking it.” If I then proceed by asking “But what is the pleasure of drinking the soda good for?” the discussion is likely to reach an awkward end. **The reason is that the pleasure is not good for anything further; it is simply that for which going to the convenience store and buying the soda is good**. 3 As Aristotle observes: “**We never ask** [a man] **what** his **end is in being pleased, because we assume that pleasure is choice worthy in itself**.”4 Presumably, a similar story can be told in the case of pains, for if someone says “This is painful!” we never respond by asking: “And why is that a problem?” We take for granted that **if something is painful, we have a sufficient explanation of why it is bad**. If we are onto something in our everyday reasoning about values, it seems that **pleasure and pain are both places where we reach the end of the line in matters of value**. Although **pleasure and pain thus seem to be good candidates for intrinsic value and disvalue**, several objections have been raised against this suggestion: (1) that pleasure and pain have instrumental but not intrinsic value/disvalue; (2) that pleasure and pain gain their value/disvalue derivatively, in virtue of satisfying/frustrating our desires; (3) that there is a subset of pleasures that are not intrinsically valuable (so-called “evil pleasures”) and a subset of pains that are not intrinsically disvaluable (so-called “noble pains”), and (4) that pain asymbolia, masochism, and practices such as wiggling a loose tooth render it implausible that pain is intrinsically disvaluable. I shall argue that these objections fail. Though it is, of course, an open question whether other objections to P1 might be more successful, I shall assume that if (1)–(4) fail, we are justified in believing that P1 is true itself a paragon of freedom—there will always be some agents able to interfere substantially with one’s choices. The effective level of protection one enjoys, and hence one’s actual degree of freedom, will vary according to multiple factors: how powerful one is, how powerful individuals in one’s vicinity are, how frequent police patrols are, and so on. Now, we saw above that what makes a slave unfree on Pettit’s view is the fact that his master has the power to interfere arbitrarily with his choices; in other words, what makes the slave unfree is the power relation that obtains between his master and him. The difﬁculty is that, in light of the facts I just mentioned, there is no reason to think that this power relation will be unique. A similar relation could obtain between the master and someone other than the slave: absent perfect state control, the master may very well have enough power to interfere in the lives of countless individuals. Yet it would be wrong to infer that these individuals lack freedom in the way the slave does; if they lack anything, it seems to be security. A problematic power relation can also obtain between the slave and someone other than the master, since there may be citizens who are more powerful than the master and who can therefore interfere with the slave’s choices at their discretion. Once again, it would be wrong to infer that these individuals make the slave unfree in the same way that the master does. Something appears to be missing from Pettit’s view. If I live in a particularly nasty part of town, then it may turn out that, when all the relevant factors are taken into account, I am just as vulnerable to outside interference as are the slaves in the royal palace, yet it does not follow that our conditions are equivalent from the point of view of freedom. As a matter of fact, we may be equally vulnerable to outside interference, but as a matter of right, our standings could not be more different. I have legal recourse against anyone who interferes with my freedom; the recourse may not be very effective—presumably it is not, if my overall vulnerability to outside interference is comparable to that of a slave— but I still have full legal standing.68 By contrast, the slave lacks legal recourse against the interventions of one speciﬁc individual: his master. It is that fact, on a Kantian view—a fact about the legal relation in which a slave stands to his master—that sets slaves apart from freemen. The point may appear trivial, but it does get something right: whereas one cannot identify a power relation that obtains uniquely between a slave and his master, the legal relation between them is undeniably unique. A master’s right to interfere with respect to his slave does not extend to freemen, regardless of how vulnerable they might be as a matter of fact, and citizens other than the master do not have the right to order the slave around, regardless of how powerful they might be. This suggests that Kant is correct in thinking that the ideal of freedom is essentially linked to a person’s having full legal standing. More speciﬁcally, he is correct in holding that the importance of rights is not exhausted by their contribution to the level of protection that an individual enjoys, as it must be on an instrumental view like Pettit’s. Although it does matter that rights be enforced with reasonable effectiveness, the sheer fact that one has adequate legal rights is essential to one’s standing as a free citizen. In this respect, Kant stays faithful to the idea that freedom is primarily a matter of standing—a standing that the freeman has and that the slave lacks. Pettit himself frequently insists on the idea, but he fails to do it justice when he claims that freedom is simply a matter of being adequately (and reliably) shielded against the strength of others. As Kant recognizes, the standing of a free citizen is a more complex matter than that. One could perhaps worry that the idea of legal standing is something of a red herring here—that it must ultimately be reducible to a complex network of power relations and, hence, that the position I attribute to Kant differs only nominally from Pettit’s. That seems to me doubtful. Viewing legal standing as essential to freedom makes sense only if our conception of the former includes conceptions of what constitutes a fully adequate scheme of legal rights, appropriate legal recourse, justiﬁed punishment, and so on. Only if one believes that these notions all boil down to power relations will Kant’s position appear similar to Pettit’s. On any other view—and certainly that includes most views recently defended by philosophers—the notion of legal standing will outstrip the power relations that ground Pettit’s theory.

#### 4] Extinction outweighs

MacAskill 14 [William, Oxford Philosopher and youngest tenured philosopher in the world, Normative Uncertainty, 2014]

The human race might go extinct from a number of causes: asteroids, supervolcanoes, runaway climate change, pandemics, nuclear war, and the development and use of dangerous new technologies such as synthetic biology, all pose risks (even if very small) to the continued survival of the human race.184 And different moral views give opposing answers to question of whether this would be a good or a bad thing. It might seem obvious that human extinction would be a very bad thing, both because of the loss of potential future lives, and because of the loss of the scientific and artistic progress that we would make in the future. But the issue is at least unclear. The continuation of the human race would be a mixed bag: inevitably, it would involve both upsides and downsides. And if one regards it as much more important to avoid bad things happening than to promote good things happening then one could plausibly regard human extinction as a good thing.For example, one might regard the prevention of bads as being in general more important that the promotion of goods, as defended historically by G. E. Moore,185 and more recently by Thomas Hurka.186 One could weight the prevention of suffering as being much more important that the promotion of happiness. Or one could weight the prevention of objective bads, such as war and genocide, as being much more important than the promotion of objective goods, such as scientific and artistic progress. If the human race continues its future will inevitably involve suffering as well as happiness, and objective bads as well as objective goods. So, if one weights the bads sufficiently heavily against the goods, or if one is sufficiently pessimistic about humanity’s ability to achieve good outcomes, then one will regard human extinction as a good thing.187 However, even if we believe in a moral view according to which human extinction would be a good thing, we still have strong reason to prevent near-term human extinction. To see this, we must note three points. First, we should note that the extinction of the human race is an extremely high stakes moral issue. Humanity could be around for a very long time: if humans survive as long as the median mammal species, we will last another two million years. On this estimate, the number of humans in existence in the The future, given that we don’t go extinct any time soon, would be 2×10^14. So if it is good to bring new people into existence, then it’s very good to prevent human extinction. Second, human extinction is by its nature an irreversible scenario. If we continue to exist, then we always have the option of letting ourselves go extinct in the future (or, perhaps more realistically, of considerably reducing population size). But if we go extinct, then we can’t magically bring ourselves back into existence at a later date. Third, we should expect ourselves to progress, morally, over the next few centuries, as we have progressed in the past. So we should expect that in a few centuries’ time we will have better evidence about how to evaluate human extinction than we currently have. Given these three factors, it would be better to prevent the near-term extinction of the human race, even if we thought that the extinction of the human race would actually be a very good thing. To make this concrete, I’ll give the following simple but illustrative model. Suppose that we have 0.8 credence that it is a bad thing to produce new people, and 0.2 certain that it’s a good thing to produce new people; and the degree to which it is good to produce new people, if it is good, is the same as the degree to which it is bad to produce new people, if it is bad. That is, I’m supposing, for simplicity, that we know that one new life has one unit of value; we just don’t know whether that unit is positive or negative. And let’s use our estimate of 2×10^14 people who would exist in the future, if we avoid near-term human extinction. Given our stipulated credences, the expected benefit of letting the human race go extinct now would be (.8-.2)×(2×10^14) = 1.2×(10^14). Suppose that, if we let the human race continue and did research for 300 years, we would know for certain whether or not additional people are of positive or negative value. If so, then with the credences above we should think it 80% likely that we will find out that it is a bad thing to produce new people, and 20% likely that we will find out that it’s a good thing to produce new people. So there’s an 80% chance of a loss of 3×(10^10) (because of the delay of letting the human race go extinct), the expected value of which is 2.4×(10^10). But there’s also a 20% chance of a gain of 2×(10^14), the expected value of which is 4×(10^13). That is, in expected value terms, the cost of waiting for a few hundred years is vanishingly small compared with the benefit of keeping one’s options open while one gains new information.

