# 1AC

## 1AC — Plan

#### Plan text: The United States ought to recognize an unconditional right to strike for agricultural laborers by amending the National Labor Relations Act to extend the definition of ‘employee’ to include agricultural laborers.

#### Squo NLRA fails to protect farmer’s rights to strike – plan amends the NLRA to collectively bargain

Reilly, 11, Penn State Law, “Agricultural Laborers: Their Inability to Unionize Under the National Labor Relations Act”, Penn State: Masters of Science, JD Law, URL: <https://pennstatelaw.psu.edu/_file/aglaw/Publications_Library/Agricultural_Laborers.pdf>, 2011 + since most recent citation is from then, KR

The NLRA gives workers “freedom of association, self-organization, and designation of representatives of their own choosing” in order to equalize the bargaining power between employers and employees in the hopes of limiting the interruptions to the free flow of commerce.10 The statute covers a large number of workers based on the broad definition of “employee,”11 but excludes from coverage all agricultural laborers.12 The NLRA does not define who these agricultural laborers are that are excluded from the right to organize, but rather Congress has instructed the National Labor Relations Boards (NLRB)13 in the annual Appropriations Act that in determining who is an agricultural laborer excluded from the NLRA, to rely on the definition of “agriculture” found in the Fair Labor Standards Act (FLSA).14 Agriculture in the FLSA is defined as “farming in all its branches ... and any practices ... performed by a farmer or on a farm as an incident to or in conjunction with such farming operations...”15 The definition also lists specific activities to further define what would specifically be considered agricultural work.16 Therefore, workers whose responsibilities are contained in the FLSA’s definition of “agriculture” are excluded from the right to organize and form unions under the NLRA.

The reasoning behind this exclusion is somewhat vague, especially considering that the bill originally proposed in the Senate did not exclude agricultural laborers from the definition of “employee.”17 There is not much mentioned about the agricultural exclusion because of the statute’s primary focus on addressing problems in the industrial sector. There is, however, a debate from in the House addressing the agricultural laborer exemption,18 where an argument was made that agricultural laborers should be included because they needed the same protections as industrial workers. Agricultural labor issues were brought to light in 1935 after governmental investigations into child labor issues and the lack of clean water provided for such workers.19

In response, two possible reasons were briefly mentioned that may explain why agricultural laborers were excluded: first, in regions like the Midwest, farms are mostly family farms and should not be within the scope of the NLRA, and second there was a concern that Congress did not have jurisdiction over agricultural workers because it was questionable whether such workers were engaged in interstate commerce.20 Many commentators believe that it was the former argument that led to the exclusion of agricultural workers from protection under the NLRA. Another possible reason for this exclusion as presented by some commentators is that the larger farms lobbied to have their workers excluded from the NLRA.21 While not expressly stated, the most likely explanation is that Congress wanted to protect the family farmer from having to pay higher wages that unions would inevitably demand of the employers.22 Realizing that agriculture was important to the entire nation, Congress wanted to shield this industry from unionization, and wanted to protect the family farmer from having to pay what they could not afford. Congress did not think it necessary to equate the family farmer with big business.

The broad definition of “agriculture” under the FLSA would seem to exclude from the NLRA any worker who is employed by any agricultural entity. This is not the case, however, because the Supreme Court has adopted a two-part test to determine if an employee is in fact an agricultural laborer excluded from the NLRA.23 An agricultural employee will be excluded from the right to organize if he or she is engaged in either primary or secondary farming. The Supreme Court has taken the FLSA definition of agriculture and essentially limited its application based on a strict application of the statutory language. Primary farming are those tasks specifically referred to in the statutory definition of “agriculture” such as “cultivation and tillage of the soil [and] dairying.”24 The rest of the definition is considered secondary farming, and therefore a worker is an agricultural laborer if the work performed is of the type that would be performed “by a farmer or on a farm as an incident to or in conjunction with such farming operations.”25

In one of the more recent cases to address the question of who is considered an agricultural employee, the Supreme Court in Holly Farms Corp. v. N.L.R.B. upheld the determination made by the NLRB that workers on live-haul chicken crews do not engage in agricultural labor and therefore are not subject to the agricultural exception from the NLRA.26 The responsibility of the live-haul crew is to enter the farms of independent contractors who raise chickens supplied by Holly Farms; the chickens are then caught and caged by nine chicken catchers, moved by a forklift operator onto a truck to be transported by a truck driver to the processing plant.27 These live-haul crews were not engaged in primary farming because primary farming would have been the actual raising of the poultry, which was the responsibility of the independent contractors, not the live- haul crews.28

The court then focused on whether these live-haul crews were engaged in secondary farming. In doing so, the court immediately found that that the work performed by the live-haul crews were not of the kind “performed by a farmer” because Holly Farms gave up its farmer status as soon as the chicks were delivered to independent contractors for raising.29 As a result of this determination, the truck drivers were not considered agricultural laborers and were therefore not part of the agricultural exception to the NLRA and were able to unionize.30

The court then looked to whether the chicken catchers and forklift operators were engaged in work “on a farm as an incident to or in conjunction with” raising poultry.31 The Supreme Court found that neither the chicken catchers nor the forklift operators “worked on a farm” because the work these employees performed were part of Holly Farms’ poultry processing operations and was not of the type of work contemplated to be included in the statutory definition of “farming.”32 The Supreme Court adopted the reasoning of the NLRB in deciding that the catchers and forklift operators were not performing work “incident to or in conjunction with” the farming operations of the independent contractors.33 In doing so, the Supreme Court decided that it was more important to look at the status of the employer as a farmer rather than where the laborer carried out the responsibilities of the job he or she was hired to perform. Because, as previously determined, Holly Farms was not considered a farmer by the time the live- haul crews went in to catch the chickens, the catchers and the forklift operators were not engaged in secondary farming as defined in the FLSA.34 This meant that all the members of the live-haul crews were not agricultural laborers and therefore all had the right to organize under the NLRA.

The Supreme Court limited the applicability of the definition of “agriculture” in Holly Farms and in doing so opened up the possibility that more workers employed by large, vertically integrated employers would be able to organize.35 By taking the approach to look at the status of the employer rather than where the work is performed, the Supreme Court broadened the already broad definition of “employee” under the NLRA. More employees working for these vertically integrated employers will be able to experience the protection of the NLRA that has been open to industrial workers since the act was first passed in 1935. The impact of the Holly Farms decision is for courts to engage in an in depth analysis before deciding whether a worker is an agricultural laborer not protected by the NLRA. Switching the focus to the status of the employer rather than where the employees are performing their responsibilities will ensure greater protection for workers and a broader reach of the NLRA.

While the definition of “employee” has expanded to include some employees who are employed by agricultural employers, there is still the exception for agricultural laborers included in the statute and therefore there are still many workers who are unable to form unions. These may be the workers that need the most protection because they are the field workers who are subjected to abuse, poverty and hazardous working conditions.36 Many commentators would like to see the NLRA extended to include agricultural laborers. The main advantage to extending the definition of “employee” to include agricultural laborers under the NLRA is that the statute has been in existence for many years, and most of the challenges that would be brought up with respect to agricultural laborers attempting to unionize have most likely already been resolved in other employment sectors allowing the NLRB and courts to rely on precedent. This will make application of the statue to the agricultural laborers consistent with other employment sectors. Reliance on precedent would lead to predictable outcomes when labor disputes arise. Agricultural laborers still have a ways to go before they will be able to reap the benefits of the NLRA; but, if this were to happen, agricultural laborers would be able not only to unionize and have their association protected, but also would have the advantage of being able to rely on others with experience and knowledge of the NLRA and its intricacies.

#### The aff is key to increase incentives to farm: it increases wages, sets safe living conditions, AND helps farmers expand products

Reilly, 11, Penn State Law, “Agricultural Laborers: Their Inability to Unionize Under the National Labor Relations Act”, Penn State: Masters of Science, JD Law, URL: <https://pennstatelaw.psu.edu/_file/aglaw/Publications_Library/Agricultural_Laborers.pdf>, 2011 + since most recent citation is from then, KR

The rate of pay agricultural laborers earn in return for their work would increase if these workers were able to organize and engage in collective bargaining with their employers. Agricultural workers in 2008 made between $8.64 per hour and $13.02 per hour.50 The hourly wage is relatively low, especially when compared to other occupations with the ability to unionize that require similar training and working conditions. For example, construction laborers in 2008 earned between $10.80 and $14.95 per hour51 and textile, apparel and furnishing workers earned between $9.14 and $18.15 per hour.52 While there is a wide range of earnings for anyone entering these three professions, the two professions that are able to unionize earn more per hour on a national level than the agricultural workers who are exempted form organizing under the NLRA. The low earnings of agricultural laborers as compared to other laborers supports a finding that the NLRA would benefit agricultural laborers and are the type of workers that were meant to be extended the right to organize. If agricultural laborers were afforded protection under the NLRA to engage in collective bargaining, the likely result would be that bargaining representatives would be able to negotiate with agricultural employers for higher wages that would lead to less of an earnings gap between agricultural laborers and laborers in other industries.

There is one major similarity between the construction industry and the agriculture industry that would seem to tip the scales in favor of affording agricultural laborers the right to unionize under the NLRA. That is that both industries hire seasonally.53 The seasonal nature of agricultural work is often cited as a reason against unionization, but with the similarity in the construction industry and the ability of those workers to unionize, the seasonal nature of agricultural work should be a factor in considering whether or not to include these workers under the NLRA, but is not itself conclusive. If seasonal workers in other industries are able to unionize, the seasonal nature of agricultural work should not be a major point of opposition to allowing agricultural laborers the right to collectively bargain.

Agricultural laborers are also subject to harsh conditions because of the work that they perform and should be able to organize under the NLRA in order to bargain with their employers for better working conditions. Agricultural laborers are not always provided with access to clean drinking water nor are there typically adequate restroom facilities for these workers to use.55 Unions can help workers to gain access to sanitary facilities and clean drinking water by bargaining for these necessities with the employers.56 By making these issues part of a collective bargaining agreement, unions will be able to hold employers contractually liable to follow such conditions and will thereby improve the conditions of employment for agricultural laborers who would otherwise be subject to sub-standard facilities.

