## T

#### A] Interp - the aff can't defend a subset of press organizations in which objectivity is prioritized over advocacy. The article “a” implies a nonspecific or generic reading of the phrase “free press”.

Walden 20 Walden University [The Writing Center provides a broad range of writing instruction and editing services for students at Walden University, including writing assistance for undergraduates, graduate students, and doctoral capstone writers], “"A" or "An"” last modified July 14 2020, <https://academicguides.waldenu.edu/writingcenter/grammar/articles> SM

When to Use "A" or "An" "A" and "an" are used with singular countable nouns when the noun is nonspecific or generic. I do not own a car. In this sentence, "car" is a singular countable noun that is not specific. It could be any car. She would like to go to a university that specializes in teaching. "University" is a singular countable noun. Although it begins with a vowel, the first sound of the word is /j/ or “y.” Thus, "a" instead of "an" is used. In this sentence, it is also generic (it could be any university with this specialization, not a specific one). I would like to eat an apple. In this sentence, "apple" is a singular countable noun that is not specific. It could be any apple.

#### B] Violation – they only defend the Red Guard

#### C] Vote neg—

#### Semantics outweigh:

#### A] Topicality is a constitutive rule of the activity and a basic aff burden, they agreed to debate the topic when they came to the tournament.

#### B] Jurisdiction -- you can’t vote affirmative if they haven’t affirmed.

#### C] It’s the only stasis point we know before the round so it controls the internal link to engagement, and there’s no way to use ground if debaters aren’t prepared to defend it.

#### 1] Limits:

#### A] Quantitative – there are literally millions of organizations that can be considered a free press – unlimited topics incentivize obscure affs and kill reciprocal prep burdens which are key to well researched clash, especially since there’s no universal DA because each press organization is different.

#### B] Qualitative – spec allows them to cherry-pick small aff biased subsets which kills equitable neg ground and encourages a race to the fringe of the topic away from the core topic literature.

#### 2] TVA solves – read the aff as advantage to a whole-res aff.

#### 3] No PICs offense – potential neg abuse doesn’t justify aff abuse because that would permit infinite 1AC abuse

#### T is DTD – A] their abusive advocacy skewed the debate from the start B] DTA is incoherent because we indict their advocacy

#### Use competing interps on T – A] topicality is a yes/no question, you can’t be reasonably topical, B] only our interp sets norms -- reasonability is arbitrary and invites judge intervention, C] reasonability causes a race to the bottom of questionable argumentation

#### No RVIs – A] Illogical – fairness is a burden – they can’t win for following the rules, B] Chilling effect – abusive debaters get really good at the RVI debate and bait theory which means infinite abuse goes unchecked, C] Substance crowdout – prevents 1AR blipstorms and allows us to get back to substance – we only have this tournament for the topic.

## Framing

#### I value morality.

#### 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. SM

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.

#### Thus, the standard is maximizing expected well-being. Prefer additionally –

#### [1] All other frameworks collapse –

#### Actor specificity – Only util solves tradeoffs because we aggregate based on consequences – outweighs since the res is a question of government obligations.

#### Lexical pre-requisite – focusing on extinction precludes all other ethics – you can’t uphold moral values if you’re dead.

#### [2] Framework defines what obligations are – that means it’s also a topicality issue, so we must theoretically defend our interpretation – I defend ought as the standard text. Prefer it:

#### Ground – all impacts function under util whereas other ethics flow to one side exclusively – makes util the fairest.

#### Topic ed – util forces debates about what happens in the real world because we must analyze consequences of the plan – increases topic ed because it forces research on the effects of the resolution – key to education because we use it in the real-world to talk about current topics. Outweighs phil ed – we can learn about Kant on other topics or at camp, but topical debate only happens now.

## DA

#### Media advocacy is a major catalyst for social movements.

Opara ’20 (Ndidi Opara; Based in Eastside Seattle, Ndidi Opara (she/her) is a community organizer, journalist, and researcher. Her published work spans from research on the American Color-line in Rap Advocacy in the Journal of Student Research to op-ed's on educational inequality through being journalism fellow with StudentVoice. Her political beliefs are radically left, economically anti-capitalist and socially a radical progressive abolitionist; published 2020; "The Importance of journalistic advocacy"; https://www.yipinstitute.com/articles/the-importance-of-journalistic-advocacy; accessed 2-24-2022; Elkins AM)

Journalistic advocacy, journalism that takes a politically or socially charged view, is another way journalism is a powerful political tool. Advocacy journalism **rejects** the prominent ideal of **objectivity** in journalism in favor of **opinionated rhetoric** to **push a social agenda**. Political organizations may use advocacy journalism to write letters to the editors of local publications to **persuade** and **mobilize** people who read those publications. People also use journalism to write op-ed pieces that focus on **combining personal stories with facts** to push a political agenda. Advocacy journalism can **seriously impact legislation**, primarily through **lobbying local officials** and **garnering local support** for an issue or initiative. As more people are becoming politically involved, more advocates and organizers are turning to journalistic advocacy as a form of advocacy. In short: **more advocates are becoming journalists**. Right-wing journalists like Dennis Campbell argue that this journalism represents a complete disregard for truth post-Watergate. The right views this advocacy as propaganda, while the left views it as the advantageous merge between advocacy groups and media organizations. Mathew Ingram for the Columbia Journalism Review cites the ACLU revealing Amazon’s recent implementation of facial recognition software as an example of the way that advocacy groups have used — and continue to use — journalism to their advantage. People's views on advocacy journalism differ on whether it represents positive or negative deviance from the traditional values of journalism. The right may view the departure from traditional, objective journalism as a sign that journalism is becoming propaganda. The left may view the turn towards opinionated journalism as a new opportunity for advocacy and reform. On the same political thread, op-eds — commentary rather than strictly fact-based reporting — have become a vessel for bridging the personal to politics. Op-eds have **given a voice** to the **social issues** that our nation is currently facing and have done this **in a way that fact-based reporting cannot**. This personal element to politics is a **new way** that journalism can portray **traditional journalistic ideals** like **integrity**, **public trust**, and **accountability**, but at the expense of objectivity. Advocacy journalism must ask itself where facts and opinions meet. It must ask itself what kinds of opinions can be supported with facts, and what a fact means if it is put in an objective light. In turn, Americans must be more critical of the journalism they consume. Advocacy journalism presents a greater debate about the ethics of journalism. Is it good practice to publish stories with the expectation that readers will do the extra analysis of thinking critically about what they read? Can you expect the average reader to do their own fact-checking or understand what is objective and what is not? These are questions that journalistic advocates and journalists generally must consider as journalism continues to change and grow.

