### 1

#### The role of the ballot is to determine whether the resolution is a true or false statement – anything else moots 7 minutes of the nc and exacerbates the fact that they speak first and last since I should be able to compensate by choosing – it’s the most logical since you don’t say vote for the player who shoots the most 3 points, the better player wins.

#### Reject their framing on inclusion – they exclude all offense except what follows from their specific fwk which shuts out those without the resources to prepare.

#### The ballot says vote aff or neg based on a topic and five dictionaries[[1]](#footnote-1) define to negate as to deny the truth of and affirm[[2]](#footnote-2) as to prove true which means it’s constitutive and jurisdictional.

#### Their framing justifies permissibility since it only tells you what to do in face of one problem which means everything outside that instance isn’t condemned.

### 2

#### Presumption and permissibility negates – a) statements are more often false than true since I can prove something false in infinite ways b) real world policies require positive justification before being adopted c) the aff has to prove an obligation which means lack of that obligation negates d) resolved in the resolution indicates they proactively did something, to negate that means that they aren’t resolved

#### Skep is true and negates –

#### Every reason is equally as violent in its creation.

**Derrida,** Jacques Derrida, “Force of Law: The Mystical Foundation of Authority” //Massa But **justice,** however unpresentable it may be, doesn't wait.· It **is that which must not wait.** To be direct, simple and brief, let us say this: **a just decision is always required immediately, "right away." It cannot furnish itself with** infinite information and the **unlimited knowledge of conditions,** rules or hypothetical imperatives **that could justify it.** And **even if it did** have all that at its disposal, even if it did give itself the time, all the time and all the necessary facts about the matter, **the moment of decision,** as such, **always remains a finite moment of urgency** and precipitation, since it must not be the consequence or the effectof this theoretical or historical knowledge, of this reflection or this deliberation, **since it always marks the interruption of the** juridico- or ethico- or politico-**cognitive deliberation that precedes it,** that must precede it. The instant of decision is a madness, says Kierkegaard. This is particularly true of the instant of the just decision that must rend time and defy dialectics. It is a madness. **Even if time** and prudence,the patience of knowledge and the mastery of conditions **were** hypothetically **unlimited, the decision would be structurally finite,** however late it came, decision of urgency and precipitation, **acting in** the night of **non-knowledge and non-rule**

#### And, either it’s the case we can predict the outcome of a situation, or we cannot. We cannot, insofar as no situation is ever replicated exactly, and even if it can, there’s no guarantee the outcome will be the same. If we can predict situations, that means everyone can, which means we will always predict each other, making a paradox of action insofar as we always attempt to predict the outcomes of each other’s actions, and will cancel out the obligations.

#### External world skep is true.

**Neta**, Ram. “External World Skepticism.” The Problem of The External World, **2014**, philosophy.unc.edu/files/2014/06/The-Problem-of-the-External-World.pdf. //Massa You take yourself to know that you have hands. But notice that, **if you do have hands, then you are not merely a brain floating in a vat of nutrient fluid and being electrochemically stimulated to have the sensory experiences** that you have now: such a brain does not have hands, but you do. So if you know that you do have hands, then you must also be in a position to know that you are not such a brain. **But how could you know that you are not such a brain? If you were such a brain, everything would seem exactly as it does now**; **you would** (by hypothesis) **have all the same sensory experiences that you’re having right now.** Since your **empirical knowledge of the world** around you **must somehow be based upon your sensory experiences, how could these experiences**—the very same experiences that you would have if you were a brain in a vat—**furnish you with knowledge that you’re not such a brain? And if you don’t know that you’re not such a brain, then you cannot know that you have hands.**

#### And, in order to discover something, it must not be known, but in order to know to discover something, it must already be known – this makes the quest for knowledge incomprehensible and thus impossible

#### And, any account of morality is regressive since it predicates one universal rule on the existence of another moral rule. Since every human chain of reasoning must be finite according to our finite nature, such a reasoning process must terminate in a rule for which no reason can be given.

#### Truth properties – linguistic properties are indeterminate since every claim requires a factual definition and empirical verification, which is impossible given the arbitrariness of meaning. Kripke, Saul. Wittgenstein on Rules and Private Language. Harvard University Press. Cambridge MA, 1982. pg. 72 //Massa The simplest, most basic idea of the Tractatus can hardly be dismissed: a declarative sentence gets its meaning by virtue of its truth conditions, by virtue of [and] its correspondence to facts that must obtain if it is true. For example, [the sentence] ‘the cat is on the mat’ is understood by those speakers who realize that it is true if and only if a certain cat is on a certain mat; it is false otherwise. The presence of the cat on the mat is a fact or condition-in-the-world that would make the sentence true (express a truth) if it obtained.

### 3

#### 1] The[[3]](#footnote-3) “(with a unit of time) the present; the current.” but appropriation has no specified time frame

#### 2] appropriation[[4]](#footnote-4) is a sum of money or total of assets devoted to a special purpose.” but outer space cannot own a sum of money

#### 3] of[[5]](#footnote-5) “expressing an age” but the rez is atemporal

#### 4] outer[[6]](#footnote-6) is “further from the center or inside..” but the resolution is aspacial and doesn’t specify distance

#### 5] space[[7]](#footnote-7) is to “the dimensions of height, depth, and width within which all things exist and move” but the rez doesn’t volume

#### 6] by[[8]](#footnote-8) is “indicating the amount or size of a margin.” but the resolution and entities doesn’t specify

#### 6] private[[9]](#footnote-9) is “(of a person) having no official or public role or position.” so entities have no authority over appropriation

#### 7] entity[[10]](#footnote-10) is “the existence of a thing as contrasted with its attributes” but the rez doesn’t spec

#### 8] is[[11]](#footnote-11) describes being “Stay in the same place or condition.” so action is impossible and negate on presumption

### Case

**Extinction first**

#### 1 – Forecloses future improvement – we can never improve society because our impact is irreversible

#### 2 – Moral uncertainty – if we’re unsure about which interpretation of the world is true – we ought to preserve the world to keep debating about it

#### [1] Sustainability: Capitalist growth is good for the environment, sustainable, and resolves inequality

Harry Saunders 16, Managing Director, Decision Processes Incorporated, “Does Capitalism Require Endless Growth?” Summer, https://thebreakthrough.org/index.php/journal/issue-6/does-capitalism-require-endless-growth