Another hazardous working condition that arises for agricultural laborers is the exposure to pesticides. Agricultural laborers may be exposed to pesticides that are carcinogens or other pesticides that affect the endocrine and/or hormone systems.57 Agricultural laborers, especially those who apply pesticides, are at a greater risk of acute pesticide poisoning which many times is more prevalent than it needs to be because agricultural employers do not take the kinds of precautions necessary to prevent pesticide poisoning.58 Unions again can aid agricultural laborers by limiting such exposure through a collective bargaining agreement because unions would be able to bargain for certain safety precautions to be taken before workers are able to spray pesticides and can also ensure that safety gear is provided before spraying commences. Inadequate facilities and pesticides are two examples of the hazardous conditions that agricultural laborers are exposed to that could be cured through the right to unionize and collectively bargain with employers. Unions would be able to protect workers from such sub-standard conditions which in turn would lead to less illness and disease that agricultural laborers would be subjected to and would increase productivity on farms because field workers will not be slowed by sickness and would be able to work more as a result.

Further, “farmers, planters, ranchmen, dairymen, nut or fruit growers” are able to form associations for the mutual benefit of all members.59 These associations allow their members to work collectively in preparing their products for market.60 These producers are also able to form cooperatives to market their products and maintain the “bargaining position of individual farmers” in order to prevent adverse consequences of overcrowding the market.61 These agricultural producers are free to engage in concerted activity for the mutual protection of the association’s members, but agricultural laborers are exempt from asserting these same rights.62 Agricultural producers are therefore able to become even stronger entities, further widening the differences in the bargaining positions between producers and agricultural laborers. The unionization of agricultural laborers would better equalize the bargaining position on each side affording laborers the protections they need against agricultural employers as they become more powerful through associations.

## 1AC — Advantages

### Advantage 1 — Wages

#### Multiple studies prove that farmer’s investments are based on their economic confidence which ONLY the plan boosts

Wang et. al, 19, “How Farmers Make Investment Decisions: Evidence from a Farmer Survey in China”, Sustainability, Shuangjin Wang 1, Yuan Tian 2,\*ORCID, Xiaowei Liu 3 and Maggie Foley 4, 1: School of Management, Tianjin University of Commerce, Tianjin 300134, China, 2: School of Economics and Management, Beijing Jiaotong University, Beijing 100044, China, 3: College of Business, St. Ambrose University, Davenport, IA 52803, USA, 4: Davis Business School, Jacksonville University, Jacksonville, FL 32211, USA, URL: <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwii17vKue7zAhVdJjQIHUr3D7YQFnoECAUQAQ&url=https%3A%2F%2Fwww.mdpi.com%2F2071-1050%2F12%2F1%2F247%2Fpdf&usg=AOvVaw1RMvM-hGadn_uoetBxebDi>, KR

A variety of research methods were used in previous research to study farmers’ investment adjustment behavior from different perspectives. For example, Factor Analysis [3,7], Multinomial Logit Model [8,10,11], Deterministic Discrete Event Model [9], Mixed Logit Model with Flexible Mixing Distribution [12], Tobit Model [13,14], Probit Model [15–17], and Structural Equation Modeling [18,19].

It is widely accepted that farmers’ investment adjustment behavior is affected by many factors, but different literature has different opinions on key influencing factors that affect farmers’ investment behavior. Adimassu et al. [20] have found that farmers’ investments are limited by their capabilities. Okello et al. [21] have revealed that economic benefits, such as higher yields and income, can affect farmers’ investment in seed selection. Also, the cropped area, scale of the farmland, and agricultural income significantly influence farmers’ willingness to invest [10]. The government’s support and favorable policies can positively promote the agriculture investment of farmers [22,23]. Adimassu et al. [2] finds that farmers’ investment behavior is affected by five major factors: households’ resource endowments, knowledge, and experience of farming, access to information, social capital, and availability of family labor.

Moreover, some economic studies focus on specific factors that affect investment choice, such as state subsidies [24], the impact of agricultural cooperatives [25], risk preferences [26,27], the mode of communal land acquisition [28], government policies [29], and the presence of a price floor [13]. Besides, Ullah and Anad [30] examine the factors that influence the level of agricultural mechanization: economic condition of farmers, the land tenure system, scale of farmland, cost of fuel, and the cost of renting agricultural machinery. Konrad et al. [15] have found that the scale of farm operations, environmental concerns, and innovation readiness are important for farmers’ technology investments.

Factors such as the effect of planting structure adjustment and the output elasticity of capital can affect the investment adjustment behavior of farmers, and have been investigated by some studies. Ji et al. [31] have found that the shortage of a labor force can be supplemented by increasing capital input. In addition, other reasons may also lead to investment adjustment behavior such as attitudes toward capital input [4], the amount of agricultural income [32], expected financial benefits from capital input [33], and differences in adjustment capabilities [34].

#### Crop yield is key for meeting food criteria in upcoming generations

Tian et al 21-- Tian, Zhixi [principal investigator, Institute of Genetics and Developmental Biology and former research geneticist at Purdue], et al. "Designing future crops: challenges and strategies for sustainable agriculture." The Plant Journal 105.5 (2021): 1165-1178. (AG DebateDrills)

The first straightforward strategy for designing future crops that meet sustainable agriculture requirements is to improve the following aspects of current well-cultivated crops. Increasing yield. It is estimated that the yields of major crops need to increase at a rate of 2.4% per year to meet the food supply demand by 2050. However, the current growth rates of the four major crops, maize (Zea mays), rice (Oryza sativa), wheat (Triticum aestivum), and soybeans (Glycine max), are only approximately half of this anticipated rate (Ray et al., 2013). The development of new varieties with high yield potential that can fill this gap is the foremost mission of the Future Crops Design project. In fact, in a trial, it was reported that a super-high-yield rice variety could produce one- to threefold more grains under optimal conditions than in normal paddy fields (Liu et al., 2020a). Improving nutritional quality. Although the amount of food supply has been significantly improved in the last half-century, changes in human lifestyle and food consumption have resulted in a phenomenon called hidden hunger (Nair et al., 2016). For instance, in sub-Saharan Africa and America, about 17–30% of children under the age of 5 years have an inadequate daily intake of Vitamin A (Harjes et al., 2008; Haskell, 2012). It has been reported that about two billion people are suffering from a chronic deficiency of micronutrients (WHO, 2008), a new threat to human health. Moreover, the incidence of type-2 diabetes, obesity and colon disease has markedly increased in the past decade (Zhou et al., 2016). Hence, the second mission of the Future Crops Design project is to generate crops with higher/balanced nutritional quality or specialized metabolites using metabolic engineering and synthetic biology approaches (Francis et al., 2017; Martin and Li, 2017; Sweetlove et al., 2017; Vasconcelos et al., 2017). Increasing agricultural resource use efficiency. It was reported that ~17% of arable land has lost productivity since 1945 due to inappropriate agriculture management (Oldeman, 1994). In fact, nutrient-use efficiencies of today’s crops only reach 30–50% for nitrogen fertilizer (Cassman et al., 2002) and ~45% for phosphorus fertilizer (Smil, 2000). Moreover, fresh water has become a limiting factor for agriculture in many areas in the world. It is estimated that about 2800 km3 of fresh water per year is used for agricultural irrigation, and that crop production decreases by ~20% without irrigation (Siebert and Doll, 2010). Therefore, to reduce agricultural inputs and environmental burdens, we should aim to develop high nutrient and water-use efficiency crops without yield penalty.

#### Right now, the US is resorting to farmland expansion to meet food demand—we are on the brink of prohibitive ecological costs from deforestation

Tian et al 21-- Tian, Zhixi [principal investigator, Institute of Genetics and Developmental Biology and former research geneticist at Purdue], et al. "Designing future crops: challenges and strategies for sustainable agriculture." The Plant Journal 105.5 (2021): 1165-1178. (AG DebateDrills)

From the perspective of human evolution, each period of rapid population growth, such as during the Neolithic agricultural revolution, which began at about 8000 BC, the hydro agricultural or irrigation revolutions in the Near East, which began about 3000 BC, and the medieval and modern agricultural periods, which began about 1000 AD, benefited from an advance in agriculture (Taiz, 2013; Wallace et al., 2018). The recent rapid population growth during the past 300 years, in contrast, mainly resulted from the Industrial Revolution, which began in Britain about 1760. The Industrial Revolution greatly increased the range of human activities and accelerated farmland expansion. In 1700, it was reported that nearly 95% of Earth’s ice-free land consisted of wildlands and semi-natural anthromes; however, by 2000, ~55% of these regions were used as arable land (Figure 1a, data from https://ourworldindata.org/). The Industrial Revolution also gave birth to new technologies and production systems in agriculture, such as the application of larger irrigation systems, and more fertilizers and pesticides. In the 1960s, semi-dwarf wheat and rice varieties were introduced. These semi-dwarf crops exhibit beneficial characteristics, such as improved response to fertilizer input, lodging resistance and enhanced light utilization (Hedden, 2003; Wallace et al., 2018). Along with the fertilizers, pesticides and irrigation systems made possible by the Industrial Revolution, semi-dwarf crops were quickly adopted and resulted in a significant increase in total grain production globally. This big leap in agriculture was known as the ‘Green Revolution’ (Khush, 2001). Indeed, statistical data have revealed that the average daily food supply per person (in terms of calories) has doubled since the middle of the 19th century (Figure 1b, data from https://ourworld indata.org/). It is estimated that the world population will rise to more than 9 billion by 2050 (Alexandratos, 1999; Cassman, 1999), and at that time we will need at least 60% more food than is consumed by humans today. Moreover, our population will continuously increase, reaching over 11 billion by 2100 (Figure 1a, data from https://ourworldindata.org/). How to feed the increasing population is a challenge facing the whole world (Tilman et al., 2001; Godfray et al., 2010; Foley et al., 2011; Wallace et al., 2018). A simple solution to feed a population of 9 billion is to constantly turn wild habitats into farmland. However, this type of expansion is unrealistic as most of the world’s icefree and non-barren land area has been exhausted, and much of the rest is unlikely to sustain high yields (Cassman, 1999). More importantly, intact forests have been known to play essential roles in protecting the environment, such as storing fresh water, decreasing flooding and regenerating fertile soils. Clearing of forests will result in prohibitive ecological costs, such as loss of biodiversity and greenhouse gas emissions. It was reported that, due to agriculture expansion, ~30% of all plant species will become extinct (Taiz, 2013). The destruction of tropical forests releases about 1.1 9 1012 tons of carbon per year, which accounts for 12% of total anthropogenic CO2 emissions (Friedlingstein et al., 2010).