#### Social movements are the guardians of democracy—they put authoritarianism in check.

Burcher ’17 (Catalina Uribe Burcher; Catalina Uribe Burcher was a Senior Programme Officer in the Political Participation and Representation Programme. Uribe Burcher focused on money in politics, integrity and the threats that transnational illicit networks pose to democratic processes; published 1-23-2017; "Social movements are here to stay – a part of our democratic way of life"; https://www.idea.int/news-media/news/social-movements-are-here-stay-%E2%80%93-part-our-democratic-way-life; accessed 3-9-2022; Elkins AM)

US President Donald J. Trump’s inauguration on Friday marked an outstanding shift in democratic politics around the world (as my colleague Adina Trunk wrote in her piece on ‘The Dismantling of Democracy’). But Saturday was also noteworthy. More than 500,000 people attended the ‘Women’s March’ in Washington, DC in an effort to create a political counterweight to the election’s rhetoric around diversity, civil liberties and marginalized groups. The march was part of a discussion about the role that social movements will have in the way we do politics in the coming years. Barack Obama’s compelling farewell speech is the most recent wakeup call: ‘if something needs fixing, then lace up your shoes and do some organizing’. Social movements are often **issue-based collections** of individuals. Sometimes they take their voices to the streets **espousing particular political ideals** and, at times, **influencing policy** from the outside, without being democratically elected. Thus, social movements can **put in check** democratically elected political leaders with **populist** and **demagogical** tendencies that may, in the long run, not provide **realistic** and **sustainable** policy alternatives. Social movements are shaping **modern democratic political life**. The ‘Occupy Wall Street’ and related ‘Occupy’ movements are good examples. Propelled by a blog post in the aftermath of the 2008 financial crisis, the movements soon became a media sensation and later disseminated to other regional hubs. In the United States, many of the original protesters eventually supported Bernie Sanders’s 2016 surprisingly successful presidential bid. The demand for alternative political spaces has crystalized in an ‘almost three-fold increase in citizen movements at the global level’, according to the book Political Parties and Citizen Movement in Asia and Europe. Various factors have contributed to the allure of these movements. On the one hand, membership in political parties has decreased and public dissatisfaction over political parties’ performance has increased. On the other hand, social movements have been particularly savvy to maximize the potential of new communication technologies to directly engage with their followers and put pressure on politicians. These new engines for direct democracy have been fuelled by a myriad of **new communication technologies** available today. Currently, about **40 per cent** of the population has access to the **internet**, a **major increase** since 1995 when **less than 1 per cent** did. Mobile phones also are broadly used: the number of consumers is expected to hit **4.77 billion** in **2017**. Likewise, with the proliferation of social media platforms, people have **more ways** to **reach government representatives** who use social media. Facebook has more than 1 billion daily users, while Twitter had 320 million users as of March 2016, and Instagram had 600 million monthly active users as of December 2016. At the same time, traditional telecommunications have morphed. Some people refer to a ‘podcast explosion’, for example, reflecting on the way radio has transformed to become a web-based medium. TV also has been forced to adapt to this new tech-driven era. Most shows, for instance, offer short streamed clips on YouTube in the hopes of gaining traction with the viewers. This technological landscape has allowed political innovations such as ‘**hashtag activism**’, i.e. the use of Twitter hashtags for virtual advocacy to flourish. One of the most successful examples has been the #**BlackLivesMatter** movement. Born in the United States in 2012, the group **rebranded** the **black liberation movement** of the **1960s** around demands for **greater accountability** in relation to the **killing of African-American men** by **law enforcement officers**. They have provided **unprecedented visibility** to this cause primarily through social media awareness. Some of their most pivotal accomplishments include the resignation of the University of Missouri’s president over claims of racist practices in campus. Also, in Georgetown University students succeeded in forcing their institution to rename buildings that bore slave-owners’ names. Most significantly, the movement was directly involved in mobilizing public sentiment to remove the confederate flag that stood in front of the statehouse in South Carolina. This rich market of new communication technologies for political activity, as well as the increased importance of social movement mean that political activism will most likely **continue soaring** in the coming years. The **divided political arena** will further **catalyse these processes**. But while it may be true that social movements are challenging the role of political parties as the single most important broker between citizens and governments, it is not right to assume that movements can entirely replace parties. Being outside of the establishment often prevents the movements from translating their demands into policy change—to the disappointment of many of their followers. Eventually some protesters may choose to filter their initiatives through established channels before losing momentum. The creation of the Aam Aadmi Party in India illustrates this. The original movement started with activist Anna Hazare’s hunger strike in 2011. Her demands for the establishment of an effective ombudsman to deal with corruption led many people to gather in what was then referred to as ‘India’s Tahir Square’. The impact of the protests was further intensified by the media coverage and social media pressure that ensued. But eventually protesters realized ‘that the ruling political class was unresponsive and would not give up power by instituting major anti-corruption reforms’, according to the World Movement for Democracy. The protesters therefore had no other choice but to become a formal party if they wanted to achieve tangible policy reforms. But for a social movement to become a political party is not a walk in the park, as it changes the nature of the group. The Aam Aadmi party, for example, faced allegations of corruption within its own ranks. If social movements are here to stay, politicians must learn how to respond to them. Traditional politicians are not totally unaware of the potential offered by new communication technologies. Justin Trudeau's successful campaign in Canada reveals smart usage of social media during the elections, as he used Facebook and Instagram to reach 40 per cent of the country’s population. And the payoff was enormous, given how cheap and easy to use these tools are. With some (somewhat) spontaneous shots from the gym and the Trudeau family’s Christmas party, the BBC was reporting on his training routine and his holiday traditions. But Trudeau is unfortunately still the exception. Traditional politicians can do more to tap into the engaging capacity of social media to communicate with their voters. In that sense, they still have a lot to learn from activists and social movements on how to transform seemingly trivial 140-character posts and YouTube videos into trending discussions that people across the globe share millions of times. With more than 20 million Twitter followers, Trump has certainly also mastered this skill. Most importantly, these new communication technologies have the potential to improve transparency and accountability beyond election season, even if these information flows can be unreliable. While Trump’s tweets may annoy many of us, how else would we know his stands on climate change? Even though I was myself reluctant to join Twitter—which I originally thought was only used to share pictures of whatever I was eating and commenting on the Kardashians—I joined in 2012 (@catasur). And so far I actually found it to be a powerful tool to influence the debates that I am passionate about. In my case, I chiefly focus on political corruption and organized crime under the hashtag #ProtectingPolitics. How are you influencing the debate that matters to you?

