#### **K - its Condo**

#### **[White 18] An effective right to strike is a capitalist illusion. The apparatus of the state ensures strikes are always restricted down into their most benign forms where employers can easily replace or ignore workers. A right to strike is a distraction at best and a form of capitalist placation at worst.**

**White 18,** Ahmed White, Its Own Dubious Battle: The Impossible Defense of an Effective Right to Strike, 2018 Wis. L. Rev. 1065, available at <https://scholar.law.colorado.edu/articles/1261/> //cohn

**Those who call for resurrecting the right to strike contend that the flourishing of strike militancy reflected, if not the inherent politics of the original Wagner Act before it was “de-radicalized,” then at least its potential.** To be sure, it is clear that the Wagner Act was a remarkable document which did more to advance workers’ rights than any statute in American history; and it was at least ambiguous on the question of the legal status of strike militancy. **But what seemed like its support for worker militancy was not a product of any particular potential. Rather, it was a reflection of the difficulty that judges, legislators, and other authorities, who dedicated themselves to restraining these strikes even as they flourished, encountered in prosecuting these values amid the unique economic and political conditions of the 1930s and 1940s. These obstructive conditions were quite temporary, though, and the authorities’ efforts culminated soon enough in the near-categorical prohibition of the tactics that had made strikes so effective.** It is in this way that the history of strikes shows less in the way of de-radicalization than an encounter with the unyielding outer boundaries of what labor protest and labor rights can be in liberal society. As this all played out, it left in its wake a right to strike, but one whose power consists almost entirely of the ability of workers to pressure employers by withholding labor, while also maybe publicizing the workers’ issues and bolstering their morale. But while publicity and morale are not irrelevant, in the end they are not effective weapons in their own right. Nor are they generally advanced when strikes are broken. Moreover, the withholding of labor, unless it could be managed on a very large scale—something the law also tends to prohibit by its restrictions on secondary boycotts, by barring sympathy strikes and general strikes—is inherently ineffective in all but a small number of cases where workers remain irreplaceable. **Of course, striking in such a conventional way accords with liberal notions of property and social order; but precisely because of this it is simply not coercive enough to be effective. And it is bound to remain ineffective, particularly in a context where workers far outnumber decent jobs, where mechanization and automation have steadily eaten away at the centrality of skill, where the perils that employers face in the course of labor disputes are as impersonal as the risks to workers are not, where employers wield overwhelming advantages in wealth and power over workers, where the state’s machinery for enforcing property rights and social order have never been more potent—where, in fact, capital is capital and workers are workers.** **From this perspective, the quest for an effective right to strike emerges as a fantasy—an appealing fantasy for many, but a fantasy no less, steeped in a misplaced and exaggerated faith in the law and a misreading of the class politics of modern liberalism.** **The campaign to resurrect such a right appears, too, not only as a dead-end and a distraction,** but an undertaking that risks blinding those who support viable unionism and the interests of the working class to the more important and fundamental fact that liberalism and the legal system are, in the end, antithetical to a meaningful system of labor rights. **It is for this reason that the call for an effective right to strike should be set aside in favor of more direct endorsement of militancy and a turn away from the law and instead towards a political program that might advance the interests of the working class regardless of what the law might hold.** The argument that follows further elaborates these main contentions about the history of striking and the nature of strikes in liberal society, augmented by a discussion of the legal terrain on which all of this has played out. It unfolds in three main parts. Part I describes how the concept of a right to strike developed in concert with the history of striking itself, how both were influenced by the evolving condition of labor, and how this history created the circumstances under which it became possible to conceive of an effective right to strike without making this possible in fact. Part II consists of a critical review of the fate of coercive and disorderly strikes, especially those featuring sit-down tactics and mass picketing. It considers how the courts, the NLRB, and Congress confronted these strikes, and how they moved with increasing vigor to proscribe them as soon as these strikes emerged as effective forms of labor protest. Part III looks more carefully at the underpinnings of this repudiation of strike militancy, finding in court rulings and other pronouncements against the strikes an opposition to coercion and disorder that, even if sometimes invoked disingenuously, is nonetheless firmly anchored in modern liberalism and its conception of the appropriate boundaries of class protest and labor conflict. **On this rests the argument that an effective right to strike is impossible and the pursuit of it, problematic.** The final part is a brief conclusion that sums up some of the implications of this argument.

#### **[Foster 20] The unending drive for capital accumulation has created the symptoms of capitalism– Ecological crises, unending economic crises, and unlimited war– the only alternative is to invest in a new system ozf social metabolic production aimed towards socialism**

**Foster 20** REVIEW OF THE MONTH The Renewal of the Socialist Ideal by John Bellamy Foster (Sep 01, 2020) Topics: History Marxism Movements Socialism Places: Global John Bellamy Foster is an American professor of sociology at the University of Oregon and editor of the Monthly Review. He writes about political economy of capitalism and economic crisis, ecology and ecological crisis, and Marxist theory. <https://monthlyreview.org/2020/09/01/the-renewal-of-the-socialist-ideal/> //avery recut //cohn

Any serious treatment of **the renewal of socialism today must begin with capitalism’s creative destruction of the bases of all social existence.** **Since the late 1980s, the world has been engulfed in an epoch of catastrophe capitalism,** **defined as the accumulation of imminent catastrophe on every side due to the unintended consequences of “the juggernaut of capital.”1 Catastrophe capitalism in this sense is manifested today in the convergence of (1) the planetary ecological crisis, (2) the global epidemiological crisis, and (3) the unending world economic crisis.2** Added to this are the main features of today’s “empire of chaos,” including the extreme system of imperialist exploitation unleashed by global commodity chains; the demise of the relatively stable liberal-democratic state with the rise of neoliberalism and neofascism; and **the emergence of a new age of global hegemonic instability accompanied by increased dangers of unlimited war.**3 **The climate crisis** represents what the world scientific consensus refers to as a “no analogue” situation, such that if net carbon emissions from fossil fuel combustion do not reach zero in the next few decades, **it will threaten the very existence of industrial civilization and ultimately human survival**.4 Nevertheless, **the existential crisis is *not limited to climate change*, but extends to the crossing of other planetary boundaries that together define the global ecological rift in the Earth System as a safe place for humanity. These include*: (1) ocean acidification; (2) species extinction (and loss of genetic diversity); (3) destruction of forest ecosystems; (4) loss of fresh water; (5) disruption of the nitrogen and phosphorus cycles; (6) the rapid spread of toxic agents (including radionuclides); and (7) the uncontrolled proliferation of genetically modified organisms***.5 **This rupturing of planetary boundaries is intrinsic to the system of capital accumulation that recognizes no insurmountable barriers to its unlimited, exponential quantitative advance.** Hence, **there is no exit from the current capitalist destruction of the overall social and natural conditions of existence that does not require exiting capitalism itself.** **What is essential is the creation of what István Mészáros in Beyond Capital called a new system of “social metabolic reproduction.”6 This points to socialism as the heir apparent to capitalism in the twenty-first century, but conceived in ways that critically challenge the theory and practice of socialism as it existed in the twentieth century.** The Polarization of the Class System In the United States, key sectors of monopoly-finance capital have now succeeded in mobilizing elements of the primarily white lower-middle class in the form of a nationalist, racist, misogynist ideology. The result is a nascent neofascist political-class formation, capitalizing on the long history of structural racism arising out of the legacies of slavery, settler colonialism, and global militarism/imperialism. This burgeoning neofascism’s relation to the already existing neoliberal political formation is that of “enemy brothers” characterized by a fierce jockeying for power coupled with a common repression of the working class.7 It is these conditions that have formed the basis of the rise of the New York real-estate mogul and billionaire Donald Trump as the leader of the so-called radical right, leading to the imposition of right-wing policies and a new authoritarian capitalist regime.8 Even if the neoliberal faction of the ruling class wins out in the coming presidential election, ousting Trump and replacing him with Joe Biden, a neoliberal-neofascist alliance, reflecting the internal necessity of the capitalist class, will likely continue to form the basis of state power under monopoly-finance capital. Appearing simultaneously with this new reactionary political formation in the United States is a resurgent movement for socialism, based in the working-class majority and dissident intellectuals. P, accelerated by the globalization of production, has undermined the former, imperial-based labor aristocracy among certain privileged sections of the working class, leading to a resurgence of socialism.9 **Confronted with what Michael D. Yates has called “the Great Inequality,” the mass of the population in the United States, particularly youth, are faced with rapidly diminishing prospects, finding themselves in a state of uncertainty and often despair, marked by a dramatic increase in “deaths of despair.”10 They are increasingly alienated from a capitalist system that offers them no hope and are attracted to socialism as the only genuine alternative.**11 Although the U.S. situation is unique, similar **objective forces propelling a resurgence of socialist movements are occurring elsewhere in the system, primarily in the Global South, in an era of continuing economic stagnation, financialization, and universal ecological decline.**