#### But, increased yield prevents devastating environmental destruction which causes major bio-diversity loss that leads to extinction.

**Torres 16** [Phil Biologist, conservationist, science advocate & educator. 2 years based in Amazon rainforest, now exploring science around the world. “[Biodiversity Loss: An Existential Risk Comparable to Climate Change](http://futureoflife.org/2016/05/20/biodiversity-loss/)” <http://futureoflife.org/2016/05/20/biodiversity-loss/>.]

According to the Bulletin of Atomic Scientists, the two greatest existential threats to human civilization stem from climate change and nuclear weapons. Both pose clear and present dangers to the perpetuation of our species, and the increasingly dire climate situation and nuclear arsenal modernizations in the United States and Russia were the most significant reasons why the Bulletin [decided](http://thebulletin.org/press-release/doomsday-clock-hands-remain-unchanged-despite-iran-deal-and-paris-talks9122) to keep the Doomsday Clock set at three minutes before midnight earlier this year.

But there is another existential threat that the Bulletin overlooked in its Doomsday Clock announcement: biodiversity loss. This phenomenon is often identified as one of the many consequences of climate change, and this is of course correct. But biodiversity loss is also a contributing factor behind climate change. For example, deforestation in the Amazon rainforest and elsewhere reduces the amount of carbon dioxide removed from the atmosphere by plants, a natural process that mitigates the effects of climate change. So the causal relation between climate change and biodiversity loss is bidirectional.

Furthermore, there are myriad phenomena that are driving biodiversity loss in addition to climate change. Other causes include ecosystem fragmentation, invasive species, pollution, oxygen depletion caused by fertilizers running off into ponds and streams, overfishing, human overpopulation, and overconsumption. All of these phenomena have a direct impact on the health of the biosphere, and all would conceivably persist even if the problem of climate change were somehow immediately solved.

Such considerations warrant decoupling biodiversity loss from climate change, because the former has been consistently subsumed by the latter as a mere effect. Biodiversity loss is a distinct environmental crisis with its own unique syndrome of causes, consequences, and solutions—such as restoring habitats, creating protected areas (“biodiversity parks”), and practicing sustainable agriculture.

Deforestation of the Amazon rainforest decreases natural mitigation of CO2 and destroys the habitats of many endangered species.

The sixth extinction.

The repercussions of biodiversity loss are potentially as severe as those anticipated from climate change, or even a nuclear conflict. For example, according to a 2015 [study](http://www.ncbi.nlm.nih.gov/pubmed/26601195) published in Science Advances, the best available evidence reveals “an exceptionally rapid loss of biodiversity over the last few centuries, indicating that a sixth mass extinction is already under way.” This conclusion holds, even on the most optimistic assumptions about the background rate of species losses and the current rate of vertebrate extinctions. The group classified as “vertebrates” includes mammals, birds, reptiles, fish, and all other creatures with a backbone.

The article argues that, using its conservative figures, the average loss of vertebrate species was 100 times higher in the past century relative to the background rate of extinction. (Other scientists have suggested that the current extinction rate could be as much as 10,000 times higher than normal.) As the authors write, “The evidence is incontrovertible that recent extinction rates are unprecedented in human history and highly unusual in Earth’s history.” Perhaps the term “Big Six” should enter the popular lexicon—to add the current extinction to the previous “Big Five,” the last of which wiped out the dinosaurs 66 million years ago.

But the concept of biodiversity encompasses more than just the total number of species on the planet. It also refers to the size of different populations of species. With respect to this phenomenon, multiple studies have confirmed that wild populations around the world are dwindling and disappearing at an alarming rate. For example, the 2010 [Global Biodiversity Outlook](https://www.cbd.int/gbo3) report found that the population of wild vertebrates living in the tropics dropped by 59 percent between 1970 and 2006.

The report also found that the population of farmland birds in Europe has dropped by 50 percent since 1980; bird populations in the grasslands of North America declined by almost 40 percent between 1968 and 2003; and the population of birds in North American arid lands has fallen by almost 30 percent since the 1960s. Similarly, 42 percent of all amphibian species (a type of vertebrate that is sometimes called an “ecological indicator”) are undergoing population declines, and 23 percent of all plant species “are estimated to be threatened with extinction.” [Other studies](http://commondreams.org/views/2016/02/10/biodiversity-loss-and-doomsday-clock-invisible-disaster-almost-no-one-talking-about) have found that some 20 percent of all reptile species, 48 percent of the world’s primates, and 50 percent of freshwater turtles are threatened. Underwater, about 10 percent of all coral reefs are now dead, and another 60 percent are in danger of dying.

Consistent with these data, the 2014 [Living Planet Report](http://bit.ly/1ssxx5m) shows that the global population of wild vertebrates dropped by 52 percent in only four decades—from 1970 to 2010. While biologists often avoid projecting historical trends into the future because of the complexity of ecological systems, it’s tempting to extrapolate this figure to, say, the year 2050, which is four decades from 2010. As it happens, a 2006[study](http://science.sciencemag.org/content/314/5800/787) published in Science does precisely this: It projects past trends of marine biodiversity loss into the 21st century, concluding that, unless significant changes are made to patterns of human activity, there will be virtually no more wild-caught seafood by 2048.

48% of the world’s primates are threatened with extinction.

Catastrophic consequences for civilization.

The consequences of this rapid pruning of the evolutionary tree of life extend beyond the obvious. There could be surprising effects of biodiversity loss that scientists are unable to fully anticipate in advance. For example, prior research has shown that localized ecosystems can undergo abrupt and irreversible shifts when they reach a tipping point. According to a 2012 [paper](http://www.nature.com/nature/journal/v486/n7401/full/nature11018.html) published in Nature, there are reasons for thinking that we may be approaching a tipping point of this sort in the global ecosystem, beyond which the consequences could be catastrophic for civilization.

As the authors write, a planetary-scale transition could precipitate “substantial losses of ecosystem services required to sustain the human population.” An ecosystem service is any ecological process that benefits humanity, such as food production and crop pollination. If the global ecosystem were to cross a tipping point and substantial ecosystem services were lost, the results could be “widespread social unrest, economic instability, and loss of human life.” According to Missouri Botanical Garden ecologist Adam Smith, one of the paper’s co-authors, this could occur in a matter of decades—far more quickly than most of the expected consequences of climate change, yet equally destructive.

Biodiversity loss is a “threat multiplier” that, by pushing societies to the brink of collapse, will exacerbate existing conflicts and introduce entirely new struggles between state and non-state actors. Indeed, it could even fuel the rise of terrorism. (After all, climate change has been [linked](http://thebulletin.org/climate-change-and-syrian-uprising) to the emergence of ISIS in Syria, and multiple high-ranking US officials, such as former US Defense Secretary [Chuck Hagel](http://www.defense.gov/News-Article-View/Article/603441)and CIA director [John Brennan](http://www.cnsnews.com/news/article/cnsnewscom-staff/cia-director-cites-impact-climate-change-deeper-cause-global), have affirmed that climate change and terrorism are connected.)

The reality is that we are entering the sixth mass extinction in the 3.8-billion-year history of life on Earth, and the impact of this event could be felt by civilization “in as little as three human lifetimes,” as the aforementioned 2012 Nature paper notes. Furthermore, the widespread decline of biological populations could plausibly initiate a dramatic transformation of the global ecosystem on an even faster timescale: perhaps a single human lifetime.

The unavoidable conclusion is that biodiversity loss constitutes an existential threat in its own right. As such, it ought to be considered alongside climate change and nuclear weapons as one of the most significant contemporary risks to human prosperity and survival.

**Warming is linear—every decrease in rising temperatures radically mitigates the risk of existential climate change.**

Xu and Ramanathan 17, Yangyang Xu, Assistant Professor of Atmospheric Sciences at Texas A&M University; and Veerabhadran Ramanathan, Distinguished Professor of Atmospheric and Climate Sciences at the Scripps Institution of Oceanography, University of California, San Diego, 9/26/17, “Well below 2 °C: Mitigation strategies for avoiding dangerous to catastrophic climate changes,” Proceedings of the National Academy of Sciences of the United States of America, Vol. 114, No. 39, p. 10315-10323//recut CHS PK