The modern notion that capitalism harbors the seeds of its own ecological destruction owes its provenance to a most unlikely duo of canonical economic thinkers. The Reverend Thomas Malthus claimed in the eighteenth century that a collision between the growing number of mouths to feed and the capacity to add productive agricultural land was inevitable. Karl Marx argued in the nineteenth century that technological change would bring with it falling wages, declining profits, and hence, ultimately, the collapse of capital formation. The argument of Malthus was famously resurrected in the early 1970s in the Club of Rome report The Limits to Growth.1 Around the same time, ecological economists Nicholas Georgescu-Rosen, Herman Daly, Robert Costanza, Robert Ayres, and others advanced the idea that all human economic activity fundamentally relies on a limited planetary endowment of what they call “natural capital.” On the other side, Marxist scholars like Paul Sweezy2, Fred Magdoff, and John Foster3 have extended Marx’s insight, directing our attention to what they call the “growth imperative of capitalism,” by which they mean the indispensable necessity of capitalism to continually accumulate capital and generate a reserve of unemployed workers if it is to remain viable. Without continual economic growth, they argue, capitalism will collapse. Or, as Giorgos Kallis recently so succinctly put it, “Growth is what capitalism needs, knows, and does.”4 Taken together, the dilemma is evident: An economic system that requires perpetual economic growth on a spherical planet with finite resources simply cannot last. Merging Marx and Malthus in this way has made Malthusian arguments accessible to elements of the global left that had historically rejected them. Capitalism and environmental sustainability simply could not be reconciled. Constraining the economy to keep it within a safe margin of ecological limits would only hasten capitalism’s collapse, while allowing capitalism to grow unconstrained would result in ecological collapse. Either way, the choice was clear: abandon capitalism or risk the end of the human project. But Marx and Malthus are not so easily reconciled. Marx’s central insight was that capitalism would collapse of its own contradictions, including rising inequality and immiseration of labor that would ultimately destroy the market for the goods that capitalists produced. As it turns out, the mechanism by which this would occur, technological change driving greater economic productivity, was precisely the mechanism that Malthus failed to anticipate when he predicted that food production would fail to keep up with population growth. In Marx’s crisis lay precisely the mechanism that would prevent Malthus’ prophecy. We see much evidence for this today. Improving technologies have driven a major expansion in food availability, along with continuing production efficiencies across the global economy more generally. The world faces no shortage of ecological challenges — species extinctions, collapsing fisheries, depleted aquifers, poisoned land, and, of course, the inexorable rise of global temperatures as atmospheric concentrations of greenhouse gases increase. And economists today concern themselves with the threat of “secular stagnation,” chronically low growth rates that threaten long-term prosperity. But it is important to distinguish these challenges from the sweeping claims made originally by Sweezy, Magdoff, and Foster and repeated today by prominent intellectuals and activists such as Naomi Klein and Bill McKibben. In the pages that follow, I will demonstrate that both neoclassical growth theory and empirical evidence suggest that capitalist economies do not require endless growth but are rather much more likely to evolve toward a steady state once consumption demands of the global population have been satisfied. Those demands demonstrably saturate once economies achieve a certain level of affluence. For these reasons, a capitalist economy is as likely as any other to see stable and declining demands on natural resources and ecological services. Indeed, with the right policies and institutions, capitalist economies are more likely to achieve high living standards and low environmental impacts than just about any other economic system. 1.From the window of his Manchester home in the mid-1840s, Marx’s colleague and contemporary Friedrich Engels looked out on a horrifying microcosm of what was happening in England and throughout the newly industrializing world — a stark imbalance between the luxurious wealth of capital owners and the miserable poverty of the workers they employed. Marx himself had witnessed firsthand this same imbalance, and over several decades of intense study came to propose that a core flaw of capitalism resides in excessive claims placed by privately owned capital as against labor on the economic value created by their combination. Herein lay the fundamental contradiction, in Marx’s view, which would bring an end to capitalism. As capitalists invested in ever-newer technologies, Marx predicted that their dependence on labor would decline. As this occurred, returns to labor in the form of earned wages would decline. If there were no return to households for their labor, there would be no income with which to consume goods produced by capital owners, nor savings that households might reinvest in new capital. An economic system in which declining returns to labor due to technological change immiserated most households was a system in which the market for goods sold by capital owners could not long survive.Notably, Marx did not dispute the necessity of capital for producing what households need, only who in society need control this resource. The problem, as Marx saw it, was that the surplus value created by labor was being unfairly conscripted by capital owners. In the first decades of the twenty-first century, a number of prominent analyses have suggested that Marx’s prophecy is perhaps coming true. MIT economists Erik Brynjolfsson and Andrew McAfee5 in recent years have suggested that continuing automation and rising labor productivity threaten mass unemployment, a problem foreseen by Keynes in 1930.6 Thomas Piketty, in his much-lauded book Capital in the Twenty-first Century7, finds that returns to capital have exceeded real economic growth in the industrialized world in recent decades, attributing that shift to ever-increasing concentration of limited capital in the hands of the few. The economist Robert Gordon8,9 finds that growth rates slow dramatically as societies become wealthier. The growth associated with the enormous rise in economic productivity and output associated with the transition from agrarian to industrial societies cannot be sustained as societies shift from industrial to post-industrial economies. Meanwhile, Paul Mason and others in the “post capitalism" movement contend that “an economy based on the full utilization of information cannot tolerate the free market.”10 His argument is that capitalist corporations will not prove capable of capturing value from the technology they deliver, value adequate to sustain them over time. Before considering whether these various challenges to