#### Expanded authoritarianism leads to great power war.

Diamond ’19 (PhD in Sociology, professor of Sociology and Political Science at Stanford University (Larry, “Ill Winds: Saving Democracy from Russian Rage, Chinese Ambition and American Complacency,” Kindle Edition)

In such a near future, my fellow experts would no longer talk of “democratic erosion.” We would be spiraling downward into a time of democratic despair, recalling Daniel Patrick Moynihan’s grim observation from the 1970s that liberal democracy “is where the world was, not where it is going.” 5 The world pulled out of that downward spiral—but it took new, more purposeful American leadership. The planet was not so lucky in the 1930s, when the global implosion of democracy led to a catastrophic world war, between a rising axis of emboldened dictatorships and a shaken and economically depressed collection of selfdoubting democracies. These are the stakes. Expanding democracy—with its liberal norms and constitutional commitments—is a crucial foundation for world peace and security. Knock that away, and our most basic hopes and assumptions will be imperiled. The problem is not just that the ground is slipping. It is that we are perched on a global precipice. That ledge has been gradually giving way for a decade. If the erosion continues, we may well reach a tipping point where democracy goes bankrupt suddenly—plunging the world into depths of oppression and aggression that we have not seen since the end of World War II. As a political scientist, I know that our theories and tools are not nearly good enough to tell us just how close we are getting to that point—until it happens.

#### Nuclear war causes extinction—famine, fallout, and Ice Age.

Starr ’15 (Steven Starr; Steven is an Associate member of the Nuclear Age Peace Foundation and has been published by the Bulletin of the Atomic Scientists. His writings appear on the websites of PSR, the Nuclear Age Peace Foundation, the Moscow Institute of Physics and Technology Center for Arms Control, Energy and Environmental Studies, Scientists for Global Responsibility, and the International Network of Scientists Against Proliferation. From 2007 through 2011, he worked with the governments of Switzerland, Chile, and New Zealand, in support of their efforts at the United Nations to eliminate thousands of high-alert, launch-ready nuclear weapons. Mr. Starr is also an expert on the environmental consequences of nuclear war, and in 2011, he made an address to the U.N. First Committee describing the dangers that nuclear weapons and nuclear war poses to all nations and peoples. He has made presentations to Ministry Officials, Parliamentarians, Universities, citizens and students from around the world, and specializes in making technical scientific information understandable to all audiences.; published 2-28-2015; "Nuclear War: An Unrecognized Mass Extinction Event Waiting To Happen"; https://ratical.org/radiation/NuclearExtinction/StevenStarr022815.html; Elkins AM)

A war fought with 21st century strategic nuclear weapons would be **more than just a great catastrophe** in human history. If we allow it to happen, such a war would be a **mass extinction event** that [**ends human history**](https://ratical.org/radiation/NuclearExtinction/StarrNuclearWinterOct09.pdf). There is a profound difference between extinction and “an unprecedented disaster,” or even “the end of civilization,” because even after such an immense catastrophe, human life would go on. But extinction, by definition, is an event of **utter finality**, and a nuclear war that could cause human extinction should really be considered as the **ultimate criminal act**. It certainly would be the crime to end all crimes. The world’s leading climatologists now tell us that nuclear war **threatens our continued existence** as a species. Their studies predict that a large nuclear war, especially one fought with strategic nuclear weapons, would create a post-war environment in which for many years it would be **too cold and dark to even grow food**. Their findings make it clear that not only humans, but most large animals and many other forms of complex life would likely **vanish forever** in a nuclear darkness of our own making. The environmental consequences of nuclear war would attack the ecological support systems of life at **every level**. Radioactive fallout, produced not only by nuclear bombs, but also by the destruction of nuclear power plants and their spent fuel pools, would **poison the biosphere**. Millions of tons of smoke would act to **destroy Earth’s protective ozone layer** and **block most sunlight** from reaching Earth’s surface, creating **Ice Age weather conditions** that would **last for decades**. Yet the political and military leaders who control nuclear weapons strictly avoid any direct public discussion of the consequences of nuclear war. They do so by arguing that nuclear weapons are not intended to be used, but only to deter. Remarkably, the leaders of the Nuclear Weapon States have chosen to ignore the authoritative, long-standing scientific research done by the climatologists, research that predicts virtually **any nuclear war**, fought with **even a fraction** of the operational and deployed nuclear arsenals, will leave the Earth **essentially uninhabitable**.

#### Movements are uniquely key for poverty reduction—they educate the public and pressure the government to pass reforms.

Bebbington ’06 (Anthony Bebbington; University of Manchester - Institute for Development Policy and Management; published 8-1-2006; "Social Movements and the Politicization of Chronic Poverty Policy"; https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1753621; accessed 2-24-2022; Elkins AM)