We are proposing the following extension to the DAI risk categorization: warming greater than 1.5 °C as “dangerous”; warming greater than 3 °C as “catastrophic?”; and warming in excess of 5 °C as “unknown??,” with the understanding that changes of this magnitude, not experienced in the last 20+ million years, pose existential threats to a majority of the population. The question mark denotes the subjective nature of our deduction and the fact that catastrophe can strike at even lower warming levels. The justifications for the proposed extension to risk categorization are given below. From the IPCC burning embers diagram and from the language of the Paris Agreement, we infer that the DAI begins at warming greater than 1.5 °C. Our criteria for extending the risk category beyond DAI include the potential risks of climate change to the physical climate system, the ecosystem, human health, and species extinction. Let us first consider the category of catastrophic (3 to 5 °C warming). The first major concern is the issue of tipping points. Several studies (48, 49) have concluded that 3 to 5 °C global warming is likely to be the threshold for tipping points such as the collapse of the western Antarctic ice sheet, shutdown of deep water circulation in the North Atlantic, dieback of Amazon rainforests as well as boreal forests, and collapse of the West African monsoon, among others. While natural scientists refer to these as abrupt and irreversible climate changes, economists refer to them as catastrophic events (49). Warming of such magnitudes also has catastrophic human health effects. Many recent studies (50, 51) have focused on the direct influence of extreme events such as heat waves on public health by evaluating exposure to heat stress and hyperthermia. It has been estimated that the likelihood of extreme events (defined as 3-sigma events), including heat waves, has increased 10-fold in the recent decades (52). Human beings are extremely sensitive to heat stress. For example, the 2013 European heat wave led to about 70,000 premature mortalities (53). The major finding of a recent study (51) is that, currently, about 13.6% of land area with a population of 30.6% is exposed to deadly heat. The authors of that study defined deadly heat as exceeding a threshold of temperature as well as humidity. The thresholds were determined from numerous heat wave events and data for mortalities attributed to heat waves. According to this study, a 2 °C warming would double the land area subject to deadly heat and expose 48% of the population. A 4 °C warming by 2100 would subject 47% of the land area and almost 74% of the world population to deadly heat, which could pose existential risks to humans and mammals alike unless massive adaptation measures are implemented, such as providing air conditioning to the entire population or a massive relocation of most of the population to safer climates. Climate risks can vary markedly depending on the socioeconomic status and culture of the population, and so we must take up the question of “dangerous to whom?” (54). Our discussion in this study is focused more on people and not on the ecosystem, and even with this limited scope, there are multitudes of categories of people. We will focus on the poorest 3 billion people living mostly in tropical rural areas, who are still relying on 18th-century technologies for meeting basic needs such as cooking and heating. Their contribution to CO2 pollution is roughly 5% compared with the 50% contribution by the wealthiest 1 billion (55). This bottom 3 billion population comprises mostly subsistent farmers, whose livelihood will be severely impacted, if not destroyed, with a one- to five-year megadrought, heat waves, or heavy floods; for those among the bottom 3 billion of the world’s population who are living in coastal areas, a 1- to 2-m rise in sea level (likely with a warming in excess of 3 °C) poses existential threat if they do not relocate or migrate. It has been estimated that several hundred million people would be subject to famine with warming in excess of 4 °C (54). However, there has essentially been no discussion on warming beyond 5 °C. Climate change-induced species extinction is one major concern with warming of such large magnitudes (>5 °C). The current rate of loss of species is ∼1,000-fold the historical rate, due largely to habitat destruction. At this rate, about 25% of species are in danger of extinction in the coming decades (56). Global warming of 6 °C or more (accompanied by increase in ocean acidity due to increased CO2) can act as a major force multiplier and expose as much as 90% of species to the dangers of extinction (57). The bodily harms combined with climate change-forced species destruction, biodiversity loss, and threats to water and food security, as summarized recently (58), motivated us to categorize warming beyond 5 °C as unknown??, implying the possibility of existential threats. Fig. 2 displays these three risk categorizations (vertical dashed lines).

### Advantage 2 — Sustainable Argiculture

#### Farmworkers have been historically prevented from unionizing – recent developments are short in scope but lack further protections key for unions

Wozniacka, 19, 5/7/2019, “Less than 1 Percent of US Farmworkers Belong to a Union. Here’s Why.”, CivilEats, Gosia Wozniacka is a senior reporter at Civil Eats. A multilingual journalist with more than fifteen years of experience, Gosia is currently based in Oregon. Wozniacka worked for five years as a staff reporter for The Associated Press in Fresno, California, and then in Portland, Oregon. She wrote extensively about agriculture, water, and other environmental issues, farmworkers and immigration policy, URL: https://civileats.com/2019/05/07/less-than-1-percent-of-us-farmworkers-belong-to-a-union-heres-why/ , KR

Historically Excluded and Unprotected

Federal and state laws have long excluded farmworker from labor protections. The National Labor Relations Act of 1935, which forbids employers from firing a worker for joining, organizing, or supporting a labor union, specifically excluded farmworkers and domestic workers. Many of those workers were, at the time, African American.

Farmworkers were also excluded from The Fair Labor Standards Act, enacted in 1938, which guarantees other workers a minimum wage, overtime pay, and other protections. In 1966, the act was amended to partially include agricultural workers in the minimum wage provisions. But 60 years later, farmworkers are still not eligible for overtime pay. The law also offers fewer protections to child agricultural workers than to children in other industries. And those who work on smaller farms are not eligible for the federal minimum wage, which currently stands at $7.25 per hour.

Some do earn a lot more than that per hour. Workers who are paid piece rate—based on how many buckets or bags they pick—can, if they are fast pickers, earn much more than the minimum wage. And some workers get paid an hourly rate that’s higher than the minimum wage. But since farm jobs are seasonal and most farmworkers don’t work year-round, their annual earnings are meager.

In addition, most farmworkers lack other basic labor protections such as workers’ compensation, health insurance, and disability insurance. Some states like New York, following the federal government’s lead, have exclude farmworkers from its labor laws. Only a handful of states have enacted legislation that protects the organizing and collective bargaining efforts of agricultural workers. A few states, such as California, have also extended overtime pay and other protections to them.

The bottom line: although federal and state laws don’t explicitly forbid farmworkers from unionizing, they withhold labor protections that make unionizing easier. In a state where bargaining isn’t specifically protected, farmworkers may decide to form a union, but an employer does not have to negotiate with them and can retaliate against the workers.

Because of all this, convincing farmworkers to unionize has never been more difficult. “This isn’t steady year-round employment where workers can get together and have a consistent campaign. When farmworkers organize, it’s often on an isolated farm. And due to a lack of documentation, employers have huge leeway to exploit workers and create an atmosphere of fear,” said Justin Flores, vice president of the Farm Labor Organizing Committee in North Carolina. “Because of all that, traditional labor has deemed agricultural workers un-organizable and has not dedicated campaigns to them. So only a few crazy people historically have been dedicated enough to run a farmworker union,” added Flores.

#### Unions are key for sustainable agriculture – only collective bargaining rights and unionization checks – international union of agriculture proves

Hurst et. al, 07, “Agricultural Workers and Their Contribution to Sustainable Agriculture and Rural Development”, ILO, Peter Hurst is the IUF's Occupational Health and Safety Specialist, Paola Termine is the FAO's Rural Institutions and Rural Workers Officer, Marilee Karl is a consultant with the FAO's Rural Institutions and Participation Service.URL: <https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/publication/wcms_113732.pdf>, KR

To address the problem of unilateral codes, the IUF, working with affiliates and several NGOs in a body called the International Flower Co-ordination drew up a model International Code of Conduct for the Production of Cut Flowers.120 This Code is based firmly on International Labour Organization standards. Importers, especially in Germany and the foundation that sets the environmental standards for the Netherlands-based flower auction, were targeted to convince them to accept the International Code of Conduct. Workshops were held for East African trade unions on the International Code of Conduct and how to use it to organize workers and to improve their working conditions. A Training Manual for shop stewards on how to use the Code has been developed.121

Further negotiations with the flower producers have led to the introduction of a Fair Trade in Flowers and Plants scheme coordinated by an industry body, Union Fleurs.

The work around promotion of the International Code of Conduct for the Production of Cut Flowers has highlighted the many problems that IUF affiliates have with codes of conduct, even those drawn up multilaterally and based on ILO standards. The evidence so far is that it is very hard for trade unions in producer countries to use codes of conduct to improve working conditions. To date, there are no examples of a code, even with freedom of association as its cornerstone, leading to the formation of a new union. Some unions have been able to use the code to establish new branches but this is still fairly exceptional and there are some examples of improvements in living and working conditions, especially when a union has been able to append the code to its collective bargaining agreement. The ETI aims to enhance the private sector's contribution to sustainable develop- ment by encouraging business practices that embrace social, environmental and financial responsibility. Ethical supply chain management is a critical aspect of responsible business in developing countries.123 The IUF is participating in the ETI at board level and has also been involved in pilots in the agricultural sector, e.g. horticultural products and bananas. Fair-trade “Fair-trade is a trading partnership, based on dialogue, transparency and respect, which seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions, such as securing the rights of, marginalised producers and workers - especially in the South”. “Fair-trade” is there- fore a recognized term for agreements between producers in developing countries and commercial buyers who wish to purchase and market products based on stable and "just" or "fair" prices and production criteria which respect labour and envi- ronmental standards.124 Fair trade aims to increase producers' access to markets, improve their incomes, and ensure that their production is based on sustainable development principles.

The Fair-trade Labelling Organizations International (FLO), for example, sets com- mon criteria for fair trade tea, coffee, cocoa, honey, orange juice and bananas. FLO works mainly to label goods from small farmers, but in the tea and banana sectors there are also plantations, and the IUF's concern has been to understand fair trade's impact on employed workers and how fair trade can help them both in organizing trade unions and in improving living conditions, without undermining collective bargaining. Workers promote Integrated Production and Pest Management Integrated Production and Pest Management (IPPM) is a way of growing crops that maximizes control of pests by their natural enemies - pests, parasites and pathogens (diseases), integrated with other crop husbandry measures. This management tech- nique aims to keep pest populations below economically damaging levels and to restrict pesticide use to amounts that are economically justified and reduce risks to human health and the environment. The four key principles of IPPM125 are: Grow a healthy crop, and conserve a healthy soil; Conserve natural enemies - pests, parasites and pathogens; Observe the crop on a regular basis; Farmers and agricultural workers are the experts in pest control. Agricultural workers often say, "We know that chemical pesticides are bad for our health and that of our families and communities. So what are the alternatives? How do we stop using these poisons?”