advanced capitalist economies portend their collapse, it is important to note what none of these analyses suggest, which is that capitalism’s unquenchable demand for growth has run up against fundamental biophysical limits. If anything, these analyses suggest the opposite: that the limits to continuing growth in capitalist economies are social or technological, not biophysical. Brynjolfsson and McAfee, and Piketty, through technically different mechanisms, ultimately raise concerns that center around the immiseration of labor. Whether due to technological change, growing returns to capital, or both, all three centrally focus on declining wages and employment as the central challenge that threatens robust and equitable growth in capitalist economies. Mason, conversely, projects that technological change threatens returns to capital. The commodification of everything — material goods, knowledge, and information — ultimately brings with it an end to profits and hence both capital accumulation and capital reinvestment.11 Gordon, meanwhile, observes that there is simply no further techno-economic revolution that can replicate the one-time boost in economic productivity that comes with the shift from agrarian to industrial economies.12 If there is a common theme in these challenges to capitalist economies it is that all find their way, to one degree or another, back to Marx, not Malthus. The long-term challenge for capitalist economies, these analyses suggest, is too little growth, not too much. 2. The headwinds facing advanced industrial economies — stagnant growth and rising inequality — tell us something about the prospects for low- or zero-growth capitalist economies. Gordon’s analysis suggests that industrialized economies in relatively short order achieve a “satisficing” level of household consumption. Once that level is achieved, and once societies have built out the basic infrastructure of modernity — cities, roads, electrical grids, water and sewage systems, and the like — the growth rates characterized by the early stages of industrialization cannot be sustained by the knowledge and service sectors that increasingly dominate post-industrial societies. World Bank data clearly show this. Economic growth rates decline as countries become richer. Growth in GDP per capita in OECD countries slowed from an average of about 3 percent per year in the period 1961–1985 to about half of that in the period 1986–2014.13 Gordon’s analysis is supported not only by the long-term slowing of growth in industrialized economies but also by saturating household consumption in those economies. According to the World Bank, OECD growth in real household consumption per capita (consumption of both goods and services) has shown steady decline each decade from around 3 percent per year in the 1970s to around 1 percent per year since 2000.14 Brynjolfsson and McAfee, and Piketty, suggest that declining returns to households from their labor will drive worsening inequality and stagnant or declining wages. But that does not imply a declining material standard of living. The same technology gains and capital mobility that have eroded the power of labor in developed world labor markets have also persistently reduced the real prices of goods and services, making them ever more affordable.Even as nominal wage growth has slowed or stagnated in the US and other advanced developed economies, households are able to buy more with less of their incomes. This is because the cost of goods and services has grown even more anemically, inflation nearly disappearing in these countries over the same time period, meaning wages have grown in real terms. OECD data show that real wages OECD-wide have grown by about 1 percent per year between 2000 and 2014, including real growth in the United States, the United Kingdom, France, and Germany.15 Growth in the Scandinavian economies (Norway, Denmark, Sweden, and Finland) has exceeded this.16 This is true even at the bottom of the income distribution. Virtually all low-income homes in the United States today boast a refrigerator, modern heating and cooling, and electricity. Large majorities have dishwashers, washers and dryers, computers, cable television, and large-screen displays. Consumer goods and services once considered luxuries in the United States and other developed countries are today widely available and utilized by all citizens. That is mostly because home appliances and other goods today cost a small fraction, measured in the work time necessary to purchase them, of what they did thirty years ago.17,18 Of course, rising economic inequality raises a range of concerns beyond those related to access to goods and services. Higher rates of inequality may threaten social mobility, social cohesion, and perhaps even democratic governance. Even so, inequality appears to decline as nations industrialize and become wealthier. In rich Scandinavian countries (Sweden, Denmark), inequality has essentially halved since World War II.19 Declines recently are less impressive in the United States, United Kingdom, and other parts of Europe20, but, nonetheless, inequality remains reliably lower than in most developing economies21, where aggressive but still insufficient capital formation in the presence of large labor forces tends to result in higher levels of inequality. Moreover, increased capital mobility has driven declining inequality between countries, even as it may be worsening inequality within them. Thanks to global trade and international supply chains, firms have become increasingly able to locate production facilities in the developing world, where labor with the requisite skills can be employed at lower wages. As might be expected, labor in industrialized countries is not happy with this turn of events. But the result has been a long-term convergence of wages between producing and consuming countries, declining inequality globally, and a dramatic decline in absolute levels of poverty. The ILO reports that between 2000 and 2011, real average wages approximately doubled in Asia.22 In Latin America, the Caribbean, and Africa they also rose substantially, well above the developed world average23, while in developed economies they increased by only about 5 percent, far below the world average24, leading to what leading ILO observer Patrick Belser has dubbed “the great convergence”25 — a dynamic that was incidentally predicted many decades ago on theoretical grounds by famed economist Paul Samuelson.26 Meanwhile, according to the World Bank, the global share of people living on less than $1.90 per day (the World Bank definition of extreme poverty) fell from 44 percent in 1981 to 13 percent in 2012.27 Taken together, then, the dynamics transforming the global economy, while not without challenges, paint an interesting picture of slowing growth, converging global incomes, falling cost, and saturating demand for goods and services. Should these dynamics hold, it is not hard to imagine a future in which the global economy gravitates toward a prosperous and equitable zero-growth economy placing relatively modest demands on the biocapacity of the planet. But getting from here to there will require a number of further conditions.