This article argues that chronic poverty is a socio-political relationship rather than a condition of assetless-ness. Social movements are therefore of **acute importance**, because they are vehicles through which these **socio-political relationships** are argued over in society and potentially **changed**. Movements rarely work directly on poverty, nor do they emerge simply because poverty exists, rather: “they emerge to challenge existing social and political economic arrangements, one of whose effects is to produce and sustain poverty. Their terrain of action is therefore political: challenging ideas, assumptions, dominant practices and stereotypes […] Perhaps the **most important role** of social movements in addressing chronic poverty is that of **destabilizing dominant**, **taken-for-granted ideas** about poverty and the reasons why it is so chronic.‟ (p. 813) There has been a tendency to assume that the ways in which social movements will affect poverty pass through the state (e.g. by **placing pressure** on governments to **adopt new poverty reduction policies** etc). But much of the literature on social movements suggests their prime importance is rather to change the ways in which society understands poverty in the first place. Four pathways through which movements can affect poverty can be identified in the literature: 1. Through challenges to the institutions that underlie the political economy of chronic poverty: Many social movements have emerged to challenge processes of exploitation and dispossession. In Latin America, communities have mobilized around issues of trade liberalization (because of the perceived adverse effect on livelihoods). Other mobilizations have occurred around natural resource extraction – for example, Bolivia‟s “water wars‟, and local mobilizations of communities affected by mining in Bolivia and Peru. Whilst chronic poverty per se does not lead to the emergence of these movements, they often emerge within environments characterized by chronic poverty. “Typically these movements argue that such forms of extraction and resource governance do little to reduce poverty. Some argue that they actually deepen poverty through resource dispossession and the environmental and social damage visited on the resources of poor people living in the vicinity of these activities‟ (p. 10). Other movements emerge as **responses to social structures and institutions** that serve to **exclude groups** from **certain domains of political and economic life**. This particularly includes identity-based, gender, place, ethnic and racial movements which seek to challenge the "terms of recognition‟ of disadvantaged groups. In Latin America, such movements have played an **important role** in **creating new public spaces** in which novel debates on development and democracy have occurred. For example, People‟s assemblies in Ecuador have helped change the terms of national and local debates on development, as well the terms on which indigenous groups are recognized. 2. Through their roles in reworking the cultural politics of poverty: One of the most important effects of social movements is to **challenge ideologies** surrounding poverty debates; by using knowledge to **affect social processes**, and **challenging dominant ideas** about the nature and acceptability of poverty. For example, in Ecuador, Bolivia and Guatemala, increased indigenous people‟s organizations have helped make the **multiple links** between ethnicity and poverty **visible** and **debated** in ways that **were not the case twenty years ago**. (pp. 806-807) 3. Through direct effects on the assets of the poor: Movements rarely emerge in order to have a direct impact on the assets of the poor, but they have been important in enhancing access to land, shelter and water. Mobilizations for land typically emerge in contexts of skewed land distributions and tied labour arrangements linked to these distributions. The Landless People‟s Movement in Brazil is a prominent example. MST has changed the meanings of land and landlessness in, and beyond, Brazil, and has benefited both the chronically poor and middle-sized farmers, as well as landless rural workers. 4. Through their engagements with the state: Movements are continually troubled by debates on whether and how to engage the state, often culminating in internal arguments and divisions. Relationships vary on a continuum, from collaboration to adversarial relationships, and the success of the strategies employed by movements will vary according to context. Conciliatory approaches have been effective for the Slum Dwellers movement in India, mining companies in Peru and Ecuador have arguable only really shifted their approaches to mineral development and community relations in response to direct action. Some commentators argue the act of negotiation with the state can make movements less responsive to grassroots demands and can demobilize them. However, several factors can weaken social movements and therefore their potential to influence the dynamics of chronic poverty. These include problems of internal representation and democracy (including how far they can represent the poorest), the difficulty of sustaining coherence and convergence among actors, and tensions within movements.

## Case

#### The role of the judge is to vote for the better debater—anything else is self-serving and arbitrary.

#### Capitalism is sustainable – solves war, environment, and quality of life – prefer empirics

Mark Budolfson 21. PhD in Philosophy. Assistant Professor in the Department of Environmental and Occupational Health and Justice at the Rutgers School of Public Health and Center for Population–Level Bioethics "Arguments for Well-Regulated Capitalism, and Implications for Global Ethics, Food, Environment, Climate Change, and Beyond". Cambridge Core. 5-7-2021. https://www-cambridge-org.proxy.library.emory.edu/core/journals/ethics-and-international-affairs/article/arguments-for-wellregulated-capitalism-and-implications-for-global-ethics-food-environment-climate-change-and-beyond/96F422D04E171EECDEF77312266AE9DD