## 2

#### Xi is tightening control over the PLA but completing goals are critical.

Krishnan 21 – Ananth, 11/18/21, [‘Xi tightened control over the PLA’, TheHindu, <https://www.thehindu.com/news/international/xi-tightened-control-over-the-pla/article37549460.ece>] Justin

The new resolution on history passed last week by China’s ruling Communist Party has said that President Xi Jinping had tightened control over the military to address the party’s “obviously lacking” leadership of the armed forces under his predecessors.

The full text of the resolution, released on Tuesday evening, listed some of the actions taken by the People’s Liberation Army (PLA) under Mr. Xi, who is also the chairman of the Central Military Commission. These included what the document described as “major operations related to border defence”.

No specifics

It did not specify what those major operations were. China has unresolved land borders with India and Bhutan. In April 2020, the PLA mobilised two divisions and carried out multiple transgressions across the Line of Actual Control (LAC) in Eastern Ladakh, sparking the worst crisis along the border in many years. Talks to resolve the tensions are still on-going.

“The armed forces have remained committed to carrying out military struggles in a flexible manner to counter military provocations by external forces, and they have created a strong deterrent against separatist activities seeking ‘Taiwan independence,’” the resolution said.

“They have conducted major operations related to border defence, protecting China’s maritime rights, countering terrorism and maintaining stability, disaster rescue and relief, fighting COVID-19, peacekeeping and escort services, humanitarian assistance, and international military cooperation.”

Last week’s resolution on history was only third such document putting forth the official view on party history, following resolutions passed by Mao Zedong in 1945 and Deng Xiaoping in 1981.

The new resolution dealt more with the future than the past. It essentially reaffirmed the official view on history, saying that the “basic points and conclusions” of past resolutions “remain valid to this day.”

It repeated the conclusion reached in 1981 on Mao’s errors noting that “mistakes were made” and that “Mao Zedong’s theoretical and practical errors concerning class struggle in a socialist society became increasingly serious” leading to the disasters of the Cultural Revolution.

Criticism of predecessors

Much of the new resolution focuses on emphasising Mr. Xi’s leadership and calling for the party to support his “core” status. It only briefly mentioned Mr. Xi’s predecessors Jiang Zemin and Hu Jintao, and implicitly critcised some aspects of their leadership including on military matters.

“For a period of time, the party’s leadership over the military was obviously lacking,” it noted. “If this problem had not been completely solved, it would not only have diminished the military’s combat capacity, but also undermined the key political principle that the party commands the gun.”

The document said Mr. Xi’s leadership had tightened supervision on the military including boosting “troop training and battle preparedness”, and it repeated China’s stated goals of completing the modernisation of its armed forces by 2035 and building a “world class” military by 2050, which observers see as meaning on par with the U.S.

‘Working vigorously’

“To build strong people’s armed forces, it is of paramount importance to uphold the fundamental principle and system of absolute party leadership over the military, to ensure that supreme leadership and command authority rest with the party Central Committee and the Central Military Commission (CMC), and to fully enforce the system of the CMC chairman assuming overall responsibility,” the resolution said, adding that “setting their sights on this problem, the Central Committee and the CMC have worked vigorously to govern the military with strict discipline in every respect.”

#### The commercial space sector is one of the PLAs central goals – the plan is a 180.

Bartholomew & Cleveland 19 – Carolyn and Robin, 4/25/19, Chairmen and Vice Chairmen. Section is written from Michael A. McDevitt, US Congressperson, [“HEARING ON CHINA IN SPACE: A STRATEGIC COMPETITION?,” <https://www.uscc.gov/sites/default/files/transcripts/April%2025%2C%202019%20Hearing%20Transcript%20%282%29.pdf>] Justin

As the Chairman said, China is determined to become a leading space power, which requires continuing to boost its innovation capabilities, both in its civilian and military sectors. The People’s Liberation Army is closely involved in most if not every aspect of China’s space program, from helping formulate and execute national space goals to overseeing China’s human spaceflight program. Coverage of China’s space program must treat seriously the implications of the reality that in many cases the boundaries between the military and civil silos of China’s program are thin, if they exist at all.

Our second panel today will address the application of what China calls its “military-civil fusion” strategy to its space sector. Military-civil fusion, a strategic concept designed to harness civilian sector innovation to power China’s military and technological modernization with the goal of leapfrogging the United States and becoming a technological powerhouse. Space has been designated as an especially important sector for military-civil fusion, and the impacts of this campaign on China’s burgeoning commercial space sector—itself a recipient of generous government support and protection—will be crucial as Chinese companies increasingly seek to compete in the international marketplace. Military-civil fusion is especially worthy of attention due to its continued reliance on technology transfer, by hook or by crook, to fuel China’s industrial and military growth.

Our third and final panel today will examine China’s military space and counterspace activities. Since its direct-ascent kinetic antisatellite test in 2007, which was responsible for a large amount of all space debris currently in Earth’s orbit, China has continued to invest in a variety of offensive antisatellite capabilities. Indeed, China’s counterspace arsenal contains many options: earlier this month, Acting Secretary of Defense Patrick Shanahan said China “has exercised and continues to develop” jamming capabilities; is deploying directed-energy counterspace weapons; has deployed an operational ground-based antisatellite missile system; and is prepared to use cyberattacks against U.S. space systems.

#### That triggers backlash – they don’t support restrictions on the space sector and will do everything to convince leaders not to do the plan.

Cheng 14 [Dean Cheng, Senior Research Fellow in the Asia Studies Center at the Heritage Foundation, Former Senior Analyst at the China Studies Division of the Center for Naval Analyses, Former Senior Analyst with Science Applications International Corporation, “Prospects for U.S.-China Space Cooperation”, Testimony before the Committee on Commerce, Science, and Transportation, United States Senate, 4/9/2014, https://www.heritage.org/testimony/prospects-us-china-space-cooperation]

At the same time, space is now a sector that enjoys significant political support within the Chinese political system. Based on their writings, the PLA is clearly intent upon developing the ability to establish “space dominance,” in order to fight and win “local wars under informationized conditions.”[8] The two SOEs are seen as key parts of the larger military-industrial complex, providing the opportunities to expose a large workforce to such areas as systems engineering and systems integration. It is no accident that China’s commercial airliner development effort tapped the top leadership of China’s aerospace corporations for managerial and design talent.[9] From a bureaucratic perspective, this is a powerful lobby, intent on preserving its interests. China’s space efforts should therefore be seen as political, as much as military or economic, statements, directed at both domestic and foreign audiences. Insofar as the PRC has scored major achievements in space, these reflect positively on both China’s growing power and respect (internationally) and the CCP’s legitimacy (internally). Efforts at inducing Chinese cooperation in space, then, are likely to be viewed in terms of whether they promote one or both objectives. As China has progressed to the point of being the world’s second-largest economy (in gross domestic product terms), it becomes less clear as to why China would necessarily want to cooperate with other countries on anything other than its own terms. Prospects for Cooperation Within this context, then, the prospects for meaningful cooperation with the PRC in the area of space would seem to be extremely limited. China’s past experience of major high-technology cooperative ventures (Sino–Soviet cooperation in the 1950s, U.S.–China cooperation in the 1980s until Tiananmen, and Sino–European space cooperation on the Galileo satellite program) is an unhappy one, at best. The failure of the joint Russian–Chinese Phobos–Grunt mission is likely seen in Beijing as further evidence that a “go-it-alone” approach is preferable. Nor is it clear that, bureaucratically, there is significant interest from key players such as the PLA or the military industrial complex in expanding cooperation.[10] Moreover, as long as China’s economy continues to expand, and the top political leadership values space efforts, there is little prospect of a reduction in space expenditures—making international cooperation far less urgent for the PRC than most other spacefaring states. [FOOTNOTE] [10]It is worth noting here that the Chinese Ministry of Foreign Affairs is not a part of the CCP Politburo, a key power center in China. Thus, the voice of the Ministry of Foreign Affairs is muted, at best, in any internal debate on policy. [END FOOTNOTE] If there is likely to be limited enthusiasm for cooperation in Chinese circles, there should also be skepticism in American ones. China’s space program is arguably one of the most opaque in the world. Even such basic data as China’s annual space expenditures is lacking—with little prospect of Beijing being forthcoming. As important, China’s decision-making processes are little understood, especially in the context of space. Seven years after the Chinese anti-satellite (ASAT) test, exactly which organizations were party to that decision, and why it was undertaken, remains unclear. Consequently, any effort at cooperation would raise questions about the identity of the partners and ultimate beneficiaries—with a real likelihood that the PLA would be one of them.