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# NC

**All statements and moral theories are regulated by the falsifiability theory of meaning which prioritizes falsity over positive observation. This renders future knowledge in a state of indeterminacy and holds negative observations sufficient to disprove a theorem.**

**Nickles**, Thomas. "Falsifiability." New Dictionary of the History of Ideas. **2005**. ,<https://elearning.shisu.edu.cn/pluginfile.php/35320/mod_resource/content/1/Falsifiability%20%28Introduction%29.pdf> ///AHS PB modified //cohn

**Falsifiable contrasts with verifiable. A claim is empirically verifiable if possible observation statements logically imply the truth of the claim. If actual observation statements do imply the claim, then it is verified. "This raven is black" verifies "There are black ravens."** During the 1930s the logical empiricists of the Vienna Circle proposed verifiability both as a criterion of demarcation of science from nonscience and a criterion of meaning. Their idea was that a statement is meaningful if and only if it is verifiable in principle, and its meaning is given by its method of verification. For the logical empiricists, only empirically verifiable claims make genuine assertions about the world and are, in this broad sense, scientific. All other claims (metaphysical, religious, ethical, etc.) are cognitively meaningless. In his Logik der Forschung (1934; Logic of Scientific Discovery), Popper replied by rejecting the logical empiricists' concern with language and meaning and by noting that **verifiability as a criterion** of demarcation **excludes** scientific **law** claims and thus the core of science **itself. For** since **a law claim** is universal in scope (in simplest form, "All A's everywhere and everywhen are B's"), it **cannot possibly be verified: there are always actual or potential instances beyond those so far observed. Yet a** universal **claim can be falsified by a single negative instance. The first observed black swan refuted the claim "All swans are white."** (Law claims of statisticalprobabilistic forms are more problematic.) Based on this logical asymmetry of verification and falsification, Popper proposed falsifiability as a criterion of demarcation of science from nonscience, although not as a criterion of meaning. According to Popper, nonscience includes pseudoscience (e.g., Freudian psychology and Marxism) and metaphysics, the one fraudulent, the other sometimes providing a valuable heuristic for science. Many deep scientific problems have their roots in metaphysics, but to be scientific, a claim must take an empirical risk. Moreover, **falsifiability**, as the ongoing risk of falsification in our world, **is a permanent status** for Popper. **No amount of successful testing can establish a hypothesis as absolutely true or even probable: it forever remains conjectural. That all** scientific **theories remain falsifiable entails** fallibilism, the view that **our best epistemic efforts remain open to future revision. There can be no certain foundations to knowledge.**

**Thus the reasonable aff burden is to deny the falsifiability of the resolution two warrants:**

**[1] Deontic Logic: a single falsity negates the entire truth principle.**

**Luca**, Luca, Andrei. “LogicWarrior Demand Reason.” LogicWarrior, 9 Oct. **2017**, [www.logicwarrior.net/tag/law-of-non-contradiction/](http://www.logicwarrior.net/tag/law-of-non-contradiction/).

This law is another seemingly obvious point but in practice the Law of Non-Contradiction is the foundation of argumentative validity. The Law of Non-Contradiction makes logic truth preserving so that **you’ll never go from a true point and arrive at a false point. Contradiction negates logic**, and while true paradox may be something fun which to reflect unless you’re attempting to unite with the godhead by reaching nirvana, contradiction simply has no place in logic. This is not to say that something can’t appear to be self-contradictory and this idea is the basis of a lot of statements of reflection. In the course of debate another definition may become useful: **Both a claim and not that claim can’t be true. So, if a statement holds even a teensy weensy bit of falseness, it must be entirely false.**

**[2] Semantics - In debate, the ballot tells us to affirm or negate- Merriam Webster defines negate as “to deny the existence or truth of”[1] affirm as to “maintain as true” [2] so it’s intrinsic to our roles as debaters**

[1]<http://dictionary.reference.com/browse/negate>,<http://www.merriam-webster.com/dictionary/negate>,<http://www.thefreedictionary.com/negate>,<http://www.vocabulary.com/dictionary/negate>,<http://www.oxforddictionaries.com/definition/english/negate>

[2] *Dictionary.com – maintain as true, Merriam Webster – to say that something is true, Vocabulary.com – to affirm something is to confirm that it is true, Oxford dictionaries – accept the validity of, Thefreedictionary – assert to be true*

**And Permissibility and presumption flow neg: [A] Probability, there is one way for a statement to be true and an infinite amount of ways for it to be false [B] If I knew nothing about P I wouldn’t presume both P and not P true, a contradiction [C] if every action is permissible then ought not statements like the resolution are incoherent [D] All moral truths require absolute certainty [1] Absent certainty we can always ask why should I, making our obligation unconstitutive [2] Uncertain truth statements are illogical**

**Unger**, Peter (**1975**): Ignorance (Oxford: Oxford University Press). ///AHS PB

The very particular idea that knowing entails its being all right to be certain is suggested, further, by the fact that **knowing entails**, at least, **that one is certain**. As we saw in section 9 of the preceding chapter, that **this** is a fact **is made quite plain by the inconsistency expressed by sentences like 'He really knew that it was raining, but he wasn't absolutely certain it was.' Such a sentence can express no truth: if he wasn't certain, then he didn't know.**

# AC

### **Climate Change**

### **Impact D-**

#### **Extinction from warming requires 12 degrees, far greater than their internal link, and intervening actors will solve before then**

Sebastian **Farquhar 17**, master’s degree in Physics from the University of Oxford, leads the Global Priorities Project (GPP) at the Centre for Effective Altruism, et al., 2017, “Existential Risk: Diplomacy and Governance,” https://www.fhi.ox.ac.uk/wp-content/uploads/Existential-Risks-2017-01-23.pdf

**The most likely levels of global warming are very unlikely to cause human extinction**.15 The existential risks of climate change instead stem from tail risk climate change – the low probability of extreme levels of warming – and interaction with other sources of risk. It is impossible to say with confidence at what point global warming would become severe enough to pose an existential threat. Research has suggested that warming of 11-12°C would render most of the planet uninhabitable,16 and would completely devastate agriculture.17 This would pose an extreme threat to human civilisation as we know it.18 Warming of around 7°C or more could potentially produce conflict and instability on such a scale that the indirect effects could be an existential risk, although it is extremely uncertain how likely such scenarios are.19 **Moreover, the timescales over which such changes might happen could mean that humanity is able to adapt enough to avoid extinction in even very extreme scenarios.** The probability of these levels of warming depends on eventual greenhouse gas concentrations. According to some experts, unless strong action is taken soon by major emitters, it is likely that we will pursue a medium-high emissions pathway.20 If we do, the chance of extreme warming is highly uncertain but appears non-negligible. Current concentrations of greenhouse gases are higher than they have been for hundreds of thousands of years,21 which means that there are significant unknown unknowns about how the climate system will respond. Particularly concerning is the risk of positive feedback loops, such as the release of vast amounts of methane from melting of the arctic permafrost, which would cause rapid and disastrous warming.22 The economists Gernot Wagner and Martin Weitzman have used IPCC figures (which do not include modelling of feedback loops such as those from melting permafrost) to estimate that if we continue to pursue a medium-high emissions pathway, the probability of eventual warming of 6°C is around 10%,23 and of 10°C is around 3%.24 **These estimates are of course highly uncertain**. It is likely that the world will take action against climate change once it begins to impose large costs on human society, **long before** there is warming of 10**°C**. Unfortunately, there is significant inertia in the climate system: there is a 25 to 50 year lag between CO2 emissions and eventual warming,25 and it is expected that 40% of the peak concentration of CO2 will remain in the atmosphere 1,000 years after the peak is reached.26 Consequently, it is impossible to reduce temperatures quickly by reducing CO2 emissions. If the world does start to face costly warming, the international community will therefore face strong incentives to find other ways to reduce global temperatures.