However, things are more complicated than the arguments above would suggest, and the benefits of capitalism, especially for the world's poorest and most vulnerable people, are in fact myriad and significant. In addition, as we will see in this section, many experts argue that capitalism is not the fundamental cause of the previously described problems but rather an essential component of the best solutions to them and of the best methods for promoting our goals of health, well-being, and justice. To see where the defenders of capitalism are coming from, consider an analogy involving a response to a pandemic: if a country administered a rushed and untested vaccine to its population that ended up killing people, we would not say that vaccines were the problem. Instead, the problem would be the flawed and sloppy policies of vaccine implementation. Vaccines might easily remain absolutely essential to the correct response to such a pandemic and could also be essential to promoting health and flourishing, more generally. The argument is similar with capitalism according to the leading mainstream arguments in favor of it: Capitalism is an essential part of the best society we could have, just like vaccines are an essential part of the best response to a pandemic such as COVID-19. But of course both capitalism and vaccines can be implemented poorly, and can even do harm, especially when combined with other incorrect policy decisions. But that does not mean that we should turn against them—quite the opposite. Instead, we should embrace them as essential to the best and most just outcomes for society, and educate ourselves and others on their importance and on how they must be properly designed and implemented with other policies in order to best help us all. In fact, the argument in favor of capitalism is even more dramatic because it claims that much more is at stake than even what is at stake in response to a global pandemic—what is at stake with capitalism is nothing less than whether the world's poorest and most vulnerable billion people will remain in conditions of poverty and oppression, or if they will instead finally gain access to what is minimally necessary for basic health and wellbeing and become increasingly affluent and empowered. The argument in favor of capitalism proceeds as follows: Premise 1. Development and the past. Over the course of recorded human history, the majority of historical increases in health, wellbeing, and justice have occurred in the last two centuries, largely as a result of societies adopting or moving toward capitalism. Capitalism is a relevant cause of these improvements, in the sense that they could not have happened to such a degree if it were not for capitalism and would not have happened to the same degree under any alternative noncapitalist approach to structuring society. The argument in support of this premise relies on observed relationships across societies and centuries between indicators of degree of capitalism, wealth, investments in public goods, and outcomes for health, wellbeing, and justice, together with econometric analysis in support of the conclusion that the best explanation of these correlations and the underlying mechanism is that large increases in health, wellbeing, and justice are largely driven by increasing investments in public goods. The scale of increased wealth necessary to maximize these investments requires capitalism. Thus, as capitalist societies have become dramatically wealthier over the past hundred years (and wealthier than societies with alternative systems), this has allowed larger investments in public goods, which simply has not been possible in a sustained way in societies without the greater wealth that capitalism makes possible. Important investments in public goods include investments in basic medical knowledge, in health and nutrition programs, and in the institutional capacity and know-how to regulate society and capitalism itself. As a result, capitalism is a primary driver of positive outcomes in health and wellbeing (such as increased life expectancy, lowered child and maternal mortality, adequate calories per day, minimized infectious disease rates, a lower percentage and number of people in poverty, and more reported happiness);5 and in justice (such as reduced deaths from war and homicide; higher rankings in human rights indices; the reduced prevalence of racist, sexist, homophobic opinions in surveys; and higher literacy rates).6 These quantifiable positive consequences of global capitalism dramatically outweigh the negative consequences (such as deaths from pollution in the course of development), with the result that the net benefits from capitalism in terms of health, wellbeing, and justice have been greater than they would have been under any known noncapitalist approach to structuring society.7 Premise 2. Economics, ethics, and policy. Although capitalism has often been ill-regulated and therefore failed to maximize net benefits for health, wellbeing, and justice, it can become well-regulated so that it maximizes these societal goals, by including mechanisms identified by economists and other policy experts that do the following: optimally8 regulate negative effects such as pollution and monopoly power, and invest in public goods such as education, basic healthcare, and fundamental research including biomedical knowledge (more generally, policies that correct the failures of free markets that economists have long recognized will arise from “externalities” in the absence of regulation);9 ensure equity and distributive justice (for example, via wealth redistribution);10 ensure basic rights, justice, and the rule of law independent of the market (for example, by an independent judiciary, bill of rights, property rights, and redistribution and other legislation to correct historical injustices due to colonialism, racism, and correct current and historical distortions that have prevented markets from being fair);11 and ensure that there is no alternative way of structuring society that is more efficient or better promotes the equity, justice, and fairness goals outlined above (by allowing free exchange given the regulations mentioned).12 To summarize the implication of the first two premises, well-regulated capitalism is essential to best achieving our ethical goals—which is true even though capitalism has certainly not always been well regulated historically. Society can still do much better and remove the large deficits in terms of health, wellbeing, and justice that exist under the current inferior and imperfect versions of capitalism. Premise 3. Development and the future. If the global spread of capitalism is allowed to continue, desperate poverty can be essentially eliminated in our lifetimes. Furthermore, this can be accomplished faster and in a more just way via well-regulated global capitalism than by any alternatives. If we instead opt for less capitalism, less growth, and less globalization, then desperate poverty will continue to exist for a significant portion of the world's population into the further future, and the world will be a worse and less equitable place than it would have been with more capitalism. For example, in a world with less capitalism, there would be more overpopulation, food insecurity, air pollution, ill health, injustice, and other problems. In part, this is because of the factors identified by premise 1, which connect a turn away from capitalism with a turn away from continuing improvements in health, wellbeing, and justice, especially for the developing world. In addition, fertility declines are also a consequence of increased wealth, and the size of the population is a primary determinant of food demand and other environmental stressors.13 Finally, as discussed at length in the next section of the essay, capitalism can be naturally combined with optimal environmental regulations.14 Even bracketing anything like optimal regulation, it remains true that sufficiently wealthy nations reduce environmental degradation as they become wealthier, whereas developing nations that are nearing peak degradation will remain stuck at the worst levels of degradation if we stall growth, rather than allowing them to transition to less and less degradation in the future via capitalism and economic growth.15 In contrast, well-regulated capitalism is a key part of the best way of coping with these problems, as well as a key part of dealing with climate change, global food production, and other specific challenges, as argued at length in the next section. Here it is important to stress that we should favor well-regulated capitalism that includes correct investments in public goods over other capitalist systems such as the neoliberalism of the recent past that promoted inadequately regulated capitalism with inadequate concern for externalities, equity, and background distortions and injustices.16

#### Warming irreversible---only cap solves through CCS and a bridge to renewables

Graciela ’16 – Professor of Economics and of Statistics at Columbia University and Visiting Professor at Stanford University, and was the architect of the Kyoto Protocol carbon market (being interviewed by Marcus Rolle, freelance journalist specializing in environmental issues and global affairs, “Reversing Climate Change: Interview with Graciela Chichilnisky,” http://www.globalpolicyjournal.com/blog/01/09/2016/reversing-climate-change-interview-graciela-chichilnisky)//cmr