#### An unhinged PLA triggers Himalayan war – goes global

Chellaney 17 [Dr. Brahma Chellaney, Professor of Strategic Studies at the Center for Policy Research and Fellow at the Robert Bosch Academy, PhD in International Studies from Jawaharlal Nehru University, “Why the Chinese Military’s Rising Clout Troubles Xi Jinping”, The National, 9/9/2017, https://www.thenational.ae/opinion/why-the-chinese-military-s-rising-clout-troubles-xi-jinping-1.626815?videoId=5754807360001]

China’s president Xi Jinping has stepped up his domestic political moves in the run-up to the critical 19th national congress of the Chinese Communist Party next month, but he is still struggling to keep the People’s Liberation Army (PLA) in line. China’s political system makes it hard to get a clear picture, yet Mr Xi’s actions underscore the troublesome civil-military relations in the country. Take the recent standoff with India that raised the spectre of a Himalayan war, with China threatening reprisals if New Delhi did not unconditionally withdraw its forces from a small Bhutanese plateau, which Beijing claims is Chinese territory. After 10 weeks, the face-off on the Doklam Plateau ended with both sides pulling back troops and equipment from the site on the same day, signalling that Beijing, not New Delhi, had blinked. The mutual-withdrawal deal was struck just after Mr Xi replaced the chief of the PLA’s joint staff department. This key position, equivalent to the chairman of the US joint chiefs of staff, was created only last year as part of Mr Xi’s military reforms to turn the PLA into a force “able to fight and win wars”. The Doklam pullback suggests that the removed chief, Gen Fang Fenghui, who has since been detained for alleged corruption, was an obstacle to clinching a deal with India. To be sure, this was not the first time that the PLA’s belligerent actions in the Himalayas imposed diplomatic costs on China. A classic case happened when Mr Xi reached India on a state visit in September 2014. He arrived on Indian prime minister Narendra Modi’s birthday with a strange gift for his host, a predawn Chinese military encroachment deep into India’s northern region of Ladakh. The encroachment, the worst in many years in terms of the number of intruding troops, overshadowed Mr Xi’s visit. It appeared bizarre that the military of an important power would seek to mar the visit of its own head of state to a key neighbouring country. Yet Chinese premier Li Keqiang’s earlier visit to New Delhi in 2013 was similarly preceded by a PLA incursion into another part of Ladakh that lasted three weeks. Such provocations might suggest that they are intentional, with the Chinese government in the know, thus reflecting a preference for blending soft and hard tactics. But it is also possible that these actions underscore the continuing “disconnect between the military and the civilian leadership” in China that then US defence secretary Robert Gates warned about in 2011. During his 2014 India trip, Mr Xi appeared embarrassed by the accompanying PLA encroachment and assured Mr Modi that he would sort it out upon his return. Soon after he returned, the Chinese defence ministry quoted Mr Xi as telling a closed-door meeting with PLA commanders that “all PLA forces should follow the president’s instructions” and that the military must display “absolute loyalty and firm faith in the party”. Recently Xi conveyed that same message yet again when he addressed a parade marking the 90th anniversary of the PLA’s creation on August 1, 1927. Donning military fatigues, Mr Xi exhorted members of his 2.3-million-strong armed forces to “unswervingly follow the absolute leadership of the party.” Had civilian control of the PLA been working well, would Mr Xi repeatedly be demanding “absolute loyalty” from the military or asking it to “follow his instructions”? China does not have a national army; rather the party has an army. So the PLA has traditionally sworn fealty to the party, not the nation. Under Mr Xi’s two immediate predecessors, Hu Jintao and Jiang Zemin, the PLA gradually became stronger at the expense of the party. The military’s rising clout has troubled Mr Xi because it hampers his larger ambition. As part of his effort to reassert party control over the military, Mr Xi has used his anti-corruption campaign to ensnare a number of top PLA officers. He has also cut the size of the ground force and established a new command-and-control structure. But just as a dog’s tail cannot be straightened, asserting full civil control over a politically ascendant PLA is proving unachievable. After all, the party depends on the PLA to ensure domestic order and sustain its own political monopoly. The regime’s legitimacy increasingly relies on an appeal to nationalism. But the PLA, with its soaring budgets and expanding role to safeguard China’s overseas interests, sees itself as the ultimate arbiter of nationalism. To make matters worse, Mr Xi has made many enemies at home in his effort to concentrate power in himself, including through corruption purges. It is not known whether the PLA’s upper echelon respects him to the extent to be fully guided by his instructions. In the past decade, the PLA’s increasing clout has led China to stake out a more muscular role. This includes resurrecting territorial and maritime disputes, asserting new sovereignty claims, and using construction activity to change the status quo. China’s cut-throat internal politics and troubled civil-military relations clearly have a bearing on its external policy. The risks of China’s rise as a praetorian state are real and carry major implications for international security.

#### Extinction.

Caldicott 17 – Helen, 2017, Founder of Physicians for Social Responsibility [“The new nuclear danger: George W. Bush's military-industrial complex,” The New Press]//Elmer

The use of Pakistani nuclear weapons could trigger a chain reac­tion. **Nuclear-armed India, an ancient enemy, could respond** in kind. China, India's hated foe, could react if India used her nuclear weapons, triggering a nuclear [war] ~~holocaust~~ on the subcontinent. If any of either **Russia** or **America**'s 2,250 strategic weapons on hair-trigger alert were launched either **accidentally** or **purposefully** in response, **nuclear winter** would ensue, meaning the **end of most life on earth**.

## Case

### AT Bataille

#### Empirics is a sufficient justification for action

Owen 02 Owen, Reader of Political Theory at the University of Southampton, 2002 (David, “Re-orienting International Relations: On Pragmatism, Pluralism and Practical Reasoning,” Millennium, Vol. 31, No. 2)

Commenting on the ‘philosophical turn’ in IR, Wæver remarks that ‘**[a] frenzy for words like “epistemology” and “ontology**” often **signals this philosophical turn**’, although he goes on to comment that these terms are often used loosely.4 However, loosely deployed or not, it is clear that debates concerning ontology and epistemology play a central role in the contemporary IR theory wars. In one respect, this is unsurprising since it is a characteristic feature of the social sciences that periods of disciplinary disorientation involve recourse to reflection on the philosophical commitments of different theoretical approaches, and there is no doubt that such reflection can play a valuable role in making explicit the commitments that characterise (and help individuate) diverse theoretical positions. Yet, such a philosophical turn is not without its dangers and I will briefly mention three before turning to consider a confusion that has, I will suggest, helped to promote the IR theory wars by motivating this philosophical turn. The first danger with the philosophical turn is that **it has an inbuilt tendency to prioritise issues of ontology and epistemology over explanatory** and/or interpretive **power** as if the latter two were merely a simple function of the former. But while **the** **explanatory** and/or interpretive **power** of a theoretical account **is not** wholly independent of its ontological and/or epistemological commitments (otherwise criticism of these features would not be a criticism that had any value), it is by no means clear that it is, in contrast, wholly **dependent on these philosophical commitments**. Thus, for example, one need not be sympathetic to rational choice theory to recognise that it can provide powerful accounts of certain kinds of problems, such as the tragedy of the commons in which dilemmas of collective action are foregrounded. It may, of course, be the case that the advocates of rational choice theory cannot give a good account of why this type of theory is powerful in accounting for this class of problems (i.e., how it is that the relevant actors come to exhibit features in these circumstances that approximate the assumptions of rational choice theory) and, if this is the case, it is a philosophical weakness—but this does not undermine the point that, for a certain class of problems, **rational choice theory may** **provide the best account available to us**. In other words, while the critical judgement of theoretical accounts in terms of their ontological and/or epistemological sophistication is one kind of critical judgement, it is not the only or even necessarily the most importantkind. The second danger run by the philosophical turn is that because **prioritisation of ontology and epistemology** promotes theory-construction from philosophical first principles, it **cultivates a theory-driven** rather than problem-driven **approach to IR**. Paraphrasing Ian Shapiro, the point can be put like this: since it is the case that there is always a plurality of possible true descriptions of a given action, event or phenomenon, the challenge is to decide which is the most apt in terms of getting a perspicuous grip on the action, event or phenomenon in question given the purposes of the inquiry; yet, from this standpoint, ‘theory-driven work is part of a reductionist program’ in that it ‘dictates always opting for the description that calls for the explanation that flows from the preferred modelor theory’.5 The justification offered for this strategy rests on the mistaken belief that it is necessary for social science because general explanations are required to characterise the classes of phenomena studied in similar terms. However, as Shapiro points out,this is to misunderstand the enterprise of science since ‘whether there are general explanations for classes of phenomena is a question for social-scientific inquiry, not to be prejudged before conducting that inquiry’.6 Moreover, **this strategy easily slips into the promotion of the pursuit of** **generality over** that of **empirical validity**. The third danger is that the preceding two combine to encourage the formation of a particular image of disciplinary debate in IR—what might be called (only slightly tongue in cheek) ‘the Highlander view’—namely, an image of warring theoretical approaches with each, despite occasional temporary tactical alliances, dedicated to the strategic achievement of sovereignty over the disciplinary field. It encourages this view because **the** turn to, and **prioritisation of, ontology and epistemology stimulates the idea that there can only be one theoretical approach which gets things right**, namely, the theoretical approach that gets its ontology and epistemology right. **This image feeds** back into IR exacerbating the first and second dangers, and so **a potentially** **vicious circle** arises.