#### [2] War: Multilateral economic ties forged through capitalism are key to interdependence which sets a cap on conflict – Robust models prove

Jackson and Nei 15 – Matthew O. Jackson, William D. Eberle Professor of Economics at Stanford, and PhD in economics from Stanford Graduate School of Business, Stephen Nei, Economics PhD candidate at Stanford University (“Networks of military alliances, wars, and international trade,” *Proceedings of the National Academies of Science of the United States*, December 15th, 112(50), pp. 15277–15284, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4687585/)

We provided a model of networks of military alliances and the interactions of those with international trade. We showed that regardless of military technologies and asymmetries among countries, nonempty stable networks fail to exist unless trade considerations are substantial. Moreover, the network perspective gives us an understanding of how trade might prevent conflict, by discouraging countries from turning against their allies and encouraging countries to defend their trade partners. Although this points to trade as a necessary condition for stability, whether it is sufficient for stability depends on size of the costs and benefits of war. In closing, we comment on several other features of international relations that are part of the larger picture of interstate war. A notable change in alliances during the Cold-War period was from a “multipolar” to a “bipolar” structure, something which has been extensively discussed in the Cold-War literature (e.g., see ref. 12 for references). Although this lasted for part of the postwar period, and was characterized by a stalemate between the Eastern and Western blocs, such a system of two competing cliques of alliances is only war-stable if there are sufficient trade benefits between members of a clique, as shown in our second theorem. Moreover, it is more of a historical observation than a theory, and it does not account at all for the continued peace that has ensued over the last several decades. Thus, this fits well within the scope of the model and does not account for the overall trend in peace. Another institutional observation regarding the post-WWII calm is that institutions have allowed for coordination of countries onto a peaceful “collective security” equilibrium where any country disrupting international peace is punished by all other countries, so that war against one is war against all. However, as shown by ref. 34, this equilibrium is in some sense “weak”: It relies heavily upon the assurance that a country tempted to join an attacking coalition will refuse and that all countries will follow through on their punishment commitments, so that far-sighted expectations of off-equilibrium behavior are correct. Given that various small conflicts since WWII did not precipitate a global response, such doubts of some countries’ commitment to follow through on punishments seem reasonable.§§§§ Although collective security does not seem to explain the lasting peace, it nonetheless does suggest an interesting avenue for extension of our model: taking a repeated games approach to networked conflict and trade. One more relevant observation regarding changes in patterns of conflict is the so-called democratic peace: Democracies rarely go to war with each other. This coupled with a large growth of democracies might be thought to explain the increase in peace. However, once one brings trade back into the picture, it seems that much of the democratic peace may be due to the fact that well-established democracies tend to be better-developed and trade more. Indeed, studies (38, 39) indicate that poor democracies are actually significantly more likely to fight each other than other countries, and that paired democracy is only significantly correlated with peace when the countries involved have high levels of economic development, which is consistent with trade’s playing the major role rather than the government structure. Our model abstracts from political considerations, which still could be significant, and so this suggests another avenue for further extension.

#### [3] Space colonization: Capitalism is key to drive private investment and research

Spring 16 (Todd, 6/3/16, The Policy, “A Case for Capitalism, In Regards to Space Travel,” https://thepolicy.us/a-case-for-capitalism-in-regards-to-space-travel-d77e50f8116e#.q49v6pqm2, 9/7/16, SM)

As of now, N.A.S.A. does not plan on sending a ~~manned~~ mission to Mars until the 2030s — assuming, of course, they get the government funding they need to undertake such a massive project. Considering the recent cuts to deep space exploration, down nearly $300 million from 2016, I am not certain what the condition of the program will look like in another two years…much less the gap between now and the 2030s. Where, then — if the government and its agencies will not provide us with the money for exploration — will we turn to slake our thirst for cosmic space travel? SpaceX. Private corporations. Capitalism. Seeing this article in the news, reading day after day the story of budget cuts to N.A.S.A. in regards to deep-space exploration and other related programs, got me thinking about just how important it will be for private companies and corporations to undertake these projects…such as Elon Musk’s SpaceX, and countless others (read the full list here). The problem is that we have gotten it into our heads that Capitalism is the root cause of our economic woes in the United States, perhaps failing to understand that such policies are something like a double-edged sword: they could also be our salvation. This article provides a great list of the pro’s and con’s of Capitalism. I would recommend you take the short passing of time it requires to read it through-and-through before continuing. Now then. I have never been for fully-unhindered Capitalism. I do not believe that the government should stay out of economic affairs entirely, for as provided in the article many of the con’s relate to improper regulation (monopolization) as opposed to something fundamentally wrong, but I do not believe that any government should be going about shoving their claws into every economic affair either. There must be a healthy balance, especially if Capitalism is to work as it is supposed to work. The same goes for any policy. The government should be there to bolster competition between businesses…not favor one or bail-out the other. The more regulation, the more interference or amendment, the less it works…but this mix of regulation and free market must fall in the “goldilocks zone” if the citizens of said society are to reap its full benefit. If not, like planets about a star, the society shall either burn or freeze. One of those benefits is highlighted by Elon Musk’s SpaceX: the intervention of privately-funded companies to do things that a traditional government agency cannot. Namely, the exploration and eventual colonization of Mars in a reasonable, step-by-step timeframe…unlike the “we will get to it eventually” mindset plaguing the bowels of the United States government. Were not the policies in place to foster the growth of private companies, our best chance at getting people out of Earth-orbit — the Bush-approved, now-cancelled, insanely-expensive Constellation program — would have gone the way of promises and well-wishes. It is my hope that Elon Musk and space entrepreneurs like him are not simply blowing steam, and that one day — perhaps even within my lifetime — I could be on my way to a space hotel on the Moon, flying aboard a space airliner with the name of a private company plastered across the side. Regardless, if we humans are to truly become a multi-planet species we must not hinder economic growth with narrow thoughts. We must not become confused that the “problems down here” and the “problem of getting out there” must be in conflict; they do not need to, and we must not suppose they should. They are two separate issues with two unique sets of problems, and thus this policy of taking resources from one to give to the other will only ensure that neither issue is given that which it needs, or enough to fix what must be solved. Therefore I propose that we support these pioneers of space travel in any way that we are able. Let us not forget that solving the issue of “how do we get there” might just lead to the end of our “problems down here”.

#### They can’t win any offense – Getting off the rock solves every single extinction threat

Smith and Davies 2012 (Cameron M., Anthropology Professor, Evan T., Writer; "A Choice of Catastrophes: Common Arguments for Space Colonization", Emigrating Beyond Earth: Human Adaptation and Space Colonization, http://link.springer.com/chapter/10.1007/978-1-4614-1165-9\_4)