#### **Adaptation is intrinsic to human nature, already occurring, self reinforcing, and solves the worse effects of climate change - no extinction**

**B 21** Richard B. 21, "Perspective", https://www.washingtonpost.com/weather/2021/09/11/extreme-weather-climate-adaptation-imperative/ // cohn

Compared with mitigation, **adaptation is relatively easy**. Effective mitigation requires changing human behavior, ingrained geopolitical and economic power structures, and built infrastructure on a global scale. It requires convincing people to invest for the common good of other people, often decades into the future. At its simplest, **adaptation can be carried out by an individual**. **You can sell the house next to the ocean** and move to northern Michigan. You can **reinforce your roof** and put your oceanside house on stilts. There is a concrete value proposition. Although **adaptation can be carried out by individuals**, it is better and certainly more equitable to plan **on the larger scales** of a community, a city or a region. As the geographical scale increases and more individuals, organizations and local governments are involved, it does get more difficult. However, the threats to life, property and the local environment often serve as motivation to challenge the barriers of cooperation and shared beneficial outcomes. For example, a region threatened by rising seas is motivated to come together to find solution strategies. **Indeed such efforts are underway, for example, in the** [**Southeast Florida climate compact**](https://southeastfloridaclimatecompact.org/)**, the** [**Puget Sound climate collaborative**](https://sustain.org/program/puget-sound-regional-climate-preparedness-collaborative/)**, and efforts across Southeast Virginia’s Hampton Roads region.**  **When a region** **successfully** implements **adapt**ation plan**s**, **communities are likely to** have wins when the next storm is not as destructive and costly. These wins help people cope with global warming and realize some ability to **take control of what has been often stated as an existential threat.** **There have been those calling for adaptation policy for many years.** However, it has been difficult to get adaptation on the policy agenda. This is ascribed to many reasons, including the persistent, spurious argument that if we talk of adaptation, then we will decide that we do not need to mitigate our emissions. However, we are at the point that, even if we were to meet all of the emission reduction goals of the United Nations’ Paris agreement, adaptation will still be required. In the end, the most important aspect of **adaptation is fundamentally human.** If **individuals and communities** can **see adaptation as a way** of sustaining their well-being in the face of rapidly changing weather, **then it is a step of moving past the narrative that we must, between now and 2030, solve an existential threat to our survival.** We can see **successful adaptation strategies spreading, scaling**, and bringing planetary warming **into the** mind-set and the **behavior of more and more people**. We must entrain dealing with the weather of a warming Earth into all that we do. And that, we assert, will make the need for mitigation more real and urgent.

#### **Their impact evidence assumes no adaptation or resilience - both solve**

**Hart 15** – **emeritus professor of international affairs at the Norman Paterson School of International Affairs at Carleton University in Ottawa, Canada** (Michael, former official in Canada’s Department of Foreign Affairs, former Fulbright-Woodrow Wilson Center Visiting Research, former Scholar-in-Residence in the School of International Service and a Senior Fellow in the Center for North American Studies at American University in Washington, MA from the University of Toronto, author, editor, or co-editor of more than a dozen books, “Hubris: The Troubling Science, Economics, and Politics of Climate Change”, google books)//cmr

As already noted, the IPCC scenarios themselves **are wildly alarmist**, not only on the basic science but also on the **underlying** economic **assumptions**, which in turn drive the alarmist impacts. The result **cannot withstand critical analysis**. Economists Ian Castles and David Henderson, for example, show the extent to which the analysis is driven by the desire to reach predetermined outcomes.50 Other economists have similarly wondered what purpose was served by pursuing such unrealistic scenarios. It is hard to credit the defense put forward by Mike Hulme, one of the creators of the scenarios, that the IPCC is not engaged in forecasting the future but in creating “plausible” story lines of what might happen under various scenarios.51 Each **scare scenario** is based on linear projections without **any reference to technological developments or adaptation**. If, on a similar linear basis, our Victorian ancestors in the UK, worried about rapid urbanization and population growth in London, had made similar projections, they would have pointed to the looming crisis arising from reliance on horse-drawn carriages and omnibuses; they would have concluded that by the middle of the 20th century, London would be knee-deep in horse manure, and all of the southern counties would be required to grow the oats and hay to feed and bed the required number of horses. Technology progressed and London adapted. **Why should the rest of humanity not be able to do likewise** in the face of a trivial rise in temperature over the course of **more than a century**? The work on physical impacts is **equally over the top**. All the scenarios assume **only negative impacts**, ignore the reality of **adaptation**, and attribute **any and all things bad** to global warming. Assuming the GHG theory to be correct means that its impact would be most evident at night and during the winter in reducing atmospheric heat loss to outer space.52 It would have greater impact in increasing minimum temperatures than in increasing maximum temperatures. Secondary studies, however, generally **ignore this facet** of the hypothesis. The IPCC believes that a warmer world will harm human health due, for example, to increased disease, malnutrition, heat-waves, floods, storms, and cardiovascular incidents. As already noted **there is no basis for the claim about severe-weather-related threats or malnutrition**. The claim about heat-related deaths gained a boost during the summer of 2003 because of the tragedy of some 15,000 alleged heat-related deaths in France as elderly people stayed behind in city apartments without air conditioning while their children enjoyed the heat at the sea shore during the August vacation. Epidemiological studies of so-called "excess" deaths resulting from heat waves are abused to get the desired results. Similar studies of the impact of cold spells show that they are far more lethal than heat waves and that it is much easier to adapt to heat than to cold.53 More fundamentally, this, like most of the alarmist literature, ignores the basics of the AGW hypothesis: the world will not see an exponential increase in summer, daytime heat (and thus more heat waves), but a decrease in night-time and winter cooling, particularly at higher latitudes and altitudes. Based on the AGW hypothesis, Canada, China, Korea, Northern Europe, Australia, New Zealand, South Africa, Chile, and Argentina will see warmer winters and warmer nights. There are clear benefits to such a development, even if there may also be problems, but the AGW industry tends to ignore the positive aspects of their alarmist scenarios. The feared spread of malaria, a much repeated claim, is largely unrelated to climate. Malaria’s worst recorded outbreak **was in Siberia long before there was any discussion of AGW**. Similarly, the building of the Rideau Canal in Ottawa in the 1820s was severely hampered by outbreaks of malaria due to the proximity of mosquito-infested wetlands in the area. Malaria remains widespread in tropical countries today in part because of the UN’s lengthy embargo on the use of DDT, the legacy of an earlier

alarmist disaster. Temperature is but one factor, and a minor one at that, in the multiple factors that affect the rise or decline in the presence of disease-spreading mosquitoes. Wealthier western countries have pursued public health strategies that have reduced the incidence of the dis- ease in their countries. Entomologist Paul Reiter, widely recognized as the leading specialist on malaria vectors and a contributor to some of the early work of the IPCC, was aghast to learn how his careful and systematic analysis of the potential impacts had been twisted in ways that he could not endorse. In a recent paper, he concludes: “Simplistic reasoning on the future prevalence of malaria is ill-founded; malaria is not limited by climate in most temperate regions, nor in the tropics, and in nearly all cases, ’new' malaria at high altitudes is well below the maximum altitudinal limits for transmission. Future changes in climate may alter the prevalence and incidence of the disease, but obsessive emphasis on ’global warming' as a dominant parameter is indefensible; the principal determinants are linked to ecological and societal change, politics and economics.”54 **Catastrophic species loss** similarly has **little foundation in past experience**.55 Even if the GHG hypothesis were to be correct, **its impact would be slow**, **providing significant scope and opportunity for adaptation**, including by ﬂora and fauna. One of the more irresponsible claims was made by a group of UK modelers who fed wildly improbable scenarios and data into their computers and produced the much-touted claim of massive species loss by the end of the century. There are literally **thousands of websites** **devoted to spreading alarm about species loss** and biodiversity. Global warming is **but one of many claimed human threats to the planet’s biodiversity**. The claims, fortunately, are largely hype, based on computer models and the estimate by Harvard naturalist Edward O. Wilson that 27,000 to 100,000 species are lost annually - a figure he advanced purely hypothetically but which has become one of the most persistent of environmental urban myths. The fact is that scientists **have no idea of the extent of the world's ﬂora and fauna**, with estimates ranging from five million to 100 million species, and that there are no reliable data about the rate of loss. By some estimates, **95 percent of the species that ever existed have been lost over the eons,** most before humans became major players in altering their environment. A much more credible estimate of recent species loss comes from a surprising source, the UN Environmental Program. It reports that known **species loss is slowing reaching its lowest level in 500 years** in the last three decades of the 20th century, with some 20 reported extinctions despite increasing pressure on the biosphere from growing human population and industrialization.57 The alarmist community has also introduced the scientifically unknown concept of "locally extinct,” often meaning little more than that a species of plant or animal has responded to adverse conditions by moving to more hospitable circumstances, e.g., birds or butterflies becoming more numerous north of their range and disappearing at its extreme southern extent. Idso et al. conclude: “Many species have shown the ability to **adapt rapidly to changes in climate**. Claims that global warming threatens large numbers of species with **extinction** typically rest on a false definition of extinction (the loss of a particular population rather than en- tire species) and **speculation rather than real-world evidence**. The world’s species have proven **very resilient**, having survived past natural climate cycles that involved much greater warming and higher C02 concentrations than exist today or are likely to exist in the coming centuries?”