**Expenditure as a strategy can't cope with the changing face of capitalism- it sanitizes neoliberalism.**

**Gaux 90** (JEAN-JOSEPH,  Laurence H. Favrot Professor Emeritus of French Studies  @ Rice Yale French Studies, No. 78, On Bataille (1990), pp. 206-224)   
Everything suggests that **Bataille was unable to articulate** the my- stical **tension toward sovereign self-consciousness** "without form and mode," "pure expenditure" (224) with a utopia of social life **that would make it possible, nor to explain in a developed capitalist soci- ety** the **consumption of the surplus beyond its reinvestment in pro- duction**. Now it is quite clear that **today's capitalism has come a long way from the Calvinist ethic** that presided at its beginning. The val- ues of thrift, sobriety and asceticism no longer have the place that they held when Balzac could caricature the dominant bourgeois men- tality with the characters of pere Grandet or the usurer Gobseck. **It is doubtful** that the spirit of **capitalism**, which according to Weber is  expressed with an almost classical purity in Benjamin Franklin's principles ("he who kills a five shilling coin assassinates all that it could have produced: entire stacks of sterling pounds") **cited by Bataille, 163, could** today **be considered the spirit of the times**. Un- doubtedly, **the pace at which** all residual sacred **elements inherited from feudalism are eliminated has quickened**. But **hasn't contempo- rary society undergone a transformation of the ethic of consumption, desire, and pleasure that renders the classical** (Weberian) analyses of the spirit of capitalism (to which Bataille subscribes) **inadequate**? If the great opposition between the sacred and the profane no longer structures social life, if communal, sacrificial, and glorious **expendi- ture has been replaced by private expenditure**, it is no less true that advanced capitalism seems to exceed the principle of restricted econ- omy and utility that presided at its beginning. **No society has "wasted" as much as contemporary capitalism**. What is the form of this waste, of this excess? **These questions strike** directly at the **historical situation and philosophical signification of Bataille's thought**. Is it not clear that his passion for the "notion of expenditure,"-which, beginning in 1933, is the matrix of all his economic reflections to come-emerge precisely at a turning point in the history of capitalism, in the 1920s and 1930s, which also saw the appearance of Lukacs and Heidegger?2 Can we not perceive within the principles of secularization and re- stricted economics that were the strength of early capitalism an inter- nal conflict that undermines them, and puts capitalism in contradic- tion with itself ? (209-210)

**Post-date on Bataille matters-capitalism has shifted and outflanked his expenditure theory**

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(Mayfair Mei‐hui  Putting Global Capitalism in Its Place Economic Hybridity, Bataille, and Ritual Expenditure1  Current Anthropology  Vol. 41, No. 4, August/October )

**Scholars** such as Jean‐Joseph Goux (1998) **have pointed to a troubling overlap between Bataille’s views on luxury** and sacrificial expenditure **and postmodern consumer capitalism**. Consumer **capitalism is also predicated on** massive **consumption and waste rather than on the thrift**, asceticism, and accumulation **against which Bataille directed his theory** of expenditure. It exhibits potlatch features in **the tendency for businesses to give goods away** in the hope that “supply creates its own demand”; it **collapses the distinction between luxury and useful goods** and **between need and desire** (Goux 1998). Unlike modernist capitalism, postmodern **consumer capitalism is driven by consumption rather than production. Thus, Bataille’s vision of** the **ritual destruction** of wealth as **defying the principles** of accumulative and productive capitalism **does not address this different phase** of consumer capitalism, whose contours have only become clear since his death in 1962.

**Bataille’s form of transgression is incomplete and future-oriented, which offers no opportunity for reflection**

**Surkis, 1996** [Judith, doctoral candidate in the History department at Cornell University at time of writing, No Fun and Games Until Someone Loses and Eye: Transgression and Masculinity in Bataille and Foucault, Diacritics 26.2, 18-20, The Johns Hopkins University Press, project MUSE]

Foucault upholds Bataille as an always already "sovereign" figure who marks the limits of (Foucault's) philosophical language. He urges that "the sovereignty of these experiences must surely be recognized some day, and we must try to assimilate them: not to reveal their truth--a ridiculous pretension with respect to words that form our limits--but to serve as a basis for finally liberating our language" [38-39]. In representing and forming the limits of Foucault's discourse, Bataille offers a glimpse of a future "liberation" to Foucault. He insistently positions Bataille beyond himself, figuring him as a horizon to reach toward. In effect, Foucault ignores how, as we have seen in the conclusion to Erotism, Bataille remains on the near rather than the far side of the limit. In "Preface," Bataille takes on the character of the convulsed or lost woman's body which appears so frequently in his own writings: "Bataille's language . . . continually breaks down at the center of its space, exposing in his nakedness, a visible and insistent subject who had tried to keep language at arms length, but who now finds himself thrown by it, exhausted upon [End Page 23] [Begin Page 25] the sands of that which he can no longer say" [39]. Foucault's description of the exposed, "naked," and "visible" subject is significant in light of Bataille's own discussions of the role of naked figures in the dynamic of erotic transgression. **Bataille's language provides the necessary, visible figure in and through whom Foucault can "witness" the possibility of his own transgression.** Bataille's convulsed (figurative) body marks the limit and makes the possibility of its transgression visible to Foucault. David Carroll, in his discussion of "Preface," comments that "there is no doubt in Foucault's mind that the philosophers of transgression have achieved this [sovereign thought], that the liberation of thought and discourse has already occurred" [188]. Carroll argues that, "through this mimetic identification with Bataille and others, Foucault guarantees in advance his own critical power and gathers the spoils of victory from a battle fought by others" [188]. Thus, in Carroll's interpretation, as in my own, Foucault must figure Bataille's transgression as an event that has already occurred. I would argue that beyond simply supporting Foucault's discourse, Bataille, as a figure who marks both the limit and its rupture, actually allows Foucault to envision his own (future) transgression. However, although **Bataille** furnishes the necessary "image" of transgression, he **does not complete the project Foucault has in mind; Bataille's transgression**--like that of the erotic object--**remains incomplete**. **The form of "the philosophy of eroticism" lies in the future**--Bataille's own project notwithstanding. Foucault asserts that "**no form of reflection** yet developed, **no** established **discourse, can supply its model, its foundation, or** even **the** riches of its **vocabulary**" [40]. He reiterates Bataille's own hope that the theorization of the subjective experience of eroticism, exemplified by "the language of sexuality," will mark a path toward the transgression of conventional philosophical discourse. **Bataille is** here positioned as already **beyond language** and, as a result, in need of Foucault's theoretical elucidation