One answer is to ensure workers are trained to understand and use IPPM tech- niques. Normally, it is only farmers who receive IPPM training, especially through Agricultural Workers and Their Contribution to Sustainable Agriculture and Rural Development 65 an educational method called "Farmer Field Schools" (FFS). The FAO has been promoting the use of such techniques through farmer field schools in its country programmes throughout the world. The FAO's integrated pest management pro- gramme (IPM) has been particularly successful in Asia and in 1993, the FAO inter- country programme on IPM rice in Asia organized a global IPM meeting to intro- duce its successful IPM approach to interested policy makers from other regions. Consequently, the FAO, World Bank, United Nations Development Programme and United Nations Environmental Programme established the Global Integrated Pest Management Facility in 1995. This joint programme is housed in the FAO and is the main international agency promoting IPPM worldwide

The IUF is now working with the Global IPM Facility to train agricultural workers in IPPM techniques, using the FFS method.

Field Schools mean that workers, like farmers, go into a field to study how a crop grows, to learn to identify harmful insects, diseases and weeds, and to learn to identify how to protect and encourage beneficial insects. The workers then draw up their own agro-ecology plan for that particular crop and field, setting out how to grow a healthy crop and how to protect it from pest and disease attack and weed competition by non-chemical means.

Equipped with this new knowledge, workers can then negotiate clauses requiring use of IPPM programmes in collective bargaining agreements with employers. The aim is to give agricultural workers knowledge and skills on IPPM so that when instructed by an employer or manager to use a toxic pesticide, they can point out that IPPM techniques provide a safer way of controlling the weed, insects or dis- eases. Safer for themselves and the supervisors, the managers, the community and the environment and for the crop (which may then be sold at a premium price).

Pilot IPPM courses - the first ever of their kind for waged agricultural workers - were held in 2001 for agricultural trade unions in Tanzania (TPAWU) and Uganda (NUPAW and NUCMAW). The unions concerned also invited some NGOs and organic farmers' organizations to join the courses. Training was given by profes- sional IPPM trainers provided by the Facility. The pilot training is ongoing, with a view to expanding it to other unions and countries.

2.4 Workers promote improved health,

safety and environmental standards for pesticides

To improve workplace occupational health, safety and environmental standards, especially targeting fatalities, poisoning, ill-health and pollution resulting from intensive pesticide use, the IUF started a Global Health, Safety and Environment Project in 1998. The Project aims to build the capacities of affiliated national unions and the IUF's regional and international networks to tackle occupational hazards within the context of promoting integrated production and pest manage- ment and sustainable agriculture. Health, Safety and Environment, A Series of Trade Union Education Manuals for Agricultural Workers have been developed by the IUF and ILO, which are also designed for use by small farmers and non- governmental organizations.126

#### Sustainable agriculture, emphasized by farmers and unions, is key for biodiversity

FP, 20, “Biodiversity and Agriculture: Industrial agriculture places consistency and productivity over biodiversity, but preserving the immense variety of life on earth is vital to the health of our planet and helps us safeguard our own food supply.”, Food Print: a non-profit organization dedicated to research and education on food production practices., URL: <https://foodprint.org/issues/biodiversity-and-agriculture/>, 20+ since some citations are from 2020, KR

Given that agriculture’s expanding footprint is responsible for so much habitat loss, preventing wild lands from being converted into farmland is critical to maintaining biodiversity. By embracing both traditional knowledge and new research, farmers and scientists are producing food in a way that harnesses biodiversity to make the most of what nature provides. This approach is called agroecology, and is a core component of regenerative agriculture, which builds up natural resources like healthy soil and water rather than using them up.38

While embracing agroecology is a revolutionary shift away from industrial farming, it’s nothing new: these practices are often adapted from the practices of indigenous peoples worldwide, who have created complex agroecological systems that exist in balance with nature. Preserving and reviving these indigenous traditions can make agriculture around the world more sustainable and help preserve biodiversity.39 The fact that 80 percent of the world’s biodiversity is preserved on lands that are managed by indigenous people is a testament to agroecology’s potential.40

Agroecology: Harnessing the Benefits of Biodiversity

A critical part of regenerative agriculture is building a productive agroecosystem that isn’t reliant on chemicals. Harnessing biodiversity is key to this, and breaking up big, monocultured fields with just a few more species can bring great benefits to both crops and wildlife. Creating productive agroecosystems means — following the example of indigenous peoples’ longstanding traditions — selecting plants that will benefit each other rather than relying on chemical inputs. For example, legumes like beans and lentils add vital nitrogen into the soil, which other plants need to grow. This has benefits that stretch beyond the farm: incorporating legumes into diverse fields not only provides crops with natural fertilizer, it avoids all of the greenhouse gas emissions associated with using synthetic fertilizers, and helps curb global warming.41 Other plants can provide valuable shade or support — like the classic “three sisters” system of Native American agriculture. Mixing plants together like this is called intercropping, and this can help lower the environmental footprint of a farm. Even without chemical inputs, farmers can see enormous benefits when they grow crops in intercropped systems: experiments with corn, beans, wheat, bananas and other crops have all shown that such systems can be more productive than their industrial counterparts while enhancing biodiversity on the farm and making a varied, rich habitat for wildlife.42

<skip biod impact if already read>

#### Biod loss causes extinction – outweighs neg disads and is a threat multiplier

**Torres 16** [Phil Biologist, conservationist, science advocate & educator. 2 years based in Amazon rainforest, now exploring science around the world. “[Biodiversity Loss: An Existential Risk Comparable to Climate Change](http://futureoflife.org/2016/05/20/biodiversity-loss/)” <http://futureoflife.org/2016/05/20/biodiversity-loss/>.]

According to the Bulletin of Atomic Scientists, the two greatest existential threats to human civilization stem from climate change and nuclear weapons. Both pose clear and present dangers to the perpetuation of our species, and the increasingly dire climate situation and nuclear arsenal modernizations in the United States and Russia were the most significant reasons why the Bulletin [decided](http://thebulletin.org/press-release/doomsday-clock-hands-remain-unchanged-despite-iran-deal-and-paris-talks9122) to keep the Doomsday Clock set at three minutes before midnight earlier this year.

But there is another existential threat that the Bulletin overlooked in its Doomsday Clock announcement: biodiversity loss. This phenomenon is often identified as one of the many consequences of climate change, and this is of course correct. But biodiversity loss is also a contributing factor behind climate change. For example, deforestation in the Amazon rainforest and elsewhere reduces the amount of carbon dioxide removed from the atmosphere by plants, a natural process that mitigates the effects of climate change. So the causal relation between climate change and biodiversity loss is bidirectional.

Furthermore, there are myriad phenomena that are driving biodiversity loss in addition to climate change. Other causes include ecosystem fragmentation, invasive species, pollution, oxygen depletion caused by fertilizers running off into ponds and streams, overfishing, human overpopulation, and overconsumption. All of these phenomena have a direct impact on the health of the biosphere, and all would conceivably persist even if the problem of climate change were somehow immediately solved.

Such considerations warrant decoupling biodiversity loss from climate change, because the former has been consistently subsumed by the latter as a mere effect. Biodiversity loss is a distinct environmental crisis with its own unique syndrome of causes, consequences, and solutions—such as restoring habitats, creating protected areas (“biodiversity parks”), and practicing sustainable agriculture.

Deforestation of the Amazon rainforest decreases natural mitigation of CO2 and destroys the habitats of many endangered species.

The sixth extinction.

The repercussions of biodiversity loss are potentially as severe as those anticipated from climate change, or even a nuclear conflict. For example, according to a 2015 [study](http://www.ncbi.nlm.nih.gov/pubmed/26601195) published in Science Advances, the best available evidence reveals “an exceptionally rapid loss of biodiversity over the last few centuries, indicating that a sixth mass extinction is already under way.” This conclusion holds, even on the most optimistic assumptions about the background rate of species losses and the current rate of vertebrate extinctions. The group classified as “vertebrates” includes mammals, birds, reptiles, fish, and all other creatures with a backbone.

The article argues that, using its conservative figures, the average loss of vertebrate species was 100 times higher in the past century relative to the background rate of extinction. (Other scientists have suggested that the current extinction rate could be as much as 10,000 times higher than normal.) As the authors write, “The evidence is incontrovertible that recent extinction rates are unprecedented in human history and highly unusual in Earth’s history.” Perhaps the term “Big Six” should enter the popular lexicon—to add the current extinction to the previous “Big Five,” the last of which wiped out the dinosaurs 66 million years ago.

But the concept of biodiversity encompasses more than just the total number of species on the planet. It also refers to the size of different populations of species. With respect to this phenomenon, multiple studies have confirmed that wild populations around the world are dwindling and disappearing at an alarming rate. For example, the 2010 [Global Biodiversity Outlook](https://www.cbd.int/gbo3) report found that the population of wild vertebrates living in the tropics dropped by 59 percent between 1970 and 2006.

The report also found that the population of farmland birds in Europe has dropped by 50 percent since 1980; bird populations in the grasslands of North America declined by almost 40 percent between 1968 and 2003; and the population of birds in North American arid lands has fallen by almost 30 percent since the 1960s. Similarly, 42 percent of all amphibian species (a type of vertebrate that is sometimes called an “ecological indicator”) are undergoing population declines, and 23 percent of all plant species “are estimated to be threatened with extinction.” [Other studies](http://commondreams.org/views/2016/02/10/biodiversity-loss-and-doomsday-clock-invisible-disaster-almost-no-one-talking-about) have found that some 20 percent of all reptile species, 48 percent of the world’s primates, and 50 percent of freshwater turtles are threatened. Underwater, about 10 percent of all coral reefs are now dead, and another 60 percent are in danger of dying.

Consistent with these data, the 2014 [Living Planet Report](http://bit.ly/1ssxx5m) shows that the global population of wild vertebrates dropped by 52 percent in only four decades—from 1970 to 2010. While biologists often avoid projecting historical trends into the future because of the complexity of ecological systems, it’s tempting to extrapolate this figure to, say, the year 2050, which is four decades from 2010. As it happens, a 2006[study](http://science.sciencemag.org/content/314/5800/787) published in Science does precisely this: It projects past trends of marine biodiversity loss into the 21st century, concluding that, unless significant changes are made to patterns of human activity, there will be virtually no more wild-caught seafood by 2048.