These limits are not entirely mythological. Even if humanity were to end war,¶ overpopulation, disease and pollution, ensure global justice and build a network¶ of defenses against such cosmic dangers as solar eruptions and wandering comets¶ and asteroids, the Sun cannot be prevented burning out, at which time its plasma¶ shell will expand and incinerate the Earth and all human works. The Sun's¶ expansion is not expected to occur for another five billion years, and may be¶ thought of in a somewhat mythical way. But there are certainly serious and¶ immediate threats to the human species that, we argue, make a compelling case¶ for beginning the migration from Earth sooner rather than later.¶ We are not the first to point these out, of course; in his 1979 book A Choice of¶ Catllstrophes3 Isaac Asimov discussed a variety of plausible natural and culturally caused¶ events that could cause the extinction of humanity, or at least collapse¶ global civilization. While humanity has taken action on some of these threats -¶ for example, an international effort now scans the sky for 'civilization-killer'¶ comets and asteroids4 - many of Asimov's proposed calamities could still occur¶ today. Unfortunately, some are more likely today than in the past, such as the¶ use of nuclear, chemical or biological weapons by individuals or small¶ organizations, and the already-apparent effects of global over-consumption of¶ natural resources, which defense organizations worldwide already recognize as¶ likely leading to resource wars in the relatively short term.¶ Asimov made many of these points nearly 40 years ago, but more recent¶ surveys of the possibility of relatively near-term human catastrophe have been¶ published, and they are not encouraging. A context for these projections has¶ been forwarded by philosopher Robert Heilbroner, who has argued in the book¶ Visions of the Future that from the time of early humans to the 17th century AD,¶ most of humanity saw its future as essentially changeless in its material and¶ economic conditions, a position that paints with quite a broad brush. Perhaps¶ more perceptively, he also argues that from the 18th century AD to the mid-¶ 1900s, Western civilization (at least) saw its future as essentially bright and¶ positive, to be achieved through the application of science, whereas since the¶ mid-1900s (significantly, after two World Wars and the invention of nuclear¶ weapons) there has been a more varied conception involving negatives resulting¶ from "impersonal, disruptive, hazardous and foreboding" factors,' though¶ including some positive hope.¶ Technology figures large in these conceptions, and it is clear that science and¶ the technologies that derive from it can yield great opportunities as well as¶ terrible risks. These were important issues to Asimov, and are more important¶ today. A recent review by Oxford University philosopher and futurist Nick¶ Bostrom points out that three recent discussions of the near human future by¶ prominent thinkers have highlighted significant threats to human existence within the next 1-5 centuries; John Leslie gives humanity a 30% chance of¶ becoming extinct in the next five centuries, Astronomer Royal Martin Rees has¶ weighed in with a figure of a 50% chance of extinction within the next 90 years,¶ and Bostrom himself giving humanity a greater than 25% chance of extinction¶ in the next century. Of course, these are speculations, but they are informed¶ speculations and they reflect technological and other realities that could not¶ have informed earlier, mythical doomsday concepts we discussed above.¶ 6¶ Natural threats to humanity include impacts on Earth from extraterrestrial¶ objects such as asteroids and comets. Human-caused threats to humanity, or at¶ least civilization (defined and discussed in Chapter 2), include ecological¶ overexploitation and conflicts using nuclear, biological and/or chemical¶ weapons. The magnitude of threats to humanity range widely (e.g. from¶ extinction to substantial reduction of the species population); we focus on the¶ levels of (a) the extinction of Homo sapiens sapiens or (b) the collapse of modem¶ civilization.¶ Extinction¶ Extinct species are those whose members have all died out; they may be known¶ to humanity in the fossil and/or DNA record of ancient life forms, but are no¶ longer living at present. Humanity has only been scientifically aware of the 4.5-¶ billion-year age of the Earth for about 100 years, and for much of humanity's¶ more recent history we have considered Earth to be a relatively safe and benign¶ home, at least between cyclic catastrophes. But palaeoenvironmental and fossil¶ records show that calamities and extinctions have been common through time.¶ In a comprehensive survey of the paleontological record paleontologist David¶ Raup has documented that over 99% of all species that have ever lived on Earth¶ have become extinct, and that most species (e.g. sapiens) have a duration of¶ about four million years, while most genera (e.g. Homo) have a duration of about¶ 20 million years. 7 While these are fascinating figures, we must recall that, as we¶ will see through this book, such figures apply to life forms that do not know they¶ are evolving in the first place, and can therefore do nothing proactively about¶ significant threats to their selective environments- their habitats. Humanity, as¶ we saw in Chapters 2 and 3, however, is unique in its ability to both perceive¶ such changes and, if time allows, adapt to them. We return to this important¶ point at the end of this chapter.¶ Extinction normally takes place over multiple generations; millions of¶ generations for faster-reproducing species, thousands for slower-reproducing¶ species. It often results from changes in selective environments that are too rapid¶ for a given species to adapt biologically. For example, when a comet (or asteroid) struck the Earth around 65 million years ago , selective environments changed¶ due to the cloud of debris that was spewed into the atmosphere; the cloud¶ blocked sunlight, which caused changes in temperature, vegetation regimes and¶ so on. This was a change of selective environment so rapid that dinosaurs were¶ unable to adapt with the biological evolution of novel traits suitable to their new¶ selective pressures. Species can also become extinct if they are out-competed by¶ other life forms that are more proficient at life in a given selective environment,¶ as when North American mammals migrated south and replaced many South¶ American marsupials, starting around 3 million years ago.¶ The history of life on Earth includes several well-documented mass-extinction¶ events in which large percentages of Earth life - or some segment of Earth life -¶ became extinct. These events are so distinctive in the fossil record that the¶ disappearance of an established life form and the appearance of new one in the¶ paleontological record are often used to define the beginnings and ends of the¶ geological periods. Such events could occur again and it is clear that most¶ would either cause human extinction at least the collapse of modern¶ civilization.¶ Some mass extinctions occurred over millions of years due to gradual¶ changes in the environment, and some - as in the well-known comet or¶ asteroid impact that ended the reign of the dinosaurs - occurred, from the¶ perspective of life form adaptation, instantly. In each case, full recovery of the¶ Earth's biodiversity took tens of millions of years. We will examine some such¶ extinction events after considering another possible scenario: not extinction,¶ but civilization collapse. ¶

#### [4] Environment: Capitalism fosters growth and trade that reduce CO2 emissions – It also facilitates the transition to renewables – We cite the most conclusive studies

Ozturk et al 15 – Ilhan Ozturk, senior lecturer in the Faculty of Business and Economics at Cag University, Slim Ben Youssef, Manouba University, ESC de Tunis, Mehdi Ben Jebli, Amen Bank, Kef Agency, Tunisia, 2015 (“Testing environmental Kuznets curve hypothesis: The role of renewable and non-renewable energy consumption and trade in OECD countries,” *Ecological Indicators*, September 2nd, Available To Subscribing Institutions Through Science Direct)