#### They double turn themselves – their reading of Bataille undermines his revolutionary purpose

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So, although Bataille’s essay is ostensibly about Sade, and in particular ‘the brilliance and suffocation that the Marquis de Sade tried so indecently to provoke’ (VE, 93; BR, 149), it is also a reflection on the same effects in Bataille. When Bataille writes about Sade he is never writing only about Sade but also about himself. He is concerned with two dominant reactions to Sade: the violent rejection of Sade’s works and the admiration of Sade’s works. The first reaction is probably more prevalent and more familiar, so familiar that Simone de Beauvoir could write an article entitled ‘Must we Burn Sade?’ in 1951.6 However, Sade has also had his admirers and this was particularly true of when Bataille was writing. The surrealists had rediscovered Sade, along with Lautréamont, as a proto-surrealist. For Bataille it was Sade’s ‘most open apologists’ (VE, 92; BR, 148) which concerned him more because, as he commented in his later work Eroticism (1957), ‘Those people who used to rate de Sade as a scoundrel responded better to his intentions than his admirers do in our own day: de Sade provokes indignation and protest, otherwise the paradox of pleasure would be nothing but a poetic fancy’ (E, 180). Those who reject Sade respond better to his intentions than his admirers do, because his admirers find, or make, Sade acceptable. They turn the paradox of pleasure, where pleasure for Sade always turns on pain, into a ‘poetic fancy’. Rather than Sade having an impact on how we think about the world his admirers make him into part of a ‘thoroughly literary enterprise’ (VE, 93; BR, 149). There is little doubt that Bataille had the surrealists in mind when he wrote that ‘The behaviour of Sade’s admirers resembles that of primitive subjects in relation to their king, whom they adore and loathe, and whom they cover with honours and narrowly confine’ (VE, 92; BR, 148). When the surrealists transformed Sade into a literary precursor they were not only establishing their avant-garde credentials by appropriating him, they were also making his work available as a work of literature. Sade could eventually become a part of the literary canon, and his scandalous works could be imprisoned within the library and the bookshop. Bataille has also faced similar gestures of rejection and appropriation, which is no doubt why he considered so much to be at stake in the reading of Sade. During his lifetime Bataille was first rejected by the surrealists, being expelled from the group in 1929, and then later rejected by existentialism, when Jean-Paul Sartre described him as a case needing psychoanalysis.7 He had alienated himself from the two dominant radical movements of French and European intellectual life at the time, condemning himself to a marginal existence. Even when he was admired this admiration led to an unacknowledged appropriation of his work. Lacan would draw on Bataille’s writings which analysed the violence essential to sexuality to develop his concept of jouissance, a shattering enjoyment that is ‘beyond the pleasure principle’.8 Despite using Bataille’s work Lacan did not make direct reference to it, and Bataille’s contribution to Lacan’s thought was erased.9 In Chapter 1 I will try to recover some of Bataille’s distinctiveness from this Lacanian appropriation. It would be after his death that there would be steady increase in the number of Bataille’s admirers, and all too often they would treat him as part of a thoroughly literary enterprise. Although these admirers make powerful claims for the importance of Bataille, comparing him to Joyce or seeing him as the heir of Catholic decadence,10 this power is still limited to a literary power. We can resist these gestures of rejection and appropriation of Bataille by examining how he resists them when they are applied to Sade. Bataille was rightly pessimistic about this resistance: ‘In fact even the gesture of writing, which alone permits one to envisage slightly less conventional human relations, a little less crafty than those of so-called intimate friendships – even this gesture of writing does not leave me with an appreciable hope’ (VE, 91; BR, 147). However, although Bataille was without ‘appreciable hope’ he could not surrender Sade to his admirers any more than we can surrender Bataille. Firstly, Bataille analysed and tested the limits of the gestures of rejection and appropriation. He argued that despite the fact that they appear as opposites, in fact whether Sade is rejected or admired he is actually treated in the same way. When Sade is rejected he is immediately expelled but when he is appropriated he is first assimilated and then expelled, and the result is the same in both cases. These processes treat Sade as a ‘foreign body’ (VE, 92; BR, 148) which must be expelled to maintain purity. Rejection is more open about this act and more open about the horror the foreign body provokes. Appropriation is a more complex gesture which uses the foreign body, first assimilating it and then gaining pleasure from expelling it. For those who assimilated Sade he was only ‘an object of transports of exaltation to the extent that these transports facilitate his excretion (his peremptory expulsion)’ (VR, 92; BR, 148). This process has also happened to Bataille as well as many other ‘extreme’ or ‘transgressive’ writers and artists. They are put to use to produce a controlled pleasure by being appropriated and then excreted. In this way we can come to terms with the most extreme works and actually exploit the scandal they provoke. However, this appropriation can never completely control the foreign body or make it completely safe for the cultural market place. The foreign body that cannot be dealt with is the one that still remains despite being expelled. Both Bataille and Sade play the foreign body that exists on the limit, that cannot be safely contained within or held outside. As Bataille explains, these gestures try to excrete Sade but Sade offers an economy that wallows in excrement. This will open a thought of the heterogeneous, of ‘unassimilable elements’ (VE, 99; BR, 155), which can neither be rejected nor appropriated. It also means that Bataille cannot be either rejected or appro- priated: to reject Bataille is to fail to read him but to become an apologist for Bataille, to celebrate him,11 is also to fail to read him. What Bataille requires is a reading that respects the heterogeneity of his thought, a thought that is of and at the limit. In this book I will explore this reading to argue that any introduction to Bataille has to try and negotiate with his heterogeneity without simply excreting it. What we have seen is that we can only arrive at Bataille through Sade, because it is Sade who poses the problem of the foreign body. For Bataille there are two tendencies in Sade’s writings: firstly, ‘an irruption of excremental forces’ (VE, 92; BR, 148) and secondly, ‘a corresponding limitation’ (VE, 93; BR, 149). These two tendencies are in conflict, with the excremental forces challenging the limitations that arise from their eruption. The two tendencies are also reflected in the reception of Sade, which has responded to the eruption of his writings with limitations by either rejecting them or confining them by admiration. Instead Bataille analyses eruption as the essential movement of Sade’s writings and as the destruction of all limitations. In this way he tries to free Sade from the limitations imposed by his readers. The ‘violent excitation’ (VE, 101; BR, 158) of Sade’s work shakes those who reject it and those who try to appropriate it. It threatens to overflow the limitations in which they try to confine Sade. Bataille is also an irruptive force of violent excitation, and this accounts for the excitement of reading him. The irruptive forces which are condensed in Bataille’s works threaten to destroy any reading that imposes a sense on Bataille or tries to place him within limits. To do so is to destroy the thought of freedom that is central to all of Bataille’s work. If we do not read Bataille as a thinker of freedom then we do not read him at all. He has to be read between the gestures of rejection and appropriation for the heterogeneity of his writings and the heterogeneity he exposes at work in all writings to be uncovered. For Bataille ‘the certainty of incoherence in reading, the inevitable crumbling of the soundest constructions, is the deep truth of books’ (ON, 184). Bataille’s objective is to expose all writing to the violent excitation of the heterogeneo

### Cap Good

#### Extinction is bad under your fw- it prevents access to future resistance methods, our the ability to embrace excess, or oppose capitalism

#### Cap is good:

#### 1] It’s sustainable – data proves we’re entering the golden age

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The past 30 years have seen immense progress **in improving the quality of life for much of humanity**. Extreme poverty — the number of people living on less than $1.90 per day — has fallen by nearly two-thirds, from 1.9 **billion to** around 650 **million**. Life expectancy has risen in most of the world, along with literacy and access to education, while infant mortality has fallen. Despite perceptions to the contrary, **the average person born today is likely to have access to more opportunities and have a better quality of life than at any other point in human history**. Much of this increase in human wellbeing has been propelled by rapid economic growth driven largely by state-led industrial policy, particularly in poor-to-middle income countries. However, this growth has come at a cost: between 1990 and 2019, global emissions of CO2 **increased by 56%.** Historically, economic growth has been closely linked to increased energy consumption — and increased CO2 emissions in particular — leading some to argue that a more prosperous world is one that necessarily has more impacts on our natural environment and climate. There is a lively academic debate about our ability to “absolutely decouple” emissions and growth — that is, the extent to which the adoption of clean energy technology can allow emissions to decline while economic growth continues. Over the past 15 years, however, **something has begun to change.** Rather than a 21st century dominated by coal that energy modelers foresaw, **global coal use peaked in 2013 and is now in structural decline**. We have succeeded in making clean energy cheap, with solar power and battery storage costs falling 10-fold since 2009. The world produced more electricity from clean energy — solar, wind, hydro, and nuclear — than from coal over the past two years. And, according to some major oil companies, **peak oil is upon us** — not because we have run out of cheap oil to produce, but because demand is falling and companies expect further decline as consumers increasingly shift to electric vehicles. The world has long been experiencing a relative **decoupling** between economic growth and CO2 emissions, with the emissions per unit of GDP **falling for the past 60 years**. This is the case even in countries like **India and China** that have been undergoing rapid economic growth. But relative decoupling alone is inadequate in a world where global CO2 emissions need to peak and decline in the next decade to give us any chance at limiting warming to well below 2℃, in line with Paris Agreement targets. Thankfully, there is increasing evidence that the world is on track **to absolutely decouple CO2 emissions and economic growth** — with global CO2 emissions potentially having peaked in 2019 **and unlikely to increase substantially in the coming decade**. While an emissions peak is just the first and easiest step towards eventually reaching the net-zero emissions required to stop the world from continuing to warm, it demonstrates that linkages between emissions and economic activity are not an immutable law, but rather simply a result of our current means of energy production. In recent years we have seen more and more examples of absolute decoupling — economic growth accompanied by falling CO2 emissions. Since 2005, 32 countries with a population of at least one million people **have absolutely decoupled** emissions from economic growth, both for terrestrial emissions (those within national borders) and consumption emissions (emissions embodied in the goods consumed in a country). This includes the United States, Japan, Mexico, Germany, United Kingdom, France, Spain, Poland, Romania, Netherlands, Belgium, Portugal, Sweden, Hungary, Belarus, Austria, Bulgaria, El Salvador, Singapore, Denmark, Finland, Slovakia, Norway, Ireland, New Zealand, Croatia, Jamaica, Lithuania, Slovenia, Latvia, Estonia, and Cyprus. Figure 1, below, shows the declines in territorial emissions (blue) and increases in GDP (red). To qualify as having experienced absolute decoupling, we require countries included in this analysis to pass four separate filters: a population of at least one million (to focus the analysis on more representative cases), declining territorial emissions over the 2005-2019 period (based on a linear regression), declining consumption emissions, and increasing real GDP (on a purchasing power parity basis, using constant 2017 international $USD). We chose not to include 2020 in this analysis because it is not particularly representative of longer-term trends, and consumption and territorial emissions estimates are not yet available for many countries. There is a wide range of rates of economic growth between 2005-2019 among countries experiencing absolute decoupling. Somewhat counterintuitively, there is no significant relationship between the rate of economic growth and the magnitude of emissions reductions within the group. **While it is unlikely that there is not at least some linkage between the two factors, there are plenty of examples of countries (e.g., Singapore, Romania, and Ireland) experiencing both extremely rapid economic growth and large reductions in CO2 emissions.** One of the primary criticisms of some prior analyses of absolute decoupling is that they ignore **leakage**. Specifically, the offshoring of manufacturing from high-income countries over the past three decades to countries like China has led to “illusory” drops in emissions, where the emissions associated with high-income country consumption are simply shipped overseas and no longer show up in territorial emissions accounting. There is some truth in this critique, as there was a large increase in emissions embodied in imports from developing countries between 1990 and 2005. After 2005, however, structural changes in China and a growing domestic market led to a reversal of these trends; the amount of emissions “exported” from developed countries to developing countries **has actually declined over the past 15 years.** This means that, for many countries, both territorial emissions and consumption emissions (which include any emissions “exported” to other countries) **have jointly declined**. In fact, on average, consumption emissions have been declining slightly faster than territorial emissions since 2005 in the 32 countries we identify as experiencing absolute decoupling. Figure 2, below, shows the change in consumption emissions (teal) and GDP (red) between 2005 and 2019. There is a pretty wide variation in the extent to which these countries have reduced their territorial and consumption emissions since 2005. Some countries — such as the UK, Denmark, Finland, and Singapore – have seen territorial emissions fall faster than consumption emissions, while the US, Japan, Germany, and Spain (among others) have seen consumption emissions fall faster. Figure 3 shows reductions in consumption and territorial emissions for each country, with the size of the dot representing the size of the population in 2019. **Absolute decoupling is possible.** There is no physical law requiring economic growth — and broader increases in human wellbeing — to necessarily be linked to CO2 emissions. All of the **services that we rely on today that emit fossil fuels** — electricity, transportation, heating, food — can in principle **be replaced by near-zero carbon alternatives**, though these are more mature in some sectors (electricity, transportation, buildings) than in others (industrial processes, agriculture).