GC: Green capitalism is a new economic system that values the natural resources on which human survival depends. It fosters a harmonious relationship with our planet, its resources and the many species it harbors. It is a new type of market economics that addresses both equity and efficiency. Using carbon negative technology™ it helps reduce carbon in the atmosphere while fostering economic development in rich and developing nations, for example in the U S., EU, China and India. How does this work? In a nutshell Green Capitalism requires the creation of global limits or property rights nation by nation for the use of the atmosphere, the bodies of water and the planet’s biodiversity, and the creation of new markets to trade these rights from which new economic values and a new concept of economic progress emerges updating GDP as is now generally agreed is needed. **Green Capitalism is needed** now **to** help **avert climate change** and achieve the goals of the 2015 UN Paris Agreement, which are very ambitious and universally supported but have no way to be realized within the Agreement itself. The Carbon Market and its CDM play critical roles in the foundation of Green Capitalism, creating values to redefine GDP. These are needed to remain within the world’s “CO2 budget” and avoid catastrophic climate change. As I see it, the **building blocks** for Green Capitalism are then as follows; (1) Global limits nation by nation in the use of the planet’s atmosphere, its water bodies and biodiversity - these are global public goods. (2) New global markets to trade these limits, based on equity and efficiency. These markets are relatives of the Carbon Market and the SO2 market. The new market create new measures of economic values and update the concept of GDP. (3) Efficient use of Carbon Negative Technologies to avert catastrophic climate change by providing a smooth transition to clean energy and ensuring economic prosperity in rich and poor nations. These building blocks have immediate practical implications in reversing climate change and can assist the ambitious aims of Paris COP21 become a reality. MR: What is the greatest advantage of the new generation technologies that can capture CO2 from the air? GC: These technologies build carbon negative power plants, such as Global Thermostat, that clean the atmosphere of CO2 while producing electricity. Global Thermostat is a firm that is commercializing a technology that takes CO2 out of air and uses mostly low cost residual heat rather than electricity to drive the capture process, making the entire process of capturing CO2 from the atmosphere very inexpensive. There is enough residua heat in a coal power plant that it can be used to capture twice as much CO2 as the plant emits, thus transforming the power plant into a “carbon sink.” For example, a 400 MW coal plant that emits 1 million tons of CO2 per year can become a carbon sink absorbing a net amount of 1 million tons of CO2 instead. Carbon capture from air can be done anywhere and at any time, and so inexpensively that the CO2 can be sold for industrial or commercial uses such as plastics, food and beverages, greenhouses, bio-fertilizers, building materials and even enhanced oil recovery, all examples of large global markets and profitable opportunities. Carbon capture is powered mostly by low (85°C) residual heat that is inexpensive, and any source will do. In particular, renewable (solar) technology can power the process of carbon capture. This can help advance solar technology and make it more cost-efficient. This means more energy, more jobs, and it also means economic growth in developing nations, all of this while cleaning the CO2 in the atmosphere. Carbon negative technologies can literally transform the world economy. MR: One final question. You distinguish between long-run and short-run strategies in the effort to reverse climate change. Would carbon negative technologies be part of a short-run strategy? GC: Long-run strategies are quite different from strategies for the short-run. Often **long-run strategies do not work in the short run** and different policies and **economic incentives are needed.** In the long run the best climate change policy is to replace fossil fuel sources of energy that by themselves cause 45% of the global emissions, and to plant trees to restore if possible the natural sources and sinks of CO2. But the fossil fuel power plant infrastructure is about **87%** of the power plant infrastructure and about $45-55 trillion globally. This infrastructure cannot be replaced quickly, **certainly not in the short time period in which we need to take action to avert catastrophic climate change**. The issue is that CO2 once emitted remains hundreds of years in the atmosphere and we have emitted so much that unless we actually **remove the CO2** that is already there, **we cannot remain** long **within the carbon budget**, which is the concentration of CO2 beyond which we fear catastrophic climate change. In the short run, therefore, **we face significant time pressure**. The **IPCC indicates** in its 2014 5th Assessment Report that we must actually **remove the carbon that is already in the atmosphere** and do so **in massive quantities**, this century (p. 191 of 5th Assessment Report). This is what I called a carbon negative approach, which works for the short run. Renewable energy is the long run solution. Renewable energy is too slow for a short run resolution since replacing a $45-55 trillion power plant infrastructure with renewable plants could take **decades**. We need action sooner than that. For the short run we need carbon negative technologies that capture more carbon than what is emitted. Trees do that and they must be conserved to help preserve biodiversity. Biochar does that. But trees and other natural sinks are too slow for what we need today. Therefore, negative carbon is needed now as part of a blueprint for transformation. It must be part of the blueprint for Sustainable Development and its short term manifestation that I call **Green Capitalism**, while in the long run renewable sources of energy suffice, including Wind, Biofuels, Nuclear, Geothermal, and Hydroelectric energy. These are in limited supply and cannot replace fossil fuels. Global energy today is roughly divided as follows: 87% is fossil, namely natural gas, coal, oil; 10% is nuclear, geothermal, and hydroelectric, and less than 1% is solar power — photovoltaic and solar thermal. Nuclear fuel is scarce and nuclear technology is generally considered dangerous as tragically experienced by the Fukushima Daichi nuclear disaster in Japan, and it seems unrealistic to seek a solution in the nuclear direction. Only solar energy can be a long term solution: Less than 1% of the solar energy we receive on earth can be transformed into 10 times the fossil fuel energy used in the world today. Yet **we need a short-term strategy that accelerates long run renewable energy**, or we will defeat long-term goals. In the short term as the IPCC validates, we need carbon negative technology, carbon removals. The short run is the next 20 or 30 years. **There is no time in this period of time to transform the entire fossil infrastructure** — it costs $45-55 trillion (IEA) to replace and it is slow to build. We need to directly reduce carbon in the atmosphere now. We cannot use traditional methods to remove CO2 from smokestacks (called often Carbon Capture and Sequestration, CSS) because they are not carbon negative as is required. CSS works but does not suffice because it only captures what power plants currently emit. Any level of emissions adds to the stable and high concentration we have today and CO2 remains in the atmosphere for years. We need to remove the CO2 that is already in the atmosphere, namely air capture of CO2 also called carbon removals. The solution is to combine air capture of CO2 with storage of CO2 into stable materials such as biochar, cement, polymers, and carbon fibers that replace a number of other construction materials such as metals. The most recent BMW automobile model uses only carbon fibers rather than metals. It is also possible to combine CO2 to produce renewable gasoline, namely gasoline produced from air and water. CO2 can be separated from air and hydrogen separated from water, and their combination is a well-known industrial process to produce gasoline. Is this therefore too expensive? There are new technologies using algae that make synthetic fuel commercially feasible at competitive rates. Other policies would involve combining air capture with solar thermal electricity using the residual solar thermal heat to drive the carbon capture process. This can make a solar plant more productive and efficient so it can out-compete coal as a source of energy. In summary, the blueprint offered here is a **private/public approach**, based on **new industrial tech**nology and **financial markets**, **self-funded** and using **profitable greenmarkets**, with securities that utilize carbon credits as the “underlying” asset, based on the KP CDM, as well as new markets for biodiversity and water providing abundant clean energy to stave off impending and actual energy crisis in developing nations, fostering mutually beneficial cooperation for industrial and developing nations. The blueprint proposed provides the two sides of the coin, equity and efficiency, and can assign a critical role for women as stewards for human survival and sustainable development. My vision is **a carbon negative economy** that **represents green capitalism** in **resolving** the Global Climate negotiations and **the North–South Divide**. Carbon negative power plants and capture of CO2 from air and ensure a clean atmosphere together innovation and more jobs and exports: the more you produce and create jobs the cleaner becomes the atmosphere. In practice, Green Capitalism means economic growth that is harmonious with the Earth resources.