48% of the world’s primates are threatened with extinction.

Catastrophic consequences for civilization.

The consequences of this rapid pruning of the evolutionary tree of life extend beyond the obvious. There could be surprising effects of biodiversity loss that scientists are unable to fully anticipate in advance. For example, prior research has shown that localized ecosystems can undergo abrupt and irreversible shifts when they reach a tipping point. According to a 2012 [paper](http://www.nature.com/nature/journal/v486/n7401/full/nature11018.html) published in Nature, there are reasons for thinking that we may be approaching a tipping point of this sort in the global ecosystem, beyond which the consequences could be catastrophic for civilization.

As the authors write, a planetary-scale transition could precipitate “substantial losses of ecosystem services required to sustain the human population.” An ecosystem service is any ecological process that benefits humanity, such as food production and crop pollination. If the global ecosystem were to cross a tipping point and substantial ecosystem services were lost, the results could be “widespread social unrest, economic instability, and loss of human life.” According to Missouri Botanical Garden ecologist Adam Smith, one of the paper’s co-authors, this could occur in a matter of decades—far more quickly than most of the expected consequences of climate change, yet equally destructive.

Biodiversity loss is a “threat multiplier” that, by pushing societies to the brink of collapse, will exacerbate existing conflicts and introduce entirely new struggles between state and non-state actors. Indeed, it could even fuel the rise of terrorism. (After all, climate change has been [linked](http://thebulletin.org/climate-change-and-syrian-uprising) to the emergence of ISIS in Syria, and multiple high-ranking US officials, such as former US Defense Secretary [Chuck Hagel](http://www.defense.gov/News-Article-View/Article/603441)and CIA director [John Brennan](http://www.cnsnews.com/news/article/cnsnewscom-staff/cia-director-cites-impact-climate-change-deeper-cause-global), have affirmed that climate change and terrorism are connected.)

The reality is that we are entering the sixth mass extinction in the 3.8-billion-year history of life on Earth, and the impact of this event could be felt by civilization “in as little as three human lifetimes,” as the aforementioned 2012 Nature paper notes. Furthermore, the widespread decline of biological populations could plausibly initiate a dramatic transformation of the global ecosystem on an even faster timescale: perhaps a single human lifetime.

The unavoidable conclusion is that biodiversity loss constitutes an existential threat in its own right. As such, it ought to be considered alongside climate change and nuclear weapons as one of the most significant contemporary risks to human prosperity and survival.

**Warming is linear—every decrease in rising temperatures radically mitigates the risk of existential climate change.**

Xu and Ramanathan 17, Yangyang Xu, Assistant Professor of Atmospheric Sciences at Texas A&M University; and Veerabhadran Ramanathan, Distinguished Professor of Atmospheric and Climate Sciences at the Scripps Institution of Oceanography, University of California, San Diego, 9/26/17, “Well below 2 °C: Mitigation strategies for avoiding dangerous to catastrophic climate changes,” Proceedings of the National Academy of Sciences of the United States of America, Vol. 114, No. 39, p. 10315-10323//recut CHS PK

We are proposing the following extension to the DAI risk categorization: warming greater than 1.5 °C as “dangerous”; warming greater than 3 °C as “catastrophic?”; and warming in excess of 5 °C as “unknown??,” with the understanding that changes of this magnitude, not experienced in the last 20+ million years, pose existential threats to a majority of the population. The question mark denotes the subjective nature of our deduction and the fact that catastrophe can strike at even lower warming levels. The justifications for the proposed extension to risk categorization are given below. From the IPCC burning embers diagram and from the language of the Paris Agreement, we infer that the DAI begins at warming greater than 1.5 °C. Our criteria for extending the risk category beyond DAI include the potential risks of climate change to the physical climate system, the ecosystem, human health, and species extinction. Let us first consider the category of catastrophic (3 to 5 °C warming). The first major concern is the issue of tipping points. Several studies (48, 49) have concluded that 3 to 5 °C global warming is likely to be the threshold for tipping points such as the collapse of the western Antarctic ice sheet, shutdown of deep water circulation in the North Atlantic, dieback of Amazon rainforests as well as boreal forests, and collapse of the West African monsoon, among others. While natural scientists refer to these as abrupt and irreversible climate changes, economists refer to them as catastrophic events (49). Warming of such magnitudes also has catastrophic human health effects. Many recent studies (50, 51) have focused on the direct influence of extreme events such as heat waves on public health by evaluating exposure to heat stress and hyperthermia. It has been estimated that the likelihood of extreme events (defined as 3-sigma events), including heat waves, has increased 10-fold in the recent decades (52). 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Climate risks can vary markedly depending on the socioeconomic status and culture of the population, and so we must take up the question of “dangerous to whom?” (54). Our discussion in this study is focused more on people and not on the ecosystem, and even with this limited scope, there are multitudes of categories of people. We will focus on the poorest 3 billion people living mostly in tropical rural areas, who are still relying on 18th-century technologies for meeting basic needs such as cooking and heating. Their contribution to CO2 pollution is roughly 5% compared with the 50% contribution by the wealthiest 1 billion (55). This bottom 3 billion population comprises mostly subsistent farmers, whose livelihood will be severely impacted, if not destroyed, with a one- to five-year megadrought, heat waves, or heavy floods; for those among the bottom 3 billion of the world’s population who are living in coastal areas, a 1- to 2-m rise in sea level (likely with a warming in excess of 3 °C) poses existential threat if they do not relocate or migrate. It has been estimated that several hundred million people would be subject to famine with warming in excess of 4 °C (54). However, there has essentially been no discussion on warming beyond 5 °C. Climate change-induced species extinction is one major concern with warming of such large magnitudes (>5 °C). The current rate of loss of species is ∼1,000-fold the historical rate, due largely to habitat destruction. At this rate, about 25% of species are in danger of extinction in the coming decades (56). 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## 1AC — Method

#### The 1AC isn’t reformism – it doesn’t conflate change with progress or validate legal institutions – it’s a tactical intervention that reduces violence while exposing the contradictions within law.

Spade 13 Dean Spade, associate professor of law @ Seattle University, “Intersectional Resistance and Law Reform” *Signs* Vol. 38, No. 4, Summer 2013

What intersectional politics demands¶ Social movements using critical intersectional tools are making demandsthat are often difficult for legal scholars to comprehend because of the ways that they throw US law and the nation-state form into crisis. Because they recognize the fact that legal equality contains and neutralizes resistance and perpetuates intersectional violence and because they identify purportedly neutral administrative systems as key vectors of that violence, critical scholars and activists are making demands that include ending immigration enforcement and abolishing policing and prisons. These demands suggest that the technologies of gendered racialization that form the nation cannot be reformed into fair and neutral systems. These systems are technologies of racialized-gendered population control that cannot operate otherwise—they are built to extinguish perceived threats and drains in order to protect and enhance the livelihood of the national population. These kinds of demands and the analysis they represent produce a different relation to law reform strategies than the national narrative about law reform suggests, and different than what is often assumed by legal scholars interested in the field of “equality law.” Because legal equality “victories” are being exposed as primarily symbolic declarations that stabilize the status quo of violence, declarations from courts or legislatures become undesirable goals. Instead, law reform, in this view, might be used as a tactic of transformation focused on interventions that materially reduce violence or maldistribution without inadvertently expanding harmful systems in the name of reform. One recent example is the campaign against gang injunctions in Oakland, California. A broad coalition—comprising organizations focused on police violence, economic justice, imprisonment, youth development, immigration, gentrification, and violence against queer and trans people—succeeded in recent years in bringing significant attention to the efforts of John Russo, Oakland’s city attorney, to introduce gang injunctions (Critical Resistance 2011). The organizations in this coalition are prioritizing anticriminalization work that might usually be cast as irrelevant or marginal to organizations focused on the single axis of women’s or LGBT equality. The campaign has a law reform target in that it seeks to prevent the enactment of certain law enforcement mechanisms that are harmful to vulnerable communities. However, it is not a legal-equality campaign. Rather than aiming to change a law or policy that explicitly excludes a category of people, it aims to expose the fact that a facially neutral policy is administered in a racially targeted manner (Davis 2011; Stop the Injunctions 2011).¶ Furthermore, the coalition frames its campaign within a larger set of demands not limited to what can be won within the current structure of American law but focused on population-level conditions of maldistribution. The demands of the coalition include stopping all gang injunctions and police violence; putting resources toward reentry support and services for people returning from prison, including fully funded and immediate access to identity documents, housing, job training, drug and alcohol treatment, and education; banning employers from asking about prior convictions on job applications; ending curfews for people on parole and probation; repealing California’s three-strikes law; reallocating funds from prison construction to education; ending all collaborations between Oakland’s government and Immigration and Customs Enforcement (ICE); providing affordable and low-income housing; making Oakland’s Planning Commission accountable regarding environmental impacts of development; ending gentrification; and increasing the accountability of Oakland’s city government while augmenting decision-making power for Oakland residents (Stop the Injunctions 2011). These demands evince an analysis of conditions facing vulnerable communities in Oakland (and beyond) that cannot be resolved solely through legal reform since they include the significant harm inflicted when administrative bodies like ICE and the Planning Commission implement violent programs under the guise of neutral rationales. These demands also demonstrate an intersectional analysis of harm and refuse logics of deservingness that have pushed many social movements to distance themselves from criminalized populations. Instead, people caught up in criminal and immigration systems are portrayed as those in need of resources and support, and the national fervor for law and order that has gripped the country for decades, emptying public coffers and expanding imprisonment, is criticized.¶ Another example of intersectional activism utilizing law reform without falling into the traps of legal equality is activism against the immigration enforcement program Secure Communities**.** Secure Communities is a federal program in which participating jurisdictions submit the fingerprints of arrestees to federal databases for an immigration check. As of October 2010, 686 jurisdictions in thirty-three states were participating.12 Diverse coalitions of activists and organizations around the United States launched organizing campaigns to push their jurisdictions to refuse to participate. Organizations focused on domestic violence, trans and queer issues, racial and economic justice, and police accountability, along with many others, have joined this effort and committed resources to stopping the devolution of criminal and immigration enforcement. Their advocacy has rejected deservingness narratives that push the conversation toward reform for “good, noncriminal” immigrants. These advocates have won significant victories, convincing certain jurisdictions to refuse to participate and increasing understanding of the intersecting violences of criminal punishment and immigration enforcement.13 This work also avoids the danger of expanding and legitimizing harmful systems that other legal reform work can present. It is focused on reducing, dismantling, and preventing the expansion of harmful systems.14¶ I offer these examples not because they are perfect—certainly a significant range of tactics and strategies are part of each of these campaigns, and, with detailed analysis, we might find instances of co-optation, deservingness divides, and other dangers of legal reform work occurring even as some are avoided and rejected. However, these examples are indicative of resistance to limitations of legal equality or rights strategies. These demands exceed what the law recognizes as viable claims. These campaigns suggest that those who argue that a politics based on intersectional analysis is too broad, idealistic, complex, or impossible—or that it eliminates effective immediate avenues for resistance—are mistaken. Critical political engagements are resisting the pitfalls of rights discourse and seeking to build broad-based resistance formations made up of constituencies that come from a variety of vulnerable subpopulations but find common cause in concerns about criminalization, immigration, poverty, colonialism, militarism, and other urgent conditions.Their targets are administrative systems and law enforcement mechanisms that are nodes of distribution for racialized-gendered harm and violence, and their tactics seek material change in the lives of vulnerable populations rather than recognition and formal inclusion. Their organizing methods mobilize directly affected communities and value horizontal structures, leadership development, mutual aid, democratic participation, and community solutions rather than top-down, elite-imposed approaches to political transformation. These analytical and practical methods owe a great deal to women-of-color feminist formations that have innovated and continue to lead inquiry and experimentation into transformative social justice theory and practice.15