#### 2] Tech dematerialization secures sustainability.

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There is **no shortage** of examples of dematerialization. I chose the ones in this chapter because they illustrate a set of fundamental principles at the intersection of business, economics, innovation, and our impact on our planet. They are:

We do want more all the time, but **not more resources**. Alfred Marshall was right, but William Jevons was wrong. Our wants and desires keep growing, evidently without end, and therefore so do our economies. But our use of the earth’s resources **does not**. We do want more beverage options, but we don’t want to keep using more aluminum in drink cans. We want to communicate and compute and listen to music, but we don’t want an arsenal of gadgets; we’re happy with a single smartphone. As our population increases, we want more food, but we don’t have any desire to consume more fertilizer or use more land for crops.

Jevons was correct at the time he wrote that total British demand for coal was increasing even though steam engines were becoming much more efficient. He was right, in other words, that the price elasticity of demand for coal-supplied power was greater than one in the 1860s. But he was wrong to conclude that this would be permanent. Elasticities of demand can change over time for several reasons, the most fundamental of which is **technological change**. Coal provides a clear example of this. When fracking made natural gas much cheaper, total **demand** for coal in the United States **went down** even though its price decreased.

With the help of **innovation** and **new technologies**, economic growth in America and other rich countries—growth in all of the wants and needs that we spend money on—has become **decoupled** from resource **consumption**. This is a recent development and a **profound** one.

Materials cost money that companies locked in competition would rather **not spend**. The root of Jevons’s mistake is simple and **boring**: resources cost **money**. He realized this, of course. What he didn’t sufficiently realize was how strong the **incentive** is for a company in a contested market to **reduce** its spending on **resources** (or anything else) and so eke out a bit more profit. After all, a penny saved is a penny earned.

Monopolists can just pass costs on to their customers, but companies with a lot of competitors can’t. So American farmers who battle with each other (and increasingly with tough rivals in other countries) are eager to cut their spending on land, water, and fertilizer. Beer and soda companies want to minimize their aluminum purchases. Producers of magnets and high-tech gear run away from REE as soon as prices start to spike. In the United States, the 1980 Staggers Act removed government subsidies for freight-hauling railroads, forcing them into **competition** and **cost cutting** and making them all the more eager to not have expensive railcars sit idle. Again and again, we see that **competition** spurs **dematerialization**.

There are multiple paths to dematerialization. As profit-hungry companies seek to use fewer resources, they can go down four main paths. First, they can simply find ways to use **less** of a **given material**. This is what happened as beverage companies and the companies that supply them with cans teamed up to use less aluminum. It’s also the story with American farmers, who keep getting bigger harvests while using less land, water, and fertilizer. Magnet makers found ways to use fewer rare earth metals when it looked as if China might cut off their supply.

Second, it often becomes possible to **substitute** one resource for **another**. Total US coal consumption started to decrease after 2007 because fracking made natural gas more attractive to electricity generators. If nuclear power becomes more popular in the United States (a topic we’ll take up in chapter 15), we could use both less coal and less gas and generate our electricity from a small amount of material indeed. A kilogram of uranium-235 fuel contains approximately 2–3 million times as much energy as the same mass of coal or oil. According to one estimate, the total amount of energy that humans consume each year could be supplied by just seven thousand tons of uranium fuel.

Third, companies can use **fewer molecules** overall by making better use of the materials they **already own**. Improving CNW’s railcar utilization from 5 percent to 10 percent would mean that the company could cut its stock of these thirty-ton behemoths in half. Companies that own expensive physical assets tend to be fanatics about getting as much use as possible out of them, for clear and compelling financial reasons. For example, the world’s commercial airlines have improved their load factors—essentially the percentage of seats occupied on flights—from 56 percent in 1971 to more than 81 percent in 2018.

Finally, some materials get replaced by **nothing** at all. When a telephone, camcorder, and tape recorder are separate devices, three total microphones are needed. When they all collapse into a smartphone, only one microphone is necessary. That smartphone also uses no audiotapes, videotapes, compact discs, or camera film. The iPhone and its descendants are among the world champions of dematerialization. They use vastly less metal, plastic, glass, and silicon than did the devices they have replaced and don’t need media such as paper, discs, tape, or film.

If we use more renewable energy, we’ll be replacing coal, gas, oil, and uranium with **photons** from the **sun** (solar power) and the **movement** of **air** (wind power) and water (hydroelectric power) on the earth. All three of these types of power are also among dematerialization’s **champions**, since they use up essentially **no resources** once they’re up and running.

I call these four paths to dematerialization slim, swap, optimize, and evaporate. They’re not mutually exclusive. Companies can and do pursue all four at the same time, and all four are going on all the time in ways both obvious and subtle.

Innovation is **hard** to **foresee**. Neither the fracking revolution nor the world-changing impact of the iPhone’s introduction were well understood in advance. Both continued to be underestimated even after they occurred. The iPhone was introduced in June of 2007, with no shortage of fanfare from Apple and Steve Jobs. Yet several months later the cover of Forbes was still asking if anyone could catch Nokia.

Innovation is not **steady** and **predictable** like the orbit of the Moon or the accumulation of interest on a certificate of deposit. It’s instead inherently jumpy, uneven, and **random**. It’s also **combinatorial**, as Erik Brynjolfsson and I discussed in our book The Second Machine Age. Most new technologies and other innovations, we argued, are combinations or recombinations of preexisting elements.

The iPhone was “just” a cellular telephone plus a bunch of sensors plus a touch screen plus an operating system and population of programs, or apps. All these elements had been around for a while before 2007. It took the vision of Steve Jobs to see what they could become when combined. Fracking was the combination of multiple abilities: to “see” where hydrocarbons were to be found in rock formations deep underground; to pump down pressurized liquid to fracture the rock; to pump up the oil and gas once they were released by the fracturing; and so on. Again, none of these was new. Their effective combination was what changed the world’s energy situation.

Erik and I described the set of innovations and technologies available at any time as **building blocks** that ingenious people could combine and recombine into useful new configurations. These new configurations then serve as more blocks that later innovators can use. Combinatorial innovation is exciting because it’s unpredictable. It’s not easy to foresee when or where powerful new combinations are going to appear, or who’s going to come up with them. But as the number of both building blocks and innovators increases, we should have **confidence** that more breakthroughs such as fracking and smartphones are ahead. Innovation is highly decentralized and largely uncoordinated, occurring as the result of **interactions** among **complex** and **interlocking** social, technological, and economic systems. So it’s going to keep surprising us.

As the Second Machine Age progresses, dematerialization **accelerates**. Erik and I coined the phrase Second Machine Age to draw a contrast with the Industrial Era, which as we’ve seen transformed the planet by allowing us to overcome the limitations of muscle power. Our current time of great progress with all things related to **computing** is allowing us to **overcome** the **limitations** of our mental power and is **transformative** in a different way: it’s allowing us to **reverse** the Industrial Era’s bad habit of taking **more** and **more** from the earth every year.

Computer-aided design tools help engineers at packaging companies design generations of aluminum cans that keep getting lighter. Fracking took off in part because oil and gas exploration companies learned how to build **accurate** computer **models** of the rock formations that lay deep underground—models that predicted where hydrocarbons were to be found.