#### Warming causes *extinction*—turns every impact AND their models under-estimate it.

Spratt & Dunlop ’19 (David Spratt and Ian Dunlop; David Spratt is a Research Director for Breakthrough National Centre for Climate Restoration, Melbourne, and co-author of *Climate Code Red: The case for emergency action*; Ian T. Dunlop is a member of the Club of Rome. Formerly an international oil, gas and coal industry executive, chairman of the Australian Coal Association, chief executive of the Australian Institute of Company Directors, and chair of the Australian Greenhouse Office Experts Group on Emissions Trading 1998-2000; published May 2019; “Existential climate-related security risk: A scenario approach”; <https://52a87f3e-7945-4bb1-abbf-9aa66cd4e93e.filesusr.com/ugd/148cb0_90dc2a2637f348edae45943a88da04d4.pdf>; accessed 10-9-2020; Elkins AM)

Climate change intersects with pre-existing national security risks to function as a threat multiplier and accelerant to instability, contributing to escalating cycles of humanitarian and socio-political crises, conflict and forced migration. Climate-change impacts on food and water systems, declining crop yields and rising food prices driven by drought, wildfire and harvest failures have already become catalysts for social breakdown and conflict across the Middle East, the Maghreb and the Sahel, contributing to the European migration crisis. Understanding and foreseeing such events depends crucially on an appreciation of the real strengths and limitations of climate-science projections, and the application of risk-management frameworks which differ fundamentally from conventional practice. SCIENTIFIC RETICENCE Climate scientists may err on the side of “least drama”, whose causes may include adherence to the scientific norms of restraint, objectivity and skepticism, and may underpredict or down-play future climate changes. In 2007, security analysts warned that, in the two previous decades, scientific predictions in the climate-change arena had consistently under-estimated the severity of what actually transpired. 3 This problem persists, notably in the work of the Intergovernmental Panel on Climate Change (IPCC), whose Assessment Reports exhibit a one-sided reliance on general climate models, which incorporate important climate processes, but do not include all of the processes that can contribute to system feedbacks, compound extreme events, and abrupt and/or irreversible changes. 4 Other forms of knowledge are downplayed, including paleoclimatology, expert advice, and semi-empirical models. IPCC reports present detailed, quantified, complex modelling results, but then briefly note more severe, non- linear, system-change possibilities in a descriptive, non-quantified form. Because policymakers and the media are often drawn to headline numbers, this approach results in less attention being given to the most devastating, difficult-to-quantify outcomes. In one example, the IPCC’s Fifth Assessment Report in 2014 projected a sea-level rise of 0.55-0.82 metre by 2100, but said “levels above the likely range cannot be reliably evaluated”. By way of comparison, the higher of two US Department of Defence scenarios is a two-metre rise by 2100, and the “extreme” scenario developed by a number of US government agencies is 2.5 metres by 2100. 5 Another example is the recent IPCC 1.5°C report, which projected that warming would continue at the current rate of 0.2°C per decade and reach the 1.5°C mark around 2040. However the 1.5°C boundary is likely to be passed in half that time, around 2030, and the 2°C boundary around 2045, due to accelerating anthropogenic emissions, decreased aerosol loading and changing ocean circulation conditions.6 EXISTENTIAL RISK An existential risk to civilisation is one posing permanent large negative consequences to humanity which may never be undone, either annihilating intelligent life or permanently and drastically curtailing its potential. With the commitments by nations to the 2015 Paris Agreement, the current path of warming is 3°C or more by 2100. But this figure does not include “long-term” carbon-cycle feedbacks, which are materially relevant now and in the near future due to the unprecedented rate at which human activity is perturbing the climate system. Taking these into account, the Paris path would lead to around 5°C of warming by 2100. 7 Scientists warn that warming of 4°C is incompatible with an organised global community, is devastating to the majority of ecosystems, and has a high probability of not being stable. The World Bank says it may be “beyond adaptation”. But an existential threat may also exist for many peoples and regions at a significantly lower level of warming. In 2017, 3°C of warming was categorised as “catastrophic” with a warning that, on a path of unchecked emissions, low-probability, high-impact warming could be catastrophic by 2050. 9 The Emeritus Director of the Potsdam Institute, Prof. Hans Joachim Schellnhuber, warns that “climate change is now reaching the end-game, where very soon humanity must choose between taking unprecedented action, or accepting that it has been left too late and bear the consequences.” He says that if we continue down the present path “there is a very big risk that we will just end our civilisation. The human species will survive somehow but we will destroy almost everything we have built up over the last two thousand years.” 11 Unfortunately, conventional risk and probability analysis becomes useless in these circumstances because it excludes the full implications of outlier events and possibilities lurking at the fringes.12 Prudent risk-management means a tough, objective look at the real risks to which we are exposed, especially at those “fat-tail” events, which may have consequences that are damaging beyond quantification, and threaten the survival of human civilisation. Global warming projections display a “fat-tailed” distribution with a greater likelihood of warming that is well in excess of the average amount of warming predicted by climate models, and are of a higher probability than would be expected under typical statistical assumptions. More importantly, the risk lies disproportionately in the “fat-tail” outcomes, as illustrated in Figure 1. This is a particular concern with potential climate tipping-points — passing critical thresholds which result in step changes in the climate system that will be irreversible on human timescales — such as the polar ice sheets (and hence sea levels), permafrost and other carbon stores, where the impacts of global warming are non-linear and difficult to model with current scientific knowledge. Recently, attention has been given to a “hothouse Earth” scenario, in which system feedbacks and their mutual interaction could drive the Earth System climate to a point of no return, whereby further warming would become self-sustaining. This “hothouse Earth” planetary threshold could exist at a temperature rise as low as 2°C, possibly even lower.13

#### Capitalism is the only way to colonize space.

Ashworth ’10 (Stephen, long-standing Fellow of the British Interplanetary Society. He works in academic publishing in the Voltaire Foundation, part of Oxford University – Towards the Sociology of the Universe, part 2 – 18 December 2010 – <http://www.astronist.demon.co.uk/space-age/essays/Sociology2.html>)