### **Food Security**

#### **No warming impact but it’s key to solve agriculture, food security, and the ice age.**

**Moore 16** (Dr. Patrick Moore is a Senior Fellow with the Energy, Ecology and Prosperity program at the Frontier Centre for Public Policy. He has been a leader in the international environmental field for over 40 years. Dr. Moore is a Co-Founder of Greenpeace and served for nine years as President of Greenpeace Canada and seven years as a Director of Greenpeace International. Following his time with Greenpeace, Dr. Moore joined the Forest Alliance of BC where he worked for ten years to develop the Principles of Sustainable Forestry, which have now been adopted by much of the industry. In 2013, he published Confessions of a Greenpeace Dropout – The Making of a Sensible Environmentalist, which documents his 15 years with Greenpeace and outlines his vision for a sustainable future. THE POSITIVE IMPACT OF HUMAN CO2 EMISSIONS ON THE SURVIVAL OF LIFE ON EARTH, June 2016, <https://fcpp.org/sites/default/files/documents/Moore%20-%20Positive%20Impact%20of%20Human%20CO2%20Emissions.pdf>) Recut Justin

CO2 in the Modern Era The most important question facing a species on Earth today is how long would it have been in the absence of human-caused CO2 emissions until the gradual depletion of CO2 in the atmosphere fell to levels that began to **decrease biomass due to starvation**, thus signaling the **beginning of the end of life on Earth**? It is commonly believed that volcanic activity results in massive emissions of CO2 comparable to or greater than human-caused emissions. This is not the case. Whereas the original atmospheric CO2 was the result of massive outgassing from the Earth’s interior, there is no evidence that large volumes of new CO2 were added to the atmosphere during the 140-million-year decline leading to the present era. The eruption of Mount Pinatubo, the largest in recent history, is estimated to have released the equivalent of 2 per cent of the annual human-caused CO2 emissions. Therefore, in the absence of human-caused emissions, it could reasonably be presumed that CO2 levels would have continued to fall as they had done for the previous 140 million years.20 Judging by the timing of the many glacial and interglacial periods during the Pleistocene Ice Age, the **next major glaciation period could begin any time**. Interglacial periods have generally been of 10,000 years’ duration, and this Holocene interglacial period began nearly 12,000 years ago. In the absence of human-caused CO2 emissions and other environmental impacts, there is no reason to doubt that **another major glaciation would have occurred**, following the pattern that has been established for at least the past 800,000 years, as established by the European Project for Ice Coring in Antarctica (EPICA),21 and presumably for the past 2.5 million years of the Pletstocene Ice Age. These glaciations have coincided with the Milankovitch cycles.22 (See Figure 5) The Milankovitch cycles are determined by oscillations in the Earth’s orbit and by cycles of the tilt of the Earth toward the sun. The strong correlation between the onset of major periods of glaciation during the past 800,000 years and the Milankovitch cycles has led the majority of earth scientists and climatologists to accept the hypothesis that the major glaciations are tied to the Milankovitch cycles in a causeeffect relationship. For 90 million years from the late Jurassic Period to the Early Tertiary Period, global temperature rose considerably while CO2 levels steadily declined. Then after the Paleocene-Eocene Thermal Maximum, there began a 50-million-year cooling trend in global temperature to the current era. (See Figure 6) The Paleocene-Eocene Thermal Maximum saw an average global temperature [13] FRONTIER CENTRE FOR PUBLIC POLICY as much as 16°C higher than the temperature today. Yet, the ancestors of every species living today must have survived through this period, as they had also survived through previous much colder climates. It is instructive to note that despite the numerous periods of extreme climatic conditions and cataclysmic events, every species alive today is descended from species that survived those conditions. **This leads one to question the predictions of mass species extinction and the collapse of human civilization if the average global temperature exceeds a rise of 2°C above today’s level**.25 It may seem surprising that the average global temperature could have been **16°C higher** in previous ages, as this Figure 5. Graph showing the atmospheric CO2 concentration and temperature from Antarctica for the most recent four interglacial periods, closely tied to the Milankovitch cycles of 100,000 years. This graph is based on data from the 420,000 year record obtained from the Vostok ice cores drilled by Russian scientists.23 Note the gradual nature of the onset of colder temperatures and the rapid warming at the end of the cycle. Note that the peak warming during the most recent interglacial period (the Holocene) is lower than during the previous three interglacial periods.24 Figure 6. Global surface temperature from 65 million YBP showing the major cooling trend over the past 50 million years. While the poles were considerably warmer than they are today, there was much less warming in the tropics, which remained habitable throughout. The Earth is in one of the coldest periods during the past 600 million years.26 [14] FRONTIER CENTRE FOR PUBLIC POLICY would appear to render parts of the Earth that are warm today virtually uninhabitable. The key to understanding this is that when the Earth warms, it does so disproportionally, depending on the latitude. While the Arctic and Antarctic experience considerable warming, there is much less warming in the tropics. Thus, the tropical regions remain habitable while the high latitudes shift from polar to temperate, and during the warmest ages, they shift to a tropical climate. It is clear from the 800,000-year Antarctic ice core record that the coldest periods during major glaciations coincide with the lowest levels of CO2 in the atmosphere. (see Figure 5) The correlation is certainly strong enough during this period to suggest a causal relationship between CO2 and temperature. However, there is disagreement in the literature about which is the cause and which is the effect. Those who ascribe the warming over the past century to greenhouse gas emissions, CO2 in particular, also tend to agree with the position set forth in Al Gore’s An Inconvenient Truth: The Planetary Emergency of Global Warming and What We Can Do about It, that the warming during the interglacial periods is caused by rising CO2 levels.27 However, it is problematic to postulate how the Milankovitch cycles could cause an increase or decrease in atmospheric CO2 levels, whereas it is plausible that the Milankovitch cycles could cause a fluctuation in global temperature due to changes in solar radiation, which in turn could cause either CO2 outgassing from or absorption into the oceans. Indeed, both sets of ice core data from Antarctica show that changes in temperature usually precede changes in CO2 levels, suggesting that temperature change is the cause of change in the level of CO2. 28 Some have suggested that although the onset of warming after a glaciation is caused by the Milankovitch cycles, the subsequent outgassing of CO2 from the ocean then becomes the predominant driver of further warming.29 Presumably, it would also be postulated that the cooling leading to glaciation is triggered by the Milankovitch cycle and then driven by reduced CO2 levels due to ocean absorption. This hypothesis is **not proven**. It is extremely unlikely or perhaps impossible to imagine how CO2 could have increased from a pre-industrial 280 ppm to 400 ppm in the absence of human-caused emissions. No other species, existing or imagined in the near future, is capable of digging and drilling into the massive deposits of fossil fuels and then burning them so as to release CO2 back into the atmosphere from where it had come in the first place. Many scientists think this increase in atmospheric CO2 is the dominant cause of the slight warming (0.5C) of the atmosphere over the past 65 years. Only time will tell if this is the case. Since the Little Ice Age peaked around 1700, the climate has been warming in fits and starts for about 300 years. It is possible that the most recent warming is a continuation of the longer period of warming that had already begun long before human-caused CO2 emissions could have been a factor. [15] FRONTIER CENTRE FOR PUBLIC POLICY HIGHER CO2 CONCENTRATIONS WILL INCREASE PLANT GROWTH AND BIOMASS It has been well demonstrated that the increase in CO2 in the atmosphere is responsible for **increased plant growth on a global scale**. Many studies suggest that nearly 25 per cent of human-caused CO2 emissions, or 2.5 Gt of carbon annually, are absorbed by plants, thus increasing global plant biomass. A recent study postulates that up to 50 per cent of human CO2 emissions are absorbed by increased plant growth.30 This has been described as a “greening of the Earth” as CO2 reaches concentrations well above the near-starvation levels experienced during the major glaciations of the Pleistocene.31 The most prestigious Australian science body, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), has shown that CO2 particularly benefits plants that are adapted to dry climates. In higher CO2 environments, **they become more efficient at photosynthesis, growing faster without using more water**.32 One of the most impressive records comes from an experimental forest in Germany where there is a continuous Figure 8. Change in net primary productivity of vegetation 1982 to 2010. The driest regions, such as Western Australia, sub-Saharan Africa, western India and the Great Plains of North America, show the greatest increase in plant growth.36 Figure 7. Craig Idso,expert on CO2 and author of the CO2Science website34 demonstrating the growth-rate of pine trees under ambient conditions versus the addition of 150 ppm, 300 ppm and 450 ppm CO2. In a higher CO2 world there will be a great increase in the growth of food crops, forests, and wild landscapes around the world. Studies also demonstrate that higher CO2 levels in the oceans will result in increased growth of phytoplankton and other marine plants.35 [16] FRONTIER CENTRE FOR PUBLIC POLICY record of forest growth since 1870. Since 1960, as CO2 emissions began to rise rapidly, the growth rate of individual trees has increased by 32 per cent to 77 per cent. While some of this may be due to the slight increase in temperature since 1960, the much higher growth rate is consistent with laboratory and field studies on the effect of increased CO2 levels on plants.33 It is not widely known that greenhouse operators worldwide inject additional CO2 into their greenhouses in order to increase the growth and yield of their crops. Among horticulturalists, it is well known that this practice can increase growth by 40 per cent or more. This is because the optimum level of CO2 for plant growth is between 1,000 ppm and 3,000 ppm in air, much higher than the 400 ppm in the global