For both models we show that increasing renewable energy consumption reduces CO2 emissions in the long-run. Thus, encouraging renewable energy use by granting research and development (R&D) programs, reinforcing regulatory framework, etc. is a good policy for OECD countries to combat global warming. This result is consistent with that of Ben Jebli and Ben Youssef (2015a) for the export model. However, our result is not similar to that of Apergis et al. (2010) as they show that more renewable energy consumption increases CO2 emissions for the panel of 19 developed and developing countries they consider. We show that increasing exports or imports reduces CO2 emissions. This result could be explained by the fact that most countries of our considered panel are developed countries. Since trade has a positive effect on per capita GDP and knowing that the inverted U-shaped EKC hypothesis is verified for this panel of OECD countries, the increase in per capita trade leads to a reduction in per capita CO2 emissions in the long-run. This result is similar to that of Shahbaz et al. (2014) who show that the EKC hypothesis is verified in UAE and that increasing exports in UAE reduces CO2 emissions in the long-run. This result is contrary to that found by Ben Jebli and Ben Youssef (2015a) as they show that increasing trade increases CO2 emissions. Their result is due to the fact that the inverted U-shaped EKC hypothesis is not verified in Tunisia considered as a developing country. In addition, our result differs from that of Halicioglu (2009) showing that increasing the trade openness ratio in turkey increases per capita CO2 emissions in the long-run, whereas the EKC hypothesis is verified analytically but not graphically. It is evident from these empirical studies that when the EKC hypothesis is verified, there is a great chance that trade has a beneficial and reducing impact on CO2 emissions. 4. Conclusion and policy implications In this paper, we use panel cointegration techniques to investigate the short and long-run causal nexus between per capita carbon dioxide emissions, economic growth, renewable and non-renewable energy consumption and trade (exports or imports) for a panel of 25 OECD countries over the period 1980–2010. We also try to test the validity of the inverted U-shaped EKC hypothesis for this panel of countries. Our short-run Granger causality tests show the existence of a unidirectional causality running from trade to CO2 emissions, a unidirectional causality running from exports to renewable energy consumption, bidirectional causality between imports and renewable energy consumption, and bidirectional causality between renewable and non-renewable energy consumption. This last causality is indicative of short-run substitutability between the two energy sources. In the long-run however, there is evidence of bidirectional causal relationships between per capita CO2 emissions, real GDP, renewable and non-renewable energy consumption, real exports (or imports). The FMOLS and DOLS long-run estimates support the inverted U-shaped EKC hypothesis between per capita CO2 emissions and GDP. This result is not surprising as most of the considered countries in our panel are developed countries. As expected, increasing non-renewable energy consumption increases CO2 emissions in the long-run. However, increasing renewable energy consumption reduces CO2 emissions in the long-run. Therefore, and because of the substitutability between non-renewable and renewable energy, increasing the consumption of renewable energy leads to a reduction in CO2 emissions and may reduce the dependency of these OECD countries on fossil energy. Long-run estimates show also that increasing trade reduces CO2 emissions. Thus, increasing international commercial exchanges, which has been shown to be increasing economic growth in most empirical studies, is actually helping in combating global warming for this panel of OECD countries.

#### Any alternative to capitalism is terrible for the environment – Leads to inefficiencies, deforestation, increased land use and more emissions

Phillips 15 (Leigh Phillips is a science writer and European Union affairs journalist. Writing for Nature, the Guardian, the Daily Telegraph, the New Statesman, Jacobin, Scientific American, amongst other outlets, “Austerity Ecology & the Collapse-porn Addicts A defence of growth, progress, industry and stuff” ebook) DAH