The point here is that, while the resources of Earth are limited, those of the Solar System are very much greater. Growth in population sizes and in the usage of energy and raw materials may therefore continue for a number of centuries into the future, provided that two conditions are met: \* Material growth on Earth levels off; \* Material growth in space and on other planets takes over the upward trend. Is this not equivalent to saying that Earth must settle down with a zero-growth society before space development begins? No, so long as the terrestrial and extraterrestrial economies are linked. While this remains true, it will be possible for investors on Earth to invest capital in extraterrestrial development, and receive dividends back from that development. While most Earth-dwelling people will remain on the mother planet, there will also be flows of people, goods and ideas between Earth and her colonies, which must also have a profound economic effect. A net inflow of value to Earth is in any case necessary in order that terrestrial investment in outer space does not merely produce inflation in the home economy. But that inflow need not be of material goods, and is more likely to consist of energy (solar power delivered on microwaves or lasers) and information (software and product development). But surely ultimately the limits of the Solar System will be reached, and the interplanetary civilisation have to settle down as a zero-growth society? Yes, granted. But this differs from a zero-growth planet Earth due to the immense size of the Solar System, which is larger than Earth by between four and six orders of magnitude, depending how far out one wants to go – to the distance of Mars, say, or to the Oort comet cloud far beyond Pluto. An interplanetary industrial civilisation is secure for the long term in a way that a monoplanetary one is not, because it is too large to form a unity, either politically or environmentally, and because it is forced to adapt to a wide range of hostile environmental conditions. It will therefore be secure against any conceivable environmental or military disaster, because such a disaster can only affect a single planet, or at most a limited region of the system. Climate change or world war on Earth has no effect on Mars, and vice versa. And with the majority of the population in orbiting artificial space colonies, even a major change in solar luminosity could be tolerated (though such a change is not expected to have a noticeable effect for hundreds of millions of years yet). With interplanetary civilisation, the social system as a whole can tolerate decline and collapse in particular locations, because they can then be recolonised from outside. Once humanity achieves interstellar status, this security factor is clearly vastly enhanced. However, in order for interplanetary growth to occur in the first place, an economic mechanism must be in place to drive it. The most suitable economic mechanism that has been demonstrated so far is capitalism. Its need for continuous expansion makes it highly appropriate as an economic system for a society colonising its local planetary system. It is not clear whether an economic system based on ideology could perform this function of capitalism. If the ideology was growth-oriented, then it would have no reason to conflict with the existing capitalist order, but would rather work in concert with it. But in the more plausible case that it was oriented towards social stability and economic stagnation, particularly in view of the environmentalist, anti-growth or anti-consumerist agendas it might very likely serve, then it would not want to promote disruptive new technologies such as those of access to space. The idea of a socially just socialist society (if such a hypothetical entity is possible) expanding into space is therefore a questionable one. If Earth remained divided among competing centres of power, then they might make the leap to interplanetary capability even without the driving force of capitalist economics. However, the competitive Moon-race of the 1960s showed, firstly, that if one competitor drops out, the other may well lose interest to the point of abandoning capabilities developed for that competition, and secondly, that an ideologically based collectivist society is unlikely to make a good showing in the technologies required. Economic growth, however, has a vested interest in preserving and extending gains made. Given that the opportunities for growth in space are so large, it seems unlikely that the present burst of growth will reach a plateau until space has been colonised. There is in fact an inconsistency about the idea of an industrial civilisation which does not move beyond its home planet – like a lone tree in the middle of a fertile plain. Such a tree will either die off, or it will naturally reproduce until it has engendered a whole forest, in which a far greater variety of life is possible than on the unsheltered plain.

#### Space colonization solves otherwise inevitable extinction.

Zarkadakis ’19 [George; December 26; Ph.D. in Artificial Intelligence; George Zardakis, “Abandoning the metropolis: space colonisation as the new imperative,” <https://georgezarkadakis.com/2019/12/26/abandoning-the-metropolis-space-colonisation-as-the-new-imperative/>]

Space colonization is not only the subject of fiction but of serious science too. The late physicist Stephen Hawking argued that unless colonies were established in space the human race would become extinct. There are several natural phenomena beyond our control that could spell our obliteration. Over a long enough period of time our planet is vulnerable to catastrophic meteorite strikes, or getting exposed to the deadly radiation of a nearby supernova explosion. As our Sun burns its fuel it will start to expand and, in a few million years, will scorch Earth. We can also self-destruct by waging nuclear war, or by tilting our planet’s climate towards a runaway greenhouse effect. Space colonization is therefore the ultimate insurance policy of long-term human survival[4].

Physics and Biology: how to solve the challenges of interstellar travel

But colonizing space is hard. Three are the main problem categories for humans surviving away from Earth over an indefinite period of time. The first, and probably easiest to solve, is finding a place suitable for colonization. Our solar system provides several possible habitats, the most obvious ones being of course the Moon and Mars. The Jovian moons could also be colonization targets. The Artemis Project[5], a private venture to establish a permanent, self-sustainable human base on the Moon, has proposed the Jovian moon Europa as an alternative future habitat, given the possibility of a hot interior and a liquid ocean of water under the icy surface, both of which could provide for a sustainable human base. Colonizing the Solar System could be a stepping-stone for venturing to worlds beyond, of which there are aplenty. In 2009 NASA launched the Kepler space telescope to discover Earth-size planets orbiting other stars in habitable zones. More than 1,300 planets have been discovered so far, in about 440 star systems; the nearest planet may be “only” 12 light years away. Based on Kepler’s findings scientists estimate that there could be as many as 11 billion rocky, Earth-like planets orbiting habitable zones of Sun-like stars in our Galaxy. The possibilities for expanding humanity’s reach in the cosmos are truly astronomical.

The second problem category is how to get to these other worlds: space travel is a hugely challenging technological problem. After more than six decades of space engineering we are still dependent of heavy rockets that burn chemical fuel to get us out of the Earth’s gravity. Perhaps the greatest innovation so far is the reusable rockets pioneered by Elon Musk’s Falcon 9 and Jeff Bezos’s Charon. Having reusable rockets significantly lowers the cost of space flight. According to Elon Musk it costs $60 million to make the Falcon 9, and $200,000 to refuel it, so theoretically by reusing a rocket multiple times the cost of each flight lowers every time it flies. There are of course additional costs for refurbishment after each flight that must be factored in, but reusing rockets looks like the most practical way to advance space technology today. Alternatively, we could have a space elevator carrying people and equipment on low orbit, an idea envisioned by the pioneering Russian scientist Konstantin Tsiolkovsky back in 1895. Researchers in Japan’s Shizuoka University are presently advancing the concept by using two mini satellites to test elevator motion in space. Moreover, the Obayashi Corporation, which will build Japan’s largest tower, has put together a space elevator proposal that will take people from Earth to an orbiting space station. However, the solution requires 60,000 miles of cable made of carbon nanotubes or an as-yet undeveloped material.

Owing to developments in quantum computing in the next ten years, we may be able to exponentially advance the production of materials for constructing space elevators, as well as for developing new rocket fuels; and thus dramatically reduce the cost of space flight. By harnessing near-infinite computing power and accessing calculations at quantum level physicists may be able to unlock the mysteries of dark matter and dark energy, and probe deeper into the fundamental structure the universe.