atmosphere today.37 Every species on Earth, including our own, is descended from ancestors that thrived in climates with much higher levels of CO2 than are present today. Discussion The debate about climate change has one side insisting that the “science is settled.” Yet, there is no scientific proof that increased CO2 will result in disaster, as CO2 has been higher during most of the history of life on Earth than it is today. On the other hand, it can be stated without a doubt that if CO2 once again falls to the level it was only 18,000 years ago, or lower, there would be a catastrophe unlike any known in human history. We are advised by many scientists that we should be worried about CO2 levels climbing higher when, in fact, we should actually be worried about CO2 levels sinking lower. Atmospheric CO2 Concentrations in the Future If humans had not begun to use fossil fuels for energy, it is reasonable to assume that atmospheric CO2 concentration would have continued to drop as it has done for the past 140 million years. It is also reasonable to assume that the Earth’s climate would continue to fluctuate between relatively long periods of glaciation and relatively short periods of interglacial climate similar to the present climate. Given continued withdrawal of carbon from the atmosphere into the ocean sediments, it would only be a matter of time before CO2 dropped to 150 ppm or lower during a period of glaciation. At the average rate of 32 Kt of carbon lost annually, this would occur in less than two million years from now. In other words, **the beginning of the end of most life on planet Earth would begin** in fewer years into the future than our genus of primates, Homo, has existed as a distinct taxonomic unit. It is instructive to note that our species is a tropical species that evolved at the equator in ecosystems as warm or warmer than today’s. We were only able to leave the warmth of the tropical climate due to harnessing fire, wearing clothing and building shelters. This allowed us to settle in temperate climes and even Arctic conditions by the sea where domesticated dogs as well as marine mammals made life possible for a very small population. However, **we cannot grow food crops in abundance on glaciers or in frozen soil**. Moreover, we would not be able to grow much of anything anywhere if the level of CO2 went below 150 ppm. There is a distinct possibility that no amount of additional CO2 will shift the climate out of the next major period of glaciation. This is not a reason to abandon hope but rather to marvel at the fact that we can actually put some of the CO2 needed for life back into the atmosphere while at the same time enjoying abundant, reasonably priced energy from fossil fuels. There has been a gradual net loss of CO2 from the atmosphere during the past 550 million years from approximately 14,000 Gt to approximately 370 Gt at the lowest level during the height of the last glaciation. This is a reduction of nearly 98 per cent of one of the most essential nutrients for life on Earth. In the absence of human CO2 emissions over the past century, it is difficult to imagine how this process of continuous removal of CO2 would be interrupted. Massive volcanism on a scale not seen for more than 200 million years would be required to [17] FRONTIER CENTRE FOR PUBLIC POLICY bring about a reversal in the long-term CO2 trend that has now been achieved by human CO2 emissions. There is no doubt the Earth’s interior has cooled substantially over its roughly 4.6-billion-year existence. This makes massive volcanism an ever-decreasing likelihood. There is no other plausible natural mechanism to return carbon to the global atmosphere in the form of CO2. The present Holocene interglacial has already endured longer than some previous interglacial periods. The Holocene is also somewhat cooler than previous interglacial periods. Of more urgent concern than the **possible starvation of life** two million years from now is what would happen at the onset of the next glaciation, possibly a relatively short time from now. In the absence of human CO2 emissions, **both temperature and CO2 would have dropped to levels that would result in a continuous reduction in plant growth, bringing in climatic conditions similar to or perhaps even more severe than those that occurred in previous glaciations**. This would certainly lead to **widespread famine** and likely the eventual **collapse of human civilization**. This scenario would not require two million years but possibly only a few thousand. Even if the conditions of the Little Ice Age reoccurred in the next hundreds of years with a human population of nine billion or more, we can be sure the population would not be nine billion for long. There is a strong argument to be made that the Earth is already in a cooling trend that is descending into the next 100,000-year cycle of major glaciation. See Figure 5 and note that in the three preceding interglacial periods, there was a sharp peak followed by a steady downward trend in temperature. The peak temperature in this Holocene interglacial period was during the Holocene Optimum between 5,000 and 9,000 years ago. Since then, the warming peaks have been diminishing, and the cool periods have been colder. The Little Ice Age, which peaked about 300 years ago, was possibly the coldest period of climate since the Holocene Optimum.39 A Paradigm Shift in the Perception of CO2 Independent scientist James Lovelock provides an interesting example of both these contrasting predictions of future catastrophe versus salvation regarding CO2 Figure 9. Reconstructed Greenland mean temperature anomalies (top) and Antarctic CO2 concentration (bottom). Halving the temperature anomalies to allow for polar amplification gives a reasonable approximation of global temperature change in the Holocene. Since the Holocene Optimum began about 9,000 years before present (ka BP), global temperature has fallen by ~1°C, though CO2 concentration rose throughout.38 [18] FRONTIER CENTRE FOR PUBLIC POLICY emissions. He is undoubtedly one of the foremost experts in atmospheric chemistry,40 which is why NASA retained him to design part of the life-detection equipment for the first U.S. Mars landers.41 He concluded from the results that there is no life on Mars. Since publishing his first book on the Gaia hypothesis in 1979, Lovelock became concerned with human civilization’s impact on the global atmosphere.42 He became a strong advocate for reducing CO2 emissions, stating that humans had become a “rogue species” against Gaia (the Earth). He went so far as to state in 2006, ‘“Before this century is over, billions of us will die, and the few breeding pairs of people that survive will be in the Arctic where the climate remains tolerable . . . a broken rabble led by brutal warlords.”’43 Only four years later, in a public speech at London’s Science Museum in 2010, Lovelock recanted, stating, ‘It is worth thinking that what we are doing in creating all these carbon emissions, far from something frightful, is stopping the onset of a new ice age. If we hadn’t appeared on the earth, it would be due to go through another ice age and we can look at our part as holding that up. I hate all this business about feeling guilty about what we’re doing.’44 This abrupt reversal of Lovelock’s interpretation of CO2 is **precisely what is required** universally to avoid the tragedy of depriving billions of people of reasonably priced, reliable energy, especially those with a need to lift themselves out of poverty. There must be a total paradigm shift from demonizing fossil fuels and fearing CO2 as a toxic pollutant to **celebrating CO2 as the giver of life** that it is while continuing to use fossil fuels ever-more efficiently. Like Lovelock, we should be hopeful that CO2 will prove to be the moderate warming influence that it is predicted to be in theory. A somewhat warmer world with a higher level of CO2 in the atmosphere would result in a greener world with more plant biomass, higher yields of food crops and trees, a more hospitable climate in high northern latitudes and a possible reduction in the likelihood of another major glaciation. It is highly probable, and ironic, that the existence of life itself may have predetermined its own eventual demise due mainly to the development of CaCO3 as armour plating in marine organisms.45 The fact that humans appear able to reverse this fate temporarily due to our recycling of CO2 back into the atmosphere by burning fossil fuels for energy verges on the miraculous. Nevertheless, there is only so much fossil fuel, and once burned, it is not renewable in the short to medium term. The vast bulk of carbon is sequestered into carbonaceous rocks, mainly as CaCO3. Today, about 5 per cent of human CO2 emissions are derived from converting CaCO3 with heat into CO2 and CaO (lime) to manufacture cement. Therefore, when fossil fuels become scarce in future centuries, and if CO2 again begins to dwindle, we will have the option of producing additional CO2 by burning limestone with nuclear or solar energy, with lime for cement as a useful by-product. This has the potential to extend the existence of a highly productive living Earth into the far distant future. It is clear from the preceding discussion that rather than bringing on a catastrophic climate condition, human CO2 emissions are serving to reinstate a balance to the global carbon cycle. By reversing the 140-million-year decline in atmospheric CO2, we are helping to ensure the continuation of carbon-based life on Earth. [19] FRONTIER CENTRE FOR PUBLIC POLICY CONCLUSION **CO2 is essential for life**, and twice in the history of modern life there have been periods of steep decline in the concentration of CO2 in the global atmosphere. If this decline were to have continued at the same rate into the future, CO2 would eventually fall to levels **insufficient to support plant life**, possibly in less than two million years. More worrisome is the possibility in the nearer future that during a future glaciation, CO2 may fall to 180 ppm or lower, thus greatly reducing the growth of food crops and other plants. Human CO2 emissions have staved off this possibility so that at least during a period of glaciation, CO2 would be high enough to maintain a productive agricultural industry. A 140 million year decline in CO2 to levels that came close to threatening the survival of life on Earth can hardly be described as “the balance of nature”. To that extent human emissions are restoring a balance to the global carbon cycle by returning some of the CO2 back to the atmosphere that was drawn down by photosynthesis and CaCO3 production and subsequently lost to deep sediments. This extremely positive aspect of human CO2 emissions must surely be weighed against the **unproven hypothesis** that human CO2 emissions are mainly responsible for the **slight warming** of the climate in recent years and will cause **catastrophic warming** over the coming decades. The fact that the current warming began about 300 years ago during the Little Ice Age indicates that it may at least in part be the continuation of the same natural forces that have caused the climate to change through the ages.