Smartphones took the place of many separate pieces of gear. Because they serve as GPS devices, they’ve also led us to print out many fewer maps and so contributed to our current trend of using less paper. It’s easy to look at generations of computer paper, from 1960s punch cards to the eleven-by-seventeen-inch fanfold paper of the 1980s, and conclude that the Second Machine Age has caused us to chop down ever more trees. The year of peak paper consumption in the United States, however, was 1990. As our devices have become more capable and interconnected, always on and always with us, we’ve sharply turned away from paper. Humanity as a whole probably hit peak paper in 2013.

As these examples indicate, computers and their kin help us with all four paths to **dematerialization**. Hardware, software, and networks let us slim, swap, optimize, and evaporate. I contend that they’re the **best tools** we’ve **ever invented** for letting us tread more **lightly** on our planet.

All of these principles are about the **combination** of technological **progress** and **capitalism**, which are the first of the two pairs of forces causing **dematerialization**.

#### 6] Capitalism solves war – its anti-imperialist.

Mousseau 19, Michael. "The end of war: How a robust marketplace and liberal hegemony are leading to perpetual world peace." International Security 44.1 (2019): 160-196. Props to DML for finding. (Professor in the School of Politics, Security, and International Affairs at the University of Central Florida)//Elmer

Is war becoming obsolete? There is wide agreement among scholars that war has been in sharp decline since the defeat of the Axis powers in 1945, even as there is little agreement as to its cause.1 Realists reject the idea that this trend will continue, citing states' concerns with the “security dilemma”: that is, in anarchy states must assume that any state that can attack will; therefore, power equals threat, and changes in relative power result in conflict and war.2 Discussing the rise of China, Graham Allison calls this condition “Thucydides's Trap,” a reference to the ancient Greek's claim that Sparta's fear of Athens' growing power led to the Peloponnesian War.3 This article argues that there is no Thucydides Trap in international politics. Rather, the world is moving rapidly toward permanent peace, possibly in our lifetime. Drawing on economic norms theory,4 I show that what sometimes appears to be a Thucydides Trap may instead be a function of factors strictly internal to states and that these factors vary among them. In brief, leaders of states with advanced market-oriented economies have foremost interests in the principle of self-determination for all states, large and small, as the foundation for a robust global marketplace. War among these states, even making preparations for war, is not possible, because they are in a natural alliance to preserve and protect the global order. In contrast, leaders of states with weak internal markets have little interest in the global marketplace; they pursue wealth not through commerce, but through wars of expansion and demands for tribute. For these states, power equals threat, and therefore they tend to balance against the power of all states. Fearing stronger states, however, minor powers with weak internal markets tend to constrain their expansionist inclinations and, for security reasons, bandwagon with the relatively benign market-oriented powers. I argue that this liberal global hierarchy is unwittingly but systematically buttressing states' embrace of market norms and values that, if left uninterrupted, is likely to culminate in permanent world peace, perhaps even something close to harmony. My argument challenges the realist assertion that great powers are engaged in a timeless competition over global leadership, because hegemony cannot exist among great powers with weak markets; these inherently expansionist states live in constant fear and therefore normally balance against the strongest state and its allies.5 Hegemony can exist only among market-oriented powers, because only they care about global order. Yet, there can be no competition for leadership among market powers, because they always agree with the goal of their strongest member (currently the United States) to preserve and protect the global order

#### Cap solves war on a massive scale

Dafoe 14, Political Science and International Economics (Allan & Nina Kelsey; assistant professor in political science at Yale & research associate in international economics at Berkeley; Journal of Peace Research, “Observing the capitalist peace: Examining market-mediated signaling and other mechanisms,” http://jpr.sagepub.com.proxy.lib.umich.edu/content/51/5/619.full)

Countries with liberal political and economic systems rarely use military force against each other. This anomalous peace has been most prominently attributed to the ‘democratic peace’ – the apparent tendency for democratic countries to avoid militarized conflict with each other (Maoz & Russett, 1993; Ray, 1995; Dafoe, Oneal & Russett, 2013).More recently, however, scholars have proposed that the liberal peace could be partly (Russett & Oneal, 2001) or primarily (Gartzke, 2007; but see Dafoe, 2011) attributed to liberal economic factors, such as commercial and financial interdependence. In particular, Erik Gartzke, Quan Li & Charles Boehmer (2001), henceforth referred to as GLB, have demonstrated that measures of capital openness have a substantial and statistically significant association with peaceful dyadic relations. Gartzke (2007) confirms that this association is robust to a large variety of model specifications. To explain this correlation, GLB propose that countries with open capital markets are more able to credibly signal their resolve through the bearing of greater economic costs prior to the outbreak of militarized conflict. This explanation is novel and plausible, and resonates with the rationalist view of asymmetric information as a cause of conflict (Fearon, 1995). Moreover, it implies clear testable predictions on evidential domains different from those examined by GLB. In this article we exploit this opportunity by constructing a confirmatory test of GLB’s theory of market-mediated signaling. We first develop an innovative quantitative case selection technique to identify crucial cases where the mechanism of market-mediated signaling should be most easily observed. Specifically, we employ quantitative data and the statistical models used to support the theory we are probing to create an impartial and transparentmeans of selecting cases in which the theory – as specified by the theory’s creators –makes its most confident predictions.We implement three different case selection rules to select cases that optimize on two criteria: (1) maximizing the inferential leverage of our cases, and (2) minimizing selection bias. We examine these cases for a necessary implication of market-mediated signaling: that key participants drew a connection between conflictual events and adverse market movements. Such an inference is a necessary step in the process by which market-mediated costs can signal resolve. For evidence of this we examine news media, government documents, memoirs, historical works, and other sources. We additionally examine other sources, such as market data, for evidence that economic costs were caused by escalatory events. Based on this analysis, we assess the evidence for GLB’s theory of market mediated costly signaling. Our article then considers a more complex heterogeneous effects version of market-mediated signaling in which unspecified scope conditions are required for the mechanism to operate. Our design has the feature of selecting cases in which scope conditions are most likely to be absent. This allows us to perform an exploratory analysis of these cases, looking for possible scope conditions. We also consider alternative potential mechanisms. Our cases are reviewed in more detail in the online appendix.1 To summarize our results, our confirmatory test finds that while market-mediated signaling may be operative in the most serious disputes, it was largely absent in the less serious disputes that characterize most of the sample of militarized interstate disputes (MIDs). This suggests either that other mechanisms account for the correlation between capital openness and peace, or that the scope conditions for market-mediated signaling are restrictive. Of the signals that we observed, strategic market-mediated signals were relatively more important than automatic market-mediated signals in the most serious conflicts. We identify a number of potential scope conditions, such as that (1) the conflict must be driven by bargaining failure arising from uncertainty and (2) the economic costs need to escalate gradually and need to be substantial, but less than the expected military costs of conflict. Finally, there were a number of other explanations that seemed present in the cases we examined and could account for the capitalist peace: capital openness is associated with greater anticipated economic costs of conflict; capital openness leads third parties to have a greater stake in the conflict and therefore be more willing to intervene; a dyadic acceptance of the status quo could promote both peace and capital openness; and countries seeking to institutionalize a regional peace might instrumentally harness the pacifying effects of liberal markets. The correlation: Open capital markets and peace The empirical puzzle at the core of this article is the significant and robust correlation noted by GLB between high levels of capital openness in both members of a dyad and the infrequent incidence of militarized interstate disputes (MIDs) and wars between the members of this dyad (Gartzke, Li & Boehmer, 2001). The index of capital openness (CAPOPEN) is intended to capture the ‘difficulty states face in seeking to impose restrictions on capital flows (the degree of lost policy autonomy due to globalization)’ (Gartzke & Li, 2003: 575). CAPOPEN is constructed from data drawn from the widely used IMF’s Annual Reports on Exchange Arrangements and Exchange Controls; it is a combination of eight binary variables that measure different types of government restrictions on capital and currency flow (Gartzke, Li & Boehmer, 2001: 407). The measure of CAPOPEN starts in 1966 and is defined for many countries (increasingly more over time). Most of the countries that do not have a measure of CAPOPEN are communist.2 GLB implement this variable in a dyadic framework by creating a new variable, CAPOPENL, which is the smaller of the two dyadic values of CAPOPEN. This operationalization is sometimes referred to as the ‘weak-link’ specification since the functional form is consonant with a model of war in which the ‘weakest link’ in a dyad determines the probability of war. CAPOPENL has a negative monotonic association with the incidence of MIDs, fatal MIDs, and wars (see Figure 1).3 The strength of the estimated empirical association between peace and CAPOPENL, using a modified version of the dataset and model from Gartzke (2007), is comparable to that between peace and, respectively, joint democracy, log of distance, or the GDP of a contiguous dyad (Gartzke, 2007: 179; Gartzke, Li & Boehmer, 2001: 412). In summary, CAPOPENL seems to be an important and robust correlate of peace. The question of why specifically this correlation exists, however, remains to be answered. The mechanism: Market-mediated signaling? Gartzke, Li & Boehmer (2001) argue that the classic liberal account for the pacific effect of economic interdependence – that interdependence increases the expected costs of war – is not consistent with the bargaining theory of war (see also Morrow, 1999). GLB argue that ‘conventional descriptions of interdependence see war as less likely because states face additional opportunity costs for fighting. The problem with such an account is that it ignores incentives to capitalize on an opponent’s reticence to fight’ (Gartzke, Li & Boehmer, 2001: 400.)4 Instead, GLB (see also Gartzke, 2003; Gartzke & Li, 2003) argue that financial interdependence could promote peace by facilitating the sending of costly signals. As the probability of militarized conflict increases, states incur a variety of automatic and strategically imposed economic costs as a consequence of escalation toward conflict. Those states that persist in a dispute despite these costs will reveal their willingness to tolerate them, and hence signal resolve. The greater the degree of economic interdependence, the more a resolved country could demonstrate its willingness to suffer costs ex ante to militarized conflict. Gartzke, Li & Boehmer’s mechanism implies a commonly perceived costly signal before militarized conflict breaks out or escalates: if market-mediated signaling is to account for the correlation between CAPOPENL and the absence of MIDs, then visible market-mediated costs should occur prior to or during periods of real or potential conflict (Gartzke, Li & Boehmer, 2001). Thus, the proposed mechanism should leave many visible footprints in the historical record. This theory predicts that these visible signals must arise in any escalating conflict, involving countries with high capital openness, in which this mechanism is operative Clarifying the signaling mechanism Gartzke, Li & Boehmer’s signaling mechanism is mostly conceptualized on an abstract, game-theoretic level (Gartzke, Li & Boehmer, 2001). In order to elucidate the types of observations that could inform this theory’s validity, we discuss with greater specificity the possible ways in which such signaling might occur. A conceptual classification of costly signals The term signaling connotes an intentional communicative act by one party directed towards another. Because the term signaling thus suggests a willful act, and a signal of resolve is only credible if it is costly, scholars have sometimes concluded that states involved in bargaining under incomplete information could advance their interests by imposing costs on themselves and thereby signaling their resolve (e.g. Lektzian & Sprecher, 2007). However, the game-theoretic concept of signaling refers more generally to any situation in which an actor’s behavior reveals information about her private information. In fact, states frequently adopt sanctions with low costs to themselves and high costs to their rivals because doing so is often a rational bargaining tactic on other grounds: they are trying to coerce their rival to concede the issue. Bargaining encounters of this type can be conceptualized as a type of war-of-attrition game in which each actor attempts to coerce the other through the imposition of escalating costs. Such encounters also provide the opportunity for signaling: when states resist the costs imposed by their rivals, they ‘signal’ their resolve. If at some point one party perceives the conflict to have become too costly and steps back, that party ‘signals’ a lack of resolve. Thus, this kind of signaling arises as a by-product of another’s coercive attempts. In other words, costly signals come in two forms: self-inflicted (information about a leader arising from a leader’s intentional or incidental infliction of costs on himself) or imposed (information about a leader that arises from a leader’s response to a rival’s imposition of costs). Additionally, costs may arise as an automatic byproduct of escalation towards military conflict or may be a tool of statecraft that is strategically employed during a conflict. The automatic mechanism stipulates that as the probability of conflict increases, various economic assets will lose value due to the risk of conflict and investor flight. However, the occurrence of these costs may also be intentional outcomes of specific escalatory decisions of the states, as in the case of deliberate sanctions; in this case they are strategic. Finally, at a practical level, we identify three different potential kinds of economic costs of militarized conflict that may be mediated by open capital markets: capital costs from political risk, monetary coercion, and business sanctions. T