But the Kool-Aid of the cult of localism is not just being drunk by Rob and Tony and Naomi. Localism is pushed by Bill McKibben—the ex-New Yorker journalist, initiator of the 400,000-strong People’s Climate March outside the UN climate talks in New York in the fall of 2014, and supremo of international climate-change activist group 350.org—in his latest book, Eaarth: Making a Life on a Tough New Planet (yes, that’s spelt correctly—McKibben added an extra ‘a’). Localism is the focus of novelist Barbara Kingsolver’s Animal, Vegetable, Miracle, a memoir of her family’s efforts to eat only food that they had grown themselves or obtain locally for a full year; as it is of The 100-Mile Diet by Alisa Smith and James MacKinnon, and most of food writer Michael Pollan’s oeuvre. There’s Local: The New Face of Food and Farming in America by Douglas Gayeton; The Locavore’s Handbook by Leda Meredith and Sandor Ellix Katz; cookbooks like Local Flavors: Cooking and Eating from America’s Farmers’ Markets by Deborah Madison. Twee little signs hand-calligraphed or rubber-stamp-printed on moss-green parchment and lavender-blush vellum card-stock in cafes, farmers’ markets and high-end grocery stores declare the localist virtue and upstandingness of their muffins, cranberry horseradish and herbal alternatives to deodorant. Busybody Facebook commissars enforce localist doctrine criticising the consumer choices of their friends (when they’re not judging their parenting choices). The local food movement has achieved such ubiquity that it became the mocking subject of satirical comedy series Portlandia in a sketch called ‘Is it Local?’, in which a pair of ethical restaurant-goers grill their waitress about the sustainable pedigree of the dish they are thinking of ordering, which involves a woodland-raised, heritage-breed chicken that has been fed a diet of sheep’s milk, soy and hazelnuts, from 30 miles south of Portland, and is named Colin. It seems so simple: food (or anything else) produced locally will not require the carbon-spewing transportation of such items via cargo ship or truck or plane from far away. It appears to be an easy rule of thumb enabling consumers to do the right thing. But the reality is a great deal more complicated. Instead of the crude heuristic of ‘food miles’, if we are genuinely concerned about greenhouse gas emissions, we need to make sure we are actually doing good, not just feeling good. That means that we need to base such decisions on full life-cycle assessment (LCA) studies—a method of analysis that takes into account all aspects of the production and distribution of a product. And when we do look at LCAs, for some products, it turns out that yes, indeed, it does make sense to relocalise production, but for many, many other items, the economies of scale involved make the amount of energy employed and thus greenhouse-gas emissions per item far less than an item that is locally produced, despite the thousands of ‘food-miles’. According to a 2005 UK Department of Environment, Food and Rural Affairs analysis,64 tomato farmers in sunny Spain produce less CO2 than tomato farmers in frequently overcast Britain employing heated greenhouses (630 kg of CO2 vs 2,394 kg of CO2 per tonne). The same is true of Kenyan versus Dutch rose growers, with the former producing six tonnes of CO2 per 12,000 roses cut, and the latter producing 35 tonnes of CO2 for the same amount.65 It is the production of food that that has the largest energy appetite, rather than transportation. Again, it is simply more efficient to have the roses grown where flower production depends almost entirely on the warmth of the sun in equatorial Kenya rather than on the heating and lighting systems of the temperate Netherlands. A similar investigation in 2008 by Carnegie Mellon researchers Christopher Weber and Scott Matthews,66 covering the American situation, found that 83 percent of an average household’s carbon footprint came from emissions during the production phase, with just four percent of full life-cycle greenhouse gas emissions coming from transport from producer to retailer. Weber and Matthews found that due to the different carbon-intensity of the production and distribution of different items, with red meat on average roughly 150 percent more carbon-intensive than chicken or fish, a far more effective rule of thumb than “buying local” would be a dietary shift away from beef and milk. “Shifting less than one day per week’s worth of calories from red meat and dairy products to chicken, fish, eggs or a vegetable-based diet achieves a greater greenhouse gas reduction than buying all locally sourced food,” they conclude. In a similar fashion, in terms of the amount of water used, it can be far more sensible to produce food in areas with heavy precipitation than in arid zones, reducing the need for irrigation, disruption of natural river flows, and piercing of aquifers. Some 70 percent of our freshwater use occurs in agriculture, so this should be a key concern of the localist eco-defenders. Geographer Pierre Desrochers and public policy analyst Hiroko Shimizu describe how agriculture that is local, small-scale, less-technology-intensive—and crucially, by definition, low in productivity—is necessarily more extensive, that is, it uses up much more land for the same amount of food. There is a very simple reason for this. Not every plot of land, with its particular climate, soil type, geology, topography and so on—its terroir, if you will (and I use that term fully aware of the irony of its presence in an essay arguing against localism)—is equally well suited to all types of plant and animal. Specialisation and a division of labour between different regions that are better at growing different items is thus a more efficient use of land: you’ll get more calories produced per hectare.67 The inverse of this process—disintensification, which localism requires—means turning more forest, wetlands and grasslands into agricultural space, releasing vast quantities of carbon in the immediate term and, in the future, eliminating the carbon sinks that forests would have represented. This process of indirect land-use change is essentially why biofuels have proven to be no climate solution. The defenders of localism are in thus little different to the biofuels industry, clinging to a particular agricultural practice long after the evidence has shown it to actually exacerbate climate change. A focus on local seasonality fails for the same reason. If we say: Buy as seasonally as possible, the first question that must be asked in response is: Which region’s seasonality are we talking about? New Zealand’s apple harvest season happens when it’s winter in the UK, making it more sensible to ship fresh granny smiths all the way from the Antipodes to Europe than to keep British apples in cold storage for six months. The same goes for New Zealand lamb, dairy products and onions, according to a trio of researchers at Wellington’s Lincoln University.68 Meanwhile another 2003 study from German researchers Elmar Schlich and Ulla Fleissner69 found via a full life-cycle assessment that large-scale Brazilian orange juice producers shipping their product around the world had lower per-unit energy demands than small-scale German apple juice squeezers driving their truck just ten kilometres to market. If the advice instead is not local seasonality, but ‘global seasonality’, picking things to eat when they’re in season wherever they come from, then yes, in principle, you may see some carbon emission reductions due to shorter storage periods. But in the modern era, most food items are always in season somewhere in the world. This isn’t true for all items, and for such products, a preference for their seasonality might make sense, but then again, this should be assessed on a case-by-case basis, using an LCA to take into account all the other variables related to carbon emissions. To do this would require something like a very detailed spreadsheet comparing all the different products and their component inputs, transport, storage requirements and packaging rather than the clumsy heuristic of “Buy seasonal!”, which, as demonstrated, in a number of cases is actually detrimental in terms of mitigating climate change. Such Excel Hell might make sense for more rational agricultural planning, but as far as an individual consumer is concerned, it would be far more effective to expend one’s time fighting for clean energy infrastructure than on this sort of faff.

#### Informatics and technology mitigate existential risks such as climate change

Branch ’10 - Ph.D., Educational Research and Policy Analysis, North Carolina State University (Benjamin D.; “Educational Leadership’s Literacy Needs for Informatics and Cybernetics Agenda”; http://www.iiis.org/CDs2010/CD2010IMC/ICETI\_2010/PapersPdf/EB465UI.pdf)//TS