#### **Consensus of studies prove, more c02 = more food.**

**Idso and Idso ’12** [Sherwood PhD and former research physicist for the Department of Agriculture, Keith PhD Botany, Craig PhD Geography, 4/25/2012. “Growth Response to CO2 (Flowers)”, http://www.co2science.org/subject/f/summaries/flowers.php] DHirsch Recut Justin

By 2002, so many authors had weighed in on the subject that [Jablonski *et al*. (2002)](http://www.co2science.org/articles/V5/N42/EDIT.php) conducted a meta-analysis of 159 peer-reviewed scientific journal articles published between 1983 and 2000, dealing with the effects of atmospheric CO2 enrichment on the reproductive growth characteristics of several domesticated and wild plants. In calculating the mean responses reported in those papers, Jablonski *et al*. found that for increases in the air's CO2 concentration ranging from approximately 150 to 450 ppm (rough average of 300 ppm), across all species studied, the extra CO2 supplied to the plants resulted in 19% more flowers, 18% more fruits, 16% more seeds, 4% greater individual seed mass, 25% greater total seed mass (equivalent to yield), and 31% greater total mass.

#### **It’s a threat multiplier that causes extinction.**

**Cribb 19** [Julian; Author, journalist, editor and science communicator. He is principal of Julian Cribb & Associates who provide specialist consultancy in the communication of science, agriculture, food, mining, energy and the environment. His career includes appointments as newspaper editor, scientific editor for director of national awareness for Australia’s science agency CSIRO, member of numerous scientific boards and advisory panels, and president of national professional bodies for agricultural journalism and science communication. His published work includes over 8000 articles, 3000 media releases and eight books. He has received 32 awards for journalism. His internationally-acclaimed book, The Coming Famine explores the question of whether we can feed humanity through the mid-century peak in numbers and food demand; “6 - Food as an Existential Risk,” Cambridge; August 2019; <https://www.cambridge.org/core/books/food-or-war/food-as-an-existential-risk/8C45279588CD572FE805B7E240DE7368>] Recut Justin

Extinction and Ecological Collapse More than half of the large animals that once inhabited the Earth have been wiped from it by human action since 1970, according to the Worldwide Fund for Nature’s Living Planet Index.3 So, too, have half the fish in the sea on which humans rely for food.4 Humans are, in the words of the great biologist E. O. Wilson, ‘tearing down the biosphere’, demolishing the very home that keeps us alive.5 Extinction, it should be noted, is a part of life: 99.9 per cent of all species ever to evolve on this planet have disappeared, and new ones like ourselves have arisen to replace them. But extinction rates like today’s – a hundred to a thousand times faster than normal – are a freak occurrence that usually takes tens of millions of years, not mere decades. Animal, plant and marine species are presently vanishing so fast that scientists have dubbed our time “the Sixth Extinction” – the sixth such megadeath in the geological history of the Earth.6 By the end of the present century, Wilson says, it is possible that up to half of the eight million species thought to exist here will be gone. Furthermore, in all previous extinctions, natural events like asteroid strikes and vast volcanic outbursts have been to blame. This will be the only time in the Earth’s history when the wipe-out was caused by a single species. Us.7 [Ommited 178-180] Oxfam, illustrates how just one tenth of humanity consumes five times as much in the way of material resources (expressed here in the form of their carbon footprint) as the poorest half of the world population. The affluent are chiefly responsible for the destruction taking place on a global scale as they seek to sustain lifestyles that the planet can no longer afford or support. The **significance** of this blind spot around **consumption** for **global food security** is **very great**. As described in earlier chapters, the world food system depends **critically** on soil, water, nutrients and a stable climate, to supply **humanity’s daily need for nutriment** – and all of these essential resources are in increasingly short supply, chiefly because of our own mismanagement of them and our collective failure to appreciate that they are finite. On current trends, the existing food system will **tend to break down**, first **regionally** and then **globally**, owing to resource scarcity from the 2020s onward, and especially towards the mid century – unless there is radical change in the world diet and the means by which we feed ourselves. This will lead to **increasing outbreaks** of **violence and war. Nobody, neither rich nor poor, will escape the consequences**. It remains an open question whether panicking regimes in Russia, the USA or even France would be ruthless enough to deploy atomic weapons in an attempt to quell invasion by tens of millions of desperate refugees, fleeing famine and climate chaos in their own homelands – but the possibility ought not to be ignored. That nuclear war is at least a possible outcome of food and climate crises was first flagged in the report The Age of Consequences by Kurt Campbell and the US-based Centre for Strategic and International Studies, which stated ‘it is clear that even nuclear war cannot be excluded as a political consequence of global warming’. 15 Food insecurity is therefore a **driver in the preconditions** for the **use of nuclear weapons**, whether limited or unlimited. A global famine is a likely outcome of limited use of nuclear weapons by any country or countries – and would be **unavoidable** in the event of an **unlimited nuclear war** between America and Russia, making it **unwinnable** for either. And that, as the mute hands of the ‘Doomsday Clock’ so eloquently admonish, is also the **most likely scenario** for the **premature termination of the human species**. Such a grim scenario can be alleviated by two measures: the voluntary banning by the whole of humanity of nuclear weapons, their technology, materials and stocks – and by a global effort to secure food against future insecurity by diverting the funds now wasted on nuclear armaments into building the sustainable food and water systems of the future (see Chapters 8 and 9). Food Security Our demand for food is set to double by the 2060s – potentially the decade of ‘peak people’, the moment in history when the irresistible human population surge may top out at around 10 billion. However, as we have seen, many of the resources needed to supply it agriculturally could halve and the climate for the growing of food outdoors become far more hostile. Why food insecurity is an **existential threat to humanity** should, by now, be abundantly clear from the earlier chapters of this book: present systems are unsustainable and, as they fail, will pose risks both to civilization and, should these spiral into nuclear conflict, to the future of the human species. The important thing to note in this chapter is that food insecurity plays into many, if not all, of the **other existential threats facing humanity**. The **food sector’s role** in **extinction, resource scarcity, global toxicity and potential nuclear war** has **already been explained**. Its role in the suppression of conflict is discussed in the next chapter. Its role in securing the future of the megacities, and of a largely urbanised humanity, is covered in Chapter 8. And its role in sustaining humanity through the peak in population and into a sustainable world beyond is covered in Chapter 9. Food clearly has a pivotal role in the future of human population – both as a driver of population growth when supplies are abundant and as a potential driver of population decline, should food chains collapse. It is no exaggeration to state that the fate of civilisation depends on it. Food insecurity affects the **progression of pandemic diseases**, often in ways that are not entirely obvious. First, new pandemics of infectious disease tend to originate in developing regions where **nutritional levels are poor** or agricultural practices favour the evolution of novel pathogens such as, for example, the new flu strains seen every year – which arise mainly from places where people, pigs and poultry live side-by-side and shuffle viruses between them – and also novel diseases like SARS and MERS. Second, because totally **unknown diseases** tend to arise first in places where **rainforests are being cut down for farming and viruses** hitherto confined to **wild animals and birds** make an **enforced transition into humans**. Examples of novel human diseases escaping from the rainforest and tropical savannah in recent times include HIV/AIDS, Hendra, Nipah, Ebola, Marburg, Lassa and Hanta, Lujo, Junin, Machupo, Rift Valley, Congo and Zika.29 And thirdly, because the loss of **vital micronutrients from heavily farmed soils** and from food itself predisposes many populations to **various deficiency diseases** – for example, a lack of selenium in the diet has been linked with increased risk from both HIV/AIDS and bowel cancer.30 A key synergy is the way **hunger** and **malnourishment** **exacerbate** the **spread** **of** **disease**, classic examples being the 1918 Global Flu Pandemic which spread rapidly among war-starved populations, or the more recent cholera outbreak in war-torn Yemen. In a fresh twist, Dr Melinda Beck of North Carolina University has demonstrated that obesity – itself a form of malnutrition – may cause increased deaths from influenza by both aiding the virus and suppressing the patient’s immune response.31

### **Quebec**

#### **Covid strengthening Quebec nationalism - we’re on the brink now**

**Girard 20.** Louis Girard, 7-31-2020, "Quebec Solidaire joins with the hard-right in promoting economic nationalism", International Committee of the Fourth International, https://www.wsws.org/en/articles/2020/07/31/qsca-j31.html //SW