#### Methodological pluralism is a necessary aspect of critique.

Bleiker ’14 [Roland, professor of international relations at the university of Queensland. “International Theory Between Reification and Self-Reflective Critique” International Studies Review, Volume 16, Issue 2. June 17, 2014]

This book is part of an increasing trend of scholarly works that have embraced poststructural critique but want to ground it in more positive political foundations, while retaining a reluctance to return to the positivist tendencies that implicitly underpin much of constructivist research. The path that Daniel Levine has carved out is innovative, sophisticated, and convincing. A superb scholarly achievement. For Levine, the key challenge in international relations (IR) scholarship is what he calls “unchecked reification”: the widespread and dangerous process of forgetting “the distinction between theoretical concepts and the real-world things they mean to describe or to which they refer” (p. 15). The dangers are real, Levine stresses, because IR deals with some of the most difficult issues, from genocides to war. Upholding one subjective position without critical scrutiny can thus have far-reaching consequences. Following Theodor Adorno—who is the key theoretical influence on this book—Levine takes a post-positive position and assumes that the world cannot be known outside of our human perceptions and the values that are inevitably intertwined with them. His ultimate goal is to overcome reification, or, to be more precise, to recognize it as an inevitable aspect of thought so that its dangerous consequences can be mitigated. Levine proceeds in three stages: First he reviews several decades of IR theories to resurrect critical moments when scholars displayed an acute awareness of the dangers of reification. He refreshingly breaks down distinctions between conventional and progressive scholarship, for he detects self-reflective and critical moments in scholars that are usually associated with straightforward positivist positions (such as E.H. Carr, Hans Morgenthau, or Graham Allison). But Levine also shows how these moments of self-reflexivity never lasted long and were driven out by the compulsion to offer systematic and scientific knowledge. The second stage of Levine's inquiry outlines why IR scholars regularly closed down critique. Here, he points to a range of factors and phenomena, from peer review processes to the speed at which academics are meant to publish. And here too, he eschews conventional wisdom, showing that work conducted in the wake of the third debate, while explicitly post-positivist and critiquing the reifying tendencies of existing IR scholarship, often lacked critical self-awareness. As a result, Levine believes that many of the respective authors failed to appreciate sufficiently that “reification is a consequence of all thinking—including itself” (p. 68). The third objective of Levine's book is also the most interesting one. Here, he outlines the path toward what he calls “sustainable critique”: a form of self-reflection that can counter the dangers of reification. Critique, for him, is not just something that is directed outwards, against particular theories or theorists. It is also inward-oriented, ongoing, and sensitive to the “limitations of thought itself” (p. 12). The challenges that such a sustainable critique faces are formidable. Two stand out: First, if the natural tendency to forget the origins and values of our concepts are as strong as Levine and other Adorno-inspired theorists believe they are, then how can we actually recognize our own reifying tendencies? Are we not all inevitably and subconsciously caught in a web of meanings from which we cannot escape? Second, if one constantly questions one's own perspective, does one not fall into a relativism that loses the ability to establish the kind of stable foundations that are necessary for political action? Adorno has, of course, been critiqued as relentlessly negative, even by his second-generation Frankfurt School successors (from Jürgen Habermas to his IR interpreters, such as Andrew Linklater and Ken Booth). The response that Levine has to these two sets of legitimate criticisms are, in my view, both convincing and useful at a practical level. He starts off with depicting reification not as a flaw that is meant to be expunged, but as an a priori condition for scholarship. The challenge then is not to let it go unchecked. Methodological pluralism lies at the heart of Levine's sustainable critique. He borrows from what Adorno calls a “constellation”: an attempt to juxtapose, rather than integrate, different perspectives. It is in this spirit that Levine advocates multiple methods to understand the same event or phenomena. He writes of the need to validate “multiple and mutually incompatible ways of seeing” (p. 63, see also pp. 101–102). In this model, a scholar oscillates back and forth between different methods and paradigms, trying to understand the event in question from multiple perspectives. No single method can ever adequately represent the event or should gain the upper hand. But each should, in a way, recognize and capture details or perspectives that the others cannot (p. 102). In practical terms, this means combining a range of methods even when—or, rather, precisely when—they are deemed incompatible. They can range from poststructual deconstruction to the tools pioneered and championed by positivist social sciences. The benefit of such a methodological polyphony is not just the opportunity to bring out nuances and new perspectives. Once the false hope of a smooth synthesis has been abandoned, the very incompatibility of the respective perspectives can then be used to identify the reifying tendencies in each of them. For Levine, this is how reification may be “checked at the source” and this is how a “critically reflexive moment might thus be rendered sustainable” (p. 103). It is in this sense that Levine's approach is not really post-foundational but, rather, an attempt to “balance foundationalisms against one another” (p. 14). There are strong parallels here with arguments advanced by assemblage thinking and complexity theory—links that could have been explored in more detail.

## 1AC — FW

### FW

#### The standard is maximizing expected wellbeing.

#### Prefer it:

#### 1] Actor specificity:

#### A] Aggregation – every policy benefits some and harms others, which also means side constraints freeze action.

#### B] No act-omission distinction – choosing to omit is an act itself – governments decide not to act which means being presented with the aff creates a choice between two actions, neither of which is an omission

#### C] No intent-foresight distinction – If we foresee a consequence, then it becomes part of our deliberation which makes it intrinsic to our action since we intend it to happen

o/w

#### 2] Lexical pre-requisite: threats to bodily security preclude the ability for moral actors to effectively act upon other moral theories since they are in a constant state of crisis that inhibits the ideal moral conditions which other theories presuppose

#### 3] Only consequentialism explains degrees of wrongness—if I break a promise to meet up for lunch, that is not as bad as breaking a promise to take a dying person to the hospital. Only the consequences of breaking the promise explain why the second one is much worse than the first. Intuitions outweigh—they’re the foundational basis for any argument and theories that contradict our intuitions are most likely false even if we can’t deductively determine why.

#### 5] Governments must aggregate because their policies benefit some and harm others so the only non-arbitrary way to prioritize is by helping the most amount of people. o/w since different agents have different ethical obligations

Mack 4 [(Peter, MBBS, FRCS(Ed), FRCS (Glasg), PhD, MBA, MHlthEcon) “Utilitarian Ethics in Healthcare.” International Journal of the Computer, the Internet, and Management Vol. 12, No.3. 2004. Department of Surgery. Singapore General Hospital.] SJDI