#### Cap is key to space exploration and development

**Blundell 4** [John, director general of the Institute of Economic Affairs, “Mission to Mars must go private to succeed”, Feb 2, http://news.scotsman.com/marsexploration/Mission-to-Mars-must-go.2499794.jp]

Bush is not finding the billions himself. Rather the tab will be picked up by US taxpayers in perhaps 20 years’ time. **What arrests me is the** unchallenged **assumption that space exploration must be a nationalised industry**. The Soviet effort may be stalled but the Chinese seem committed to joining the race. The European Space Agency is a strange combination of nationalised bodies. NASA is a pure old-fashioned nationalised entity. I argue **we should relinquish the expectationthat space has to be limited to vast quangos.** The mindset we all share is an echo of the rivalry between the evaporated USSR and the still dynamic US. The first bleeps of the Sputnik galvanised the US into accelerating its space effort.   **What we need is capitalists in space. Capitalism needs property rights, enforcement of contracts and the rule of law.** The ideological tussle does not cease once we are beyond the ionosphere.   With the exception of Arthur C Clarke, **none of us imagined the entertainment potential from satellites**. Geostationary lumps of electronic gadgetry beam us our BSkyB television pictures. I remain in awe that Rupert Murdoch can place a device in the skies above Brazil that sends a signal to every home in each hemisphere. Who could have foreseen that mobile phones could keep us chattering without any wiring, or that global position techniques could plot where we all are to within a metre? **These are business applications. Business is already in space.**   Markets detect and apply opportunities that are not envisaged by even the most accomplished technicians. I’m not saying Murdoch has special competences. I imagine he is as baffled by digital miracles as I am. The point is that **companies define and refine what public bodies cannot achieve**. Lift the veil of course and all those **satellite firms are an intricate web of experts supplying ideas and services. We have an infant space market.**   What use will the Moon be? Is there value on Mars other than the TV rights? The answer is nobody can know. We can only make some guesses. The Spanish ships that set off for the US thought they would get to India. The Portuguese knew they’d reach China. The English followed them westwards seeking gold. In fact, they got tobacco. Events always confound expectations.   The arguments for putting men on Mars are expressly vague from President Bush. Perhaps he was really bidding for votes.   From my reading the **best results may be medical. Zero, or low, gravity techniques may allow therapies of which we are ignorant.** It seems facetious to suggest tourism may be a big part of space opportunity but as both the North and South poles are over-populated and there is a queue at the top of Mount Everest, a trip to the Sea of Tranquility may prove a magnet for the wealthy. **Instead of NASA’s grotesque bureaucracy it may be Thomas Cook will be a greater force for exploration.**   NASA could be a procurement body. It need not design and run all space ventures. It could sub-contract far more extensively. Without specialised engineering expertise it is not easy to criticise projects such as the shuttle. It seems to be excessively costly and far too fragile.   **There are private space entrepreneurs already.** They are tiddlers up against the mighty NASA. Yet Dan **Goldin, the NASA leader, says he favours the privatisation of space: "We can’t afford to do solar system exploration until we turn these activities over to the cutting edge private sector...**   "Some may say that commercialising portions of NASA’s functions is heresy. Others may think we are taking a path that will ruin the wonders of space. I believe that **when NASA can creatively partner, all of humankind will reap the benefits of access to open space".   Is it possible the Moon has a more noble future than merely a branch office of NASA? Is it tolerable that Mars could be a subsidiary of the USA? Could it be nominally a further state of the union? These are not silly questions. In time space will be defined by lawyers and accountants as property rights will need to be deliberated**

#### Space k2 solve long-term extinction.

**Pelton 3** [Joseph N. Pelton is director of the Space & Advanced Communications Research Institute at George Washington University and executive director of the Arthur C. Clarke Foundation “COMMENTARY: Why Space? The Top 10 Reasons”, Sept 12, http://www.space.com/news/commentary\_top10\_030912.html]

Actually **the lack of a space program could get us all killed**. I dont mean you or me or my wife or children. I mean that **Homo sapiens as a species are** actually **endangered**. Surprising to some, **a well conceived space program may well be our only hope for long-term survival**. The right or wrong decisions about space research and exploration may be key to the futures of our grandchildren or great-grandchildren or those that follow.  Arthur C. Clarke, the author and screenplay writer for 2001: A Space Odyssey, put the issue rather starkly some years back when he said: The dinosaurs are not around today because they did not have a space program. He was, of course, referring to the fact that we now know **a quite largish meteor crashed into the earth, released poisonous** Iridium **chemicals into our atmosphere and created a killer cloud above the Earth that blocked out the sun for a prolonged period of time.  This could have been foreseen and averted with a sufficiently advanced space program**. But this is only one example of how space programs, such as NASAs Spaceguard program, help protect our fragile planet. **Without a space program we would not know about the large ozone hole in our atmosphere, the hazards of solar radiation, the path of killer hurricanes or many other environmental dangers**. But this is only a fraction of the ways that space programs are crucial to our future. Protection against catastrophic planetary accidents: It is easy to assume that an erratic meteor or comet will not bring destruction to the Earth because the probabilities are low. **The truth is we are bombarded from space daily. The dangers are greatest not from a cataclysmic collision, but from not knowing enough about solar storms, cosmic radiation and the ozone layer. An enhanced** Spaceguard **Program** **is** actually **a prudent course that could save our species in time.**