The World Socialist Web Site recently exposed how **Quebec Solidaire (QS)—a pseudo-left party that holds ten seats in the 125-member Quebec National Assembly**—has supported Canadian authorities’ disastrous handling of the COVID-19 pandemic, and facilitated their efforts to compel a premature return to work that puts corporate profits before human lives. (See: Quebec Solidaire backs Canadian elite’s disastrous handling of COVID-19 pandemic) The coronavirus crisis has also provided QS with an opportunity to join forces with the province’s **right-wing populist, “Quebec First” CAQ (Coalition Avenir Québec)** government in promoting a reactionary economic nationalist agenda. Quebec Solidaire enthusiastically applauded the CAQ government's “Blue basket” initiative, a website promoting “Quebec made” products. The “Blue basket” is based on the principle, spelled out by Quebec Premier Francois Legault, that “we should be self-sufficient for goods that are essential.” QS, for its part, calls on the CAQ government “to set an example by investing in our local businesses,” and advocates that it “replace 40 percent” of the purchases Quebec departments and agencies make from out-of-province firms “with local purchases within four years.” Quebec Solidaire has also responded positively to the CAQ’s proposal that Quebec become self-sufficient in medical equipment. QS advocates Quebec take “control of our medical supply” and create a new Quebec government agency, Pharma-Québec. This it claims would allow for a coronavirus vaccine to “be produced here in Quebec as soon as it is ready, with the sole objective of making it quickly accessible to the Quebec population.” At a time when the COVID-19 pandemic is threatening millions of lives around the world, demonstrating the need for a science-based, internationally-coordinated response, Quebec Solidaire is trumpeting its nationalist egoism and parochialism. Its reactionary utopia of “buying locally” and “developing a Quebec vaccine” exclusively for Quebeckers is part of pronounced shift by ruling elites in Canada, the United States and the world over towards national protectionism, intensified strategic competition, and virulent chauvinism. This includes all sections of the political establishment—from Trump and the ultra-right to pseudo-left parties such as Quebec Solidaire and the German Left Party, as well as the traditional parties of government, liberal, conservative, and social-democratic. These forces are exploiting the health and socio-economic catastrophe triggered by the COVID-19 pandemic to promote protectionism, including local production of “strategic resources,” and the strengthening of the state—based on the spurious claim that dependence on the import of N95 masks and other medical supplies has been a major factor in the pandemic’s deadly impact.

#### **Economic causes Quebec secession – causes great power war AND global secessionism.**

Daniel **Matthews 14**. Naval Gunfire Liaison Officer for III MEF. 2014. “THE QUEBEC WARS”<http://cimsec.org/quebec-wars/11757> http://cimsec.org/quebec-wars/11757

Thought of **Canada** being the region where the **sparks for World War III will be struck** may not seem likely, but there is one area where a foreign **foe could surprise the West: Quebec**. **If Quebec were to secede** from Canada, two unsettling possibilities could occur. The first is that **Canada could go to war with its wayward province**. The second is that **some power like China or Russia could build an alliance with Quebec**. While such possibilities are unlikely, there are means of defense. The Canadian Civil War If Quebec were to secede from Canada, there are several points that could **spark a civil war between the two**. The least likely would be national pride. There are several **economic reasons that could provide the tinder for war.** Quebec controls the mouth of the St. Lawrence River, and Quebec could use that control to wage economic war with Western Canada. In addition, Quebec possesses significant reserves of natural resources that currently contribute to the North American economy on a free basis. An independent Quebec would change that. Finally, Canada proper would become a split country, with a third of Canadian provinces being geographically separated from the Capital. In light of the fact that no state wants to be divided, and Canada already has several fluttering independence movements, the urge to prevent further dissolution will be strong. While it is true that Canada does not have a large military, and Quebec has none, it is not impossible for war to break out. The Quebec separatists have used violence before, most notably with the murder of Quebec Labour

Minister Pierre Laporte, and it would be easy for a semi-independent Quebec to buy arms on the international market. If Canada did get involved in civil war with Quebec, there are several options open to both sides if the war drags on. Canada could invoke Article 5 of the NATO treaty, which could split NATO as France has traditionally expressed support for Francophone Quebec. It is unlikely Britain would be unconcerned with a core Commonwealth state being embroiled in civil war; especially depending on how the vote for Scottish independence goes this year. The United States would be committed, as they are deeply intertwined with Canada at every level. States like Russia, China, or Iran could use the **distraction** of a civil war in the very center of the Anglosphere to **press their boundaries with the Western Alliance**. Furthermore, they could start **supporting the Quebec rebels**, either directly or through third party means. If the war was presaged by an internationally recognized referendum, then Russia or China could take the position that they are upholding international norms, and paint the Western states in a negative light. Attempts at arming the rebels or openly supporting them would directly **threaten the fundamental security of the United States,** as it would **provide a foothold on the continent from which hostile states could threaten the United States**. The Bear and the Dragon in Quebec While the first scenario of a successful Quebec independence movement immediately descending into world war is unlikely, the far more dangerous one of an independent Quebec making allies with states hostile to the West is possible. An independent Quebec would have the full ability to make alliances with foreign powers, and it is unlikely they would be readily welcomed into NATO, NAFTA, or other treaties with the Western powers. Canada would put pressure on any attempts to allow Quebec a seat at the table, and European countries would be wary of admitting Quebec, **as it could fuel separatist movements within their own countries.** In addition, the United States would not want the possibility of Canada dissolving, even if most of the providences would likely join the United States. This method of amalgamation would be undesirable, if for no other reason than there is no guarantee that each section of Canada would join the US, and a unified Canada is better for the US than a series of states on its northern border. The dissolution of Canada could also embolden separatist movements in the United States. Given the internal danger to Western countries an independent Quebec would present, it is likely that Quebec would be forced to look for friends elsewhere. Russia and China are the most likely candidates. Both countries would be interested in the natural resources of Quebec. China and Russia would also both enjoy the prospects of helping to develop Quebec’s Arctic resources. In addition, the possibility of a military alliance with Quebec would present an opportunity not present since Alaska became part of the United States**; a land connection to the United States.**  Right now the Anglosphere is protected by its island status, with no major hostile powers sharing a land border with any member. An independent Quebec would be courted by hostile powers to allow such a chance thought. Russia would view it as retaliation for NATO expanding into the Baltics, Poland, and developing close relations with Ukraine and Georgia. China would view it as a chance to have a mirror for the US alliances in China’s First Island Chain, with the added bonus of a large land connection to the American heartland, as opposed to the slender one that the US has against China on the Korean peninsula. **The presence of a near-peer competitor with bases on** the **North America**n heartland would greatly reduce the flexibility of Western countries as they exert their influence on the world. Such a situation would be more bothersome to the United States and its allies than the Zimmerman telegram of a century ago, or the presence of Soviet missiles in Cuba half a century ago. It would have the same effect as **Germany’s race to rival Britain** on the high seas **before World War I**.

#### **Climate change solves - it makes Canada a global superpower.**

**Dembicki 17** [Geoff, VICE journalist, “How Climate Change Could Turn Canada into a Global Superpower,” accessible online at<https://www.vice.com/en_ca/article/mbanm4/how-climate-change-could-turn-canada-into-a-global-superpower>, published 07/24/17] // BBM

Climate change is going to suck for every country on the planet. But it may suck slightly **less** for Canada. If humanity can't reduce its greenhouse gas emissions to effectively **zero** by the end of this century, the doomsday impacts are difficult to fathom. The mass extinctions, crushing heat waves, exotic diseases, clouds of