Medicine is a costly science, but of greater concern to the health economist is that it is also a limitless art. Every medical advance created new needs that did not exist until the means of meeting them came into existence. Physicians are reputed to have an infinite capacity to do ever more things, and perform ever more expensive interventions for their patients so long as any of their patients’ health needs remain unfulfilled. The traditional stance of the physician is that each patient is an isolated universe. When confronted with a situation in which his duty involves a competition for scarce medications or treatments, he would plead the patient’s cause by all methods, short of deceit. However, when the physician’s decision involves more than just his own patient, or has some commitment to public health, other issues have to be considered. He then has to recognise that the unbridled advocacy of the patient may not square with what the economist perceives to be the most advantageous policy to society as a whole. Medical professionals characteristically deplore scarcities. Many of them are simply not prepared to modify their intransigent principle of unwavering duty to their patients’ individual interest. However, in decisions involving multiple patients, making available more medication, labour or expenses for one patient will mean leaving less for another. The physician is then compelled by his competing loyalties to enter into a decision mode of one versus many, where the underlying constraint is one of finiteness of the commodities. Although the medical treatment may be simple and inexpensive in many instances, there are situations such as in renal dialysis, where prioritisation of treatment poses a moral dilemma because some patients will be denied the treatment and perish. Ethics and economics share areas of overlap. They both deal with how people should behave, what policies the state should pursue and what obligations citizens owe to their governments. The centrality of the human person in both normative economics and normative ethics is pertinent to this discussion. Economics is the study of human action in the marketplace whereas ethics deals with the “rightness” or “wrongness” of human action in general. Both disciplines are rooted in human reason and human nature and the two disciplines intersect at the human person and the analysis of human action. From the economist’s perspective, ethics is identified with the investigation of rationally justifiable bases for resolving conflict among persons with divergent aims and who share a common world. Because of the scarcity of resources, one’s success is another person’s failure. Therefore ethics search for rationally justifiable standards for the resolution of interpersonal conflict. While the realities of human life have given rise to the concepts of property, justice and scarcity, the management of scarcity requires the exercise of choice, since having more of some goods means having less of others. Exercising choice in turn involves comparisons, and comparisons are based on principles. As ethicists, the meaning of these principles must be sought in the moral basis that implementing them would require. For instance, if the implementation of distributive justice in healthcare is founded on the basis of welfare-based principles, as opposed to say resource-based principles, it means that the health system is motivated by the idea that what is of primary moral importance is the level of welfare of the people. This means that all distributive questions should be settled according to which distribution maximises welfare. Utilitarianism is fundamentally welfarist in its philosophy. Application of the principle to healthcare requires a prior understanding of the welfarist theory as expounded by the economist. Conceptually, welfarist theory is built on four tenets: utility maximisation, consumer sovereignty, consequentialism and welfarism. Utility maximisation embodies the behavioural proposition that individuals choose rationally, but it does not address the morality of rational choice. Consumer sovereignty is the maxim that individuals are the best judge of their own welfare. Consequentialism holds that any action or choice must be judged exclusively in terms of outcomes. Welfarism is the proposition that the “goodness” of the resource allocation be judged solely on the welfare or utility levels in that situation. Taken together these four tenets require that a policy be judged solely in terms of the resulting utilities achieved by individuals as assessed by the individuals themselves. Issues of who receives the utility, the source of the utility and any non-utility aspects of the situation are ignored.

#### 6] Human life outweighs under any fw - biological death destroys any hope of ontological improvement

**Paterson 3 –** (Craig Paterson; Department of Philosophy, Providence College; “A Life Not Worth Living?”; 2003)

Contrary to those accounts, I would argue that it is death per se that is really the objective evil for us, not because it deprives us of a prospective future of overall good judged better than the alter- native of non-being. It cannot be about harm to a former person who has ceased to exist, for no person actually suffers from the sub-sequent non-participation. Rather, **death in itself is an evil to us because it ontologically destroys the current existent subject — it is the ultimate in metaphysical lightning strikes**.80 The evil of death is truly an ontological evil borne by the person who already exists, independently of calculations about better or worse possible lives. Such an evil need not be consciously experienced in order to be an evil for the kind of being a human person is. Death is an evil because of the change in kind it brings about, a change that is destructive of the type of entity that we essentially are. Anything, whether caused naturally or caused by human intervention (intentional or unin- tentional) that drastically interferes in the process of maintaining the person in existence is an objective evil for the person. What is crucially at stake here, and is dialectically supportive of the self-evidency of the basic good of human life, is that death is a radical interference with the current life process of the kind of being that we are. In consequence, death itself can be credibly thought of as a ‘primitive evil’ for all persons, regardless of the extent to which they are currently or prospectively capable of participating in a full array of the goods of life.81 In conclusion, **concerning willed human actions, it is justifiable to state that any intentional rejection of human life itself cannot therefore be warranted since it is an expression of an ultimate disvalue for the subject**, namely, the destruction of the present person; a radical 79 ontological good that we cannot begin to weigh objectively against the travails of life in a rational manner. To deal with the sources of disvalue (pain, suffering, etc.) we should not seek to irrationally destroy the person, the very source and condition of all human possibility.82

#### 7] Extinction comes first!

Pummer 15 [Theron, Junior Research Fellow in Philosophy at St. Anne's College, University of Oxford. “Moral Agreement on Saving the World” Practical Ethics, University of Oxford. May 18, 2015] AT

There appears to be lot of disagreement in moral philosophy. Whether these many apparent disagreements are deep and irresolvable, I believe there is at least one thing it is reasonable to agree on right now, whatever general moral view we adopt: that it is very important to reduce the risk that all intelligent beings on this planet are eliminated by an enormous catastrophe, such as a nuclear war. How we might in fact try to reduce such existential risks is discussed elsewhere. My claim here is only that we – whether we’re consequentialists, deontologists, or virtue ethicists – should all agree that we should try to save the world. According to consequentialism, we should maximize the good, where this is taken to be the goodness, from an impartial perspective, of outcomes. Clearly one thing that makes an outcome good is that the people in it are doing well. There is little disagreement here. If the happiness or well-being of possible future people is just as important as that of people who already exist, and if they would have good lives, it is not hard to see how reducing existential risk is easily the most important thing in the whole world. This is for the familiar reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. There are so many possible future people that reducing existential risk is arguably the most important thing in the world, even if the well-being of these possible people were given only 0.001% as much weight as that of existing people. Even on a wholly person-affecting view – according to which there’s nothing (apart from effects on existing people) to be said in favor of creating happy people – the case for reducing existential risk is very strong. As noted in this seminal paper, this case is strengthened by the fact that there’s a good chance that many existing people will, with the aid of life-extension technology, live very long and very high quality lives. You might think what I have just argued applies to consequentialists only. There is a tendency to assume that, if an argument appeals to consequentialist considerations (the goodness of outcomes), it is irrelevant to non-consequentialists. But that is a huge mistake. Non-consequentialism is the view that there’s more that determines rightness than the goodness of consequences or outcomes; it is not the view that the latter don’t matter. Even John Rawls wrote, “All ethical doctrines worth our attention take consequences into account in judging rightness. One which did not would simply be irrational, crazy.” Minimally plausible versions of deontology and virtue ethics must be concerned in part with promoting the good, from an impartial point of view. They’d thus imply very strong reasons to reduce existential risk, at least when this doesn’t significantly involve doing harm to others or damaging one’s character. What’s even more surprising, perhaps, is that even if our own good (or that of those near and dear to us) has much greater weight than goodness from the impartial “point of view of the universe,” indeed even if the latter is entirely morally irrelevant, we may nonetheless have very strong reasons to reduce existential risk. Even egoism, the view that each agent should maximize her own good, might imply strong reasons to reduce existential risk. It will depend, among other things, on what one’s own good consists in. If well-being consisted in pleasure only, it is somewhat harder to argue that egoism would imply strong reasons to reduce existential risk – perhaps we could argue that one would maximize her expected hedonic well-being by funding life extension technology or by having herself cryogenically frozen at the time of her bodily death as well as giving money to reduce existential risk (so that there is a world for her to live in!). I am not sure, however, how strong the reasons to do this would be. But views which imply that, if I don’t care about other people, I have no or very little reason to help them are not even minimally plausible views (in addition to hedonistic egoism, I here have in mind views that imply that one has no reason to perform an act unless one actually desires to do that act). To be minimally plausible, egoism will need to be paired with a more sophisticated account of well-being. To see this, it is enough to consider, as Plato did, the possibility of a ring of invisibility – suppose that, while wearing it, Ayn could derive some pleasure by helping the poor, but instead could derive just a bit more by severely harming them. Hedonistic egoism would absurdly imply she should do the latter. To avoid this implication, egoists would need to build something like the meaningfulness of a life into well-being, in some robust way, where this would to a significant extent be a function of other-regarding concerns (see chapter 12 of this classic intro to ethics). But once these elements are included, we can (roughly, as above) argue that this sort of egoism will imply strong reasons to reduce existential risk. Add to all of this Samuel Scheffler’s recent intriguing arguments (quick podcast version available here) that most of what makes our lives go well would be undermined if there were no future generations of intelligent persons. On his view, my life would contain vastly less well-being if (say) a year after my death the world came to an end. So obviously if Scheffler were right I’d have very strong reason to reduce existential risk. We should also take into account moral uncertainty. What is it reasonable for one to do, when one is uncertain not (only) about the empirical facts, but also about the moral facts? I’ve just argued that there’s agreement among minimally plausible ethical views that we have strong reason to reduce existential risk – not only consequentialists, but also deontologists, virtue ethicists, and sophisticated egoists should agree. But even those (hedonistic egoists) who disagree should have a significant level of confidence that they are mistaken, and that one of the above views is correct. Even if they were 90% sure that their view is the correct one (and 10% sure that one of these other ones is correct), they would have pretty strong reason, from the standpoint of moral uncertainty, to reduce existential risk. Perhaps most disturbingly still, even if we are only 1% sure that the well-being of possible future people matters, it is at least arguable that, from the standpoint of moral uncertainty, reducing existential risk is the most important thing in the world. Again, this is largely for the reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. (For more on this and other related issues, see this excellent dissertation). Of course, it is uncertain whether these untold trillions would, in general, have good lives. It’s possible they’ll be miserable. It is enough for my claim that there is moral agreement in the relevant sense if, at least given certain empirical claims about what future lives would most likely be like, all minimally plausible moral views would converge on the conclusion that we should try to save the world. While there are some non-crazy views that place significantly greater moral weight on avoiding suffering than on promoting happiness, for reasons others have offered (and for independent reasons I won’t get into here unless requested to), they nonetheless seem to be fairly implausible views. And even if things did not go well for our ancestors, I am optimistic that they will overall go fantastically well for our descendants, if we allow them to. I suspect that most of us alive today – at least those of us not suffering from extreme illness or poverty – have lives that are well worth living, and that things will continue to improve. Derek Parfit, whose work has emphasized future generations as well as agreement in ethics, described our situation clearly and accurately: “We live during the hinge of history. Given the scientific and technological discoveries of the last two centuries, the world has never changed as fast. We shall soon have even greater powers to transform, not only our surroundings, but ourselves and our successors. If we act wisely in the next few centuries, humanity will survive its most dangerous and decisive period. Our descendants could, if necessary, go elsewhere, spreading through this galaxy…. Our descendants might, I believe, make the further future very good. But that good future may also depend in part on us. If our selfish recklessness ends human history, we would be acting very wrongly.” (From chapter 36 of On What Matters)