At the heart of many forms of societal change is leadership that is aware of the necessary change that may best suit emerging technological paradigms. However, the informatics and cybernetics agenda is one that may be unknown in policy on the federal and many state levels towards educational K-12 value. Specifically, Executive Order 12906, a federal mandate known as the Coordinating Geographical Data Acquisition and Access: The National Spatial Data Infrastructure, by the federal government in 1994 has interested educators in exploring their possible roles in spatial thinking, broadly defined as the use of space to define, formulate and solve problems (Branch, 2009). As such, literacy towards informatics and cybernetics may be needed to stimulate such pipeline considerations by next generation educational leadership (NGEL). Thus, educational leaderships literacy towards informatics and cybernetics may need to be an intentional interdisciplinary collaboration of change where issues of climate change and a green economy are injected into a K-12 data experience which could possibly address the NCLB (2001) mandate and to increase mandated geosciences outcomes. Such state compliance to Executive Order 12906 is coordinated by the National States Geographic Information Council (Branch, 2009). Moreover, educational leadership is directed to ensure such data driven activity occurs within its infrastructure, because in most cases a state‟s department of education has to compliance like all other state agencies as a state seeks compliance with the federal Executive Order 12906. This work may serve as a brick in the new educational foundations of NGEL. Such proclaims that leadership must have pragmatic solutions and refrain from political rhetoric. NGEL should address, represent and bridge pragmatic solutions to long standing educational issues left behind due to a lack of effective interaction between communities, school leadership, such policy makers and the scientific community. Lastly, this work may imply that informal and formal community informatics and citizen science programs may be the plausible venues to address Science, Technology, Engineering and Math (STEM) outcomes. In addition, this paper focuses on Earth Science and space informatics as K-12 literacy need because it linked as outcome of the STEM outcome as defined by the United States Department of Education. Thus, the terms informatics and cybernetics are assumed to be linked to Earth Science and space concepts. For example, as the [1] National Academy of Sciences (2006) defined spatial thinking as an likely medium of scientific communication for all levels of education, the stakeholders in control may develop a new age literacy and involvement towards [2] Executive Order 12906, state mandates, the societal needs of climate change and a green economy. At the root of such effectiveness is what infrastructure and what type of investment in such infrastructures will cost effectively benefit society. As school districts are hit with budget crises, informatics and cybernetics have to re- define themselves into cost effective and pragmatic community based frameworks that support an interdisciplinary ontology of communication across disciplines as referenced in [3] knowledge representation in the semantic web for Earth and environmental terminology (SWEET). Such may be a defining collaborative skill development towards a global citizen mindset. Such a definition should be considered a NGEL literacy for the global citizen of tomorrow which is illustrated in this conceptual framework in Figure 1. Figure 1 [3] SWEET 2.0 In the [3] SWEET implementation, math may be the root of relating the value of informatics or cybernetics across disciplines. Hence, data processes along with Earth Science investigations may need a synergistic value and intentional support by NGEL to sustain K-12 implementation and assessment. The foresight of education leadership should have the ability to always define or anticipate the next generation of pedagogical need of its impending data and infrastructure requirements. For example, if grid or cloud computing becomes an cost effective norm in society, then perhaps education should consider a bee hive approach to societal needs where the entire society must input a more equitable role in the brainpower of its citizens to address future climate change and green economy needs. Simply, if informatics and cybernetics are critical to climate change response, then data driven practices along with computational Earth Science training must be a common occurrence. Hence, educational networks must transfer more knowledge in future generations. For example, National Aeronautical and Space Administration‟s (NASA) Cryosphere and Dynamic Earth public outreach materials suggest a 3-foot sea level rise by 2100 A. D. that may affect millions of persons in the world. If the potency of effective educational leadership does not have spatial thinking, informatics and cybernetics development on its radar, then how can it steer future generation towards a state of self determination in the face of a complex world where Earth Science data computation is a valuable commodity? Therefore, society may be challenged with a spatial thinking literacy as well as an informatics and cybernetic literacy. Clearly, “the spatial thinking experience of data collection, data verification, and data analysis is not on the radar of educational leadership” [4] (Branch, 2009). As such, informatics literacy and cybernetics literacy may too be nonevolved within the educational K-12 community. This paper suggests that applicable policy exists for spatial literacy to be embraced and supported from [2] 1994 Executive Order 12906. Such is the basis for literacy towards informatics and cybernetics to take root in the K-12 experience after projected based spatial thinking or Earth Science base experienced reach the K-12 standard course of study. This work argues that after school experiences are not enough to prepare the next generation of global citizens to deal with the green economy or climate change implications. The [5] 2009 White House “Educate to Innovate” campaign by the Obama administration should address the K-12 standard course of study on the state level and supported by the US Department of Education because of [2] Executive Order 12906. Furthermore, since past Presidential Initiatives such as Bush administration‟s 2005 support of geospatial technology in the K-12 and college community should not be ignored. The states and the federal government laws applicable to [2] Executive Order 12906 should provide rationale for educational leadership and NGEL to ensure spatial literacy applied to the K-16 standard course of study. Literacy towards informatics and cybernetics by educational leadership may be a secondary response to [2] Executive Order 12906. NGEL should utilize the practice of community informatics, a collection of community remote sensing, community geographical information systems and environmental study, where cost effective Earth Science could be implemented by partnership between educators and the community. Here, a literacy of climate change is justified in the terms and practices of informal to formal Earth Science data collection, analysis and presentation with cost effective Earth Science tools of GIS, remote sensing or Earth Science investigation. Successful implementations may even become applicable solution to economically stricken school districts. Moreover, a possible benefit to government agencies could be stimulation in STEM disciplines outcome in a cost effective manner if collaboration between academic institutions, the community and scientific agencies desire such synergy. Moreover, implications to Earth Science and Space informatics pipeline, climate change, interdisciplinary research and collaboration; accreditation change, and grant funding issues should be well versed by educational leadership to address the data driven needs and skills of next generation considerations of global citizens. NGEL has a morale obligation to create the next global competitive citizens with literacy in spatial tools, Earth Science data processes, climate change debate and logistics of a global economy

#### Warming causes extinction

Kareiva 18 ― Peter Kareiva, director of the Institute of the Environment and Sustainability at UCLA, Professor in Environment and Sustainability at UCLA, Ph.D. in ecology and applied mathematics from Cornell University, 2018. (“Existential risk due to ecosystem collapse: Nature strikes back”, Futures, Volume 102, September 2018, Available Online at: <https://www.sciencedirect.com/science/article/pii/S0016328717301726> Accessed 8-17-2019)

In summary, six of the nine proposed planetary boundaries (phosphorous, nitrogen, biodiversity, land use, atmospheric aerosol loading, and chemical pollution) are unlikely to be associated with existential risks. They all correspond to a degraded environment, but in our assessment do not represent existential risks. However, the three remaining boundaries (climate change, global freshwater cycle, and ocean acidification) do pose existential risks. This is because of intrinsic positive feedback loops, substantial lag times between system change and experiencing the consequences of that change, and the fact these different boundaries interact with one another in ways that yield surprises. In addition, climate, freshwater, and ocean acidification are all directly connected to the provision of food and water, and shortages of food and water can create conflict and social unrest.

Climate change has a long history of disrupting civilizations and sometimes precipitating the collapse of cultures or mass emigrations (McMichael, 2017). For example, the 12th century drought in the North American Southwest is held responsible for the collapse of the Anasazi pueblo culture. More recently, the infamous potato famine of 1846–1849 and the large migration of Irish to the U.S. can be traced to a combination of factors, one of which was climate. Specifically, 1846 was an unusually warm and moist year in Ireland, providing the climatic conditions favorable to the fungus that caused the potato blight. As is so often the case, poor government had a role as well—as the British government forbade the import of grains from outside Britain (imports that could have helped to redress the ravaged potato yields).

Climate change intersects with freshwater resources because it is expected to exacerbate drought and water scarcity, as well as flooding. Climate change can even impair water quality because it is associated with heavy rains that overwhelm sewage treatment facilities, or because it results in higher concentrations of pollutants in groundwater as a result of enhanced evaporation and reduced groundwater recharge. Ample clean water is not a luxury—it is essential for human survival. Consequently, cities, regions and nations that lack clean freshwater are vulnerable to social disruption and disease.

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