death smog and poisoned oceans described in a viral New York Magazine story by David Wallace-Wells would make our natural world unrecognizable. Yet climate change may also significantly affect the geopolitical world. By 2100, it's conceivable that the US economy will nosedive, dozens of developing countries will collapse and a new global superpower will arise to fill the **power vacuum**: **Canada**. No, seriously. Canada's economic dominance could be built on its gigantic supplies of **freshwater**, an ice-free Arctic Ocean that revolutionizes **international trade** and a mild-to-moderate climate that will be the **envy** of scorched and unlivable countries in more southern latitudes. But here's the thing: life won't be all that pleasant for many Canadians. We will be under constant threat of flooding, wildfires, tornadoes, heat waves, infestations and other disasters. National economic gains will mask stark and growing inequalities. Waves of immigrants and refugees will make us intolerant of outsiders. Amidst the chaos we will turn to authoritarian strongmen like Donald Trump to lead us. Yet compared to the rest of the world, **Canada** could look like a **progressive utopia**. To help us understand how this scenario may come to pass, VICE reached out to experts who study the future from the biggest of perspectives. They stressed the scenario above is one of many that could occur in a century of abrupt and nonlinear change. But the longer we delay on climate action, the **likelier** it becomes. One of those experts is Stanford University's Marshall Burke, who is among the world's top researchers on climate and economic productivity. He also studies the impact of global warming on armed conflict. Burke and several of his colleagues published a paper in the prestigious scientific journal Nature postulating that if climate change continues unabated there could be a 23 percent decline in average global income by 2100—compared to a world where global warming doesn't exist. Canada's average national income, meanwhile, could increase by **247 percent**. Burke's team produced these astounding figures by studying the past. "We're using history as a laboratory," he said. They looked at the impact of temperature changes on 50 years of economic activity in 166 countries. They examined whether the GDP in places as diverse as the US, Brazil, and Cameroon went up or down in years with unusually warm or cold weather. They found that economies tend to perform best in areas with average annual temperatures of 13 degrees Celsius—which, as it turns out, pretty much exactly describes a place like Silicon Valley. "Coincidence or not these also tend to be some of the wealthiest locations in the world," Burke said. His team then extrapolated those findings into the future. They imagined a world where climate change proceeds unabated until the year 2100. Already-hot countries suffer drastic impacts. Moderately warm ones decline. And cold nations like Canada see potentially large **economic gains** as their average annual climates approach the 13 degrees "**sweet spot**." These shifts won't be immediately visible to most people. "In any given year it's going to be hard to detect the specific contribution of climate to economic performance," Burke noted. "But what you're likely to see is sort of a death by thousand cuts." No country—rich or poor—will be immune from them. The most obvious way climate change affects an economy is through **agriculture**. Drought, storms, heat waves and invasive pests make it harder to grow food. Yet in an advanced economy such as the US, climate change could hamper growth in less apparent ways. Sweltering temperatures cause death and hospitalization, resulting in a **financial drag** on the healthcare system. Natural disasters hurt the insurance industry. People are **less effective** at their jobs in extreme heat. Factories produce fewer goods. The aggregate impact, according to Burke's research, could be a 36 percent decline in US income by 2100. The South will be hit particularly hard. And these are the impacts we could expect in one of the world's richest and most powerful countries. Places that are already struggling economically are going to be absolutely pummeled. Dehydration and chronic kidney disease could ravage Latin America's farm workers. Drought may set off civil wars in Africa. Entire cities and regions of the Middle East might become too physically hot to survive in. National income declines of 80 to 90 percent would become common across the developing world—that is, compared to growth scenarios without climate change. And this isn't even accounting for the one-off disasters—say, for instance, a surge of superstorms that destroy New York and London—which could send the global economy into a tailspin. "Our estimates can be considered a bit conservative," Burke said. Canadians will be watching the world burn with a mixture of **relief** and anxiety. In no way are we going to be immune from the physical effects of climate change. Polar bears and seals will go extinct across the North. Towns built on melting permafrost might literally collapse. Wildfires will rage out of control. Natural disasters caused by climate change could cost Canada up to $43 billion per year by mid-century, TD Economics estimated in 2014. Yet each dollar spent right now on adaptation could prevent up to $38 in future damages. And northern countries like Canada could see **economic benefits** from warmer temperatures. "Canada is going to have multiple **geographic advantages**," Burke said. "The evidence would suggest that Canada is likely to do well relative to many of its trading partners and competitors." One way that could happen is if melting ice opens up **shipping routes** in the Arctic Ocean. This would significantly **reduce** the **time** and **cost** of international trade. It could **revolutionize** the industry, the same way that container shipping did over the past 60 years, explained Rob Huebert, a University of Calgary associate professor who's studied the impact of climate change on the Arctic. "The ice will be gone and all of a sudden this becomes a passage and it becomes a passage through a country that will be considerably more stable than what you see in, say, Egypt," he said. Climate change could at the same time bring **more fish** into the Arctic Ocean, and into the northern reaches of the Pacific and Atlantic. During these same decades global trade is expected to **triple**, while the economic value of the planet's oceans doubles to **$3 trillion**. By taking advantage of these trends Canada could become a "**global superpower**," as Ocean Networks Canada leader Kate Moran has argued. That's an assessment shared by UCLA scientist Lawrence Smith, who's speculated that the small Manitoba city of Churchill could be one of 10 "**ports of the future**." "In many ways, the New North is **well positioned** for the coming century," he wrote. And Stony Brook professor Noah Smith has urged Americans to, "keep an eye on the big country to the north—it could be headed for very important, very good things."

### **Ice Age**

#### **Warming Key to stop an Ice age- Morales 16**

Alex **Morales**, 1-13-**2016**, "The Good News on Global Warming: We've Delayed the Next Ice Age," Bloomberg, http://www.bloomberg.com/news/articles/2016-01-13/the-good-news-on-global-warming-we-ve-delayed-the-next-ice-age

Global warming caused by fossil fuel **emissions** is blamed by scientists for intensifying storms, raising sea levels and prolonging droughts. Now there’s growing evidence of a positive effect: we may have delayed the next ice age by 100,000 years or more. QUICKTAKE Climate Change The conditions necessary for the onset of a new ice age were narrowly missed at the beginning of the Industrial Revolution in the 1800s, researchers at the Potsdam Institute for Climate Impact Research near Berlin wrote Wednesday in the journal Nature. Since then, rising emissions of heat-trapping CO2 from burning oil, coal and gas have made the spread of the world’s ice sheets even less likely, they said. “This study further confirms what we’ve suspected for some time, that the carbon dioxide humans have added to the atmosphere will alter the climate of the planet for tens to hundreds of thousands of years, and has canceled the next ice age,” said Andrew Watson, a professor of Earth sciences at the University of Exeter in southwest England who wasn’t involved in the research. "Humans now effectively control the climate of the planet." The study reveals new findings on the relationship between insolation, a measure of the Sun’s energy reaching the planet, levels of carbon dioxide in the atmosphere, and the spread of ice sheets that characterize an ice age. The researchers in Germany were able to use computer models to replicate the last eight glacial cycles and provide predictions on when the next might occur. The scientists found that even without further output of heat-trapping gases, the next ice age probably wouldn’t set in for another 50,000 years. That would make the current so-called inter-glacial period “unusually long,” according to the lead author, Andrey Ganopolski. “However, our study also shows that relatively moderate additional anthropogenic CO2-emissions from burning oil, coal and gas are already **sufficient to postpone the next ice age** for another 50,000 years,” which would mean the next one probably won’t start for 100,000 years, he said. “The bottom line is that we are basically skipping a whole glacial cycle, which is unprecedented.

#### **Extinction**

David **Deming 2009** (geophysicist and associate professor of Arts and Sciences at the University of Oklahoma) The Coming Ice Age, 5/13/09, http://www.americanthinker.com/2009/05/the\_coming\_ice\_age.html

In northern Europe, the Little Ice Age kicked off with the Great Famine of 1315. Crops failed due to cold temperatures and incessant rain. Desperate and starving, parents ate their children, and people dug up corpses from graves for food. In jails, inmates instantly set upon new prisoners and ate them alive. The Great Famine was followed by the Black Death, the greatest disaster ever to hit the human race. One-third of the human race died; terror and anarchy prevailed. Human civilization as we know it is only possible in a warm interglacial climate. Short of a catastrophic asteroid impact**, the greatest threat to the human race is the onset of another ice age**. The oscillation between ice ages and interglacial periods is the dominant feature of Earth's climate for the last million years. But the computer models that predict significant global warming from carbon dioxide cannot reproduce these temperature changes. This failure to reproduce the most significant aspect of terrestrial climate reveals an incomplete understanding of the climate system, if not a nearly complete ignorance. Global warming predictions by meteorologists are based on speculative, untested, and poorly constrained computer models. But our knowledge of ice ages is based on a wide variety of reliable data, including cores from the Greenland and Antarctic ice sheets. In this case, it would be perspicacious to listen to the geologists, not the meteorologists. By reducing our production of carbon dioxide, we risk hastening the advent of the next ice age. Even more foolhardy and dangerous is the Obama administration's announcement that they may try to cool the planet through geoengineering. Such a move in the middle of a cooling trend could provoke the irreversible onset of an ice age. **It is not hyperbole to state that such a climatic change would mean the end of human civilization as we know it.** Earth's climate is controlled by the Sun. In comparison, every other factor is trivial. The coldest part of the Little Ice Age during the latter half of the seventeenth century was marked by the nearly complete absence of sunspots. And the Sun now appears to be entering a new period of quiescence. August of 2008 was the first month since the year 1913 that no sunspots were observed. As I write, **the sun remains quiet. We are in a cooling trend**. The areal extent of global sea ice is above the twenty-year mean. We have heard much of the dangers of global warming due to carbon dioxide. But the potential danger of any potential anthropogenic warming is trivial compared to the risk of entering a new ice age. Public policy decisions should be based on a realistic appraisal