

Climate Change and Global Justice

1. Who Should Clean Up The Mess?: Consider this village:

The Village Sink: There is a village where everyone throws all of their garbage and waste into a single sink at the center of town. Some throw a lot more waste into the sink than others, but no harm comes of it, since the sink's capacity for garbage seems unlimited. But, eventually, the sink's capacity for draining all of the waste is reached, and some harmful seepage starts to occur in people's homes, swimming holes, and the water supply. The rate at which waste is put into the sink exceeds the rate at which it drains.

Originally, it seems fine for everyone to put as much garbage as they want into the sink. After all, no harm comes of it, and they leave enough drainage capacity for everyone else. But, once the sink begins to leak and overflow, and harm comes of it, it now no longer seems permissible for the biggest dumpers to dump as much as they want into it. For, now they are no longer leaving enough of the sink's capacity for others.

What should the people in this story DO? Clearly they must do SOMETHING, right? But, what is the best, or the fairest, solution?

Answering that question will help us to figure out what we, collectively, should do about climate change. For, Singer says, our atmosphere is like this sink. We are now putting more GHG's into it our carbon sink than it can handle. So, WHO should do something? And WHAT should they do? Which solution is most fair, or just?

Broadly, there are two ways of handling this sort of question:

- (1) **Historical Principles of Justice:** In order to determine whether some distribution (of goods, or rewards, or burdens, costs, etc.) is just, we need to know something about the HISTORY of the situation, e.g., how that distribution was brought about.
- (2) **End-State (or, "Time Slice") Principles of Justice:** In order to determine whether or not some distribution is just, we need ONLY look at the distribution itself. We do NOT need to know any of the historical details, or how it came about.

For instance, imagine that you are caring for 5 children and you discover that someone has tracked mud all over the entryway. You might choose one of two solutions:

- You determine which one of the 5 children made the mess and you make THEM clean it up. (historical)
- You make ALL 5 children share an equal portion of the duties and clean the mess together. (end-state)

Either of these responses might be deemed the "fair" solution, for different reasons.

2. The Polluter Pays: “You break it, you buy it.” This is a common sentiment. If something bad is YOUR fault, then YOU ought to be the one who fixes it or deals with it. This is a historical principle of justice. If we take this stance, then it is clear that the U.S. will bear the brunt of the burden to mitigate the problem of climate change.

The U.S. is the #1 contributor to climate change. In 1888, the U.S. became the world leader in annual CO₂ emissions (overtaking the UK). We held that title for 118 years, until China overtook the U.S. in 2006 as the #1 annual emitter. Yet,

- (a) Though China’s TOTAL annual emissions are now higher than those of the U.S., China’s population is more than FOUR TIMES that of the U.S. So, **our per capita emissions are essentially the highest in the world** (barely beat by Australia). They’re nearly twice that of China, and about 3 times the global average. ([source](#))
- (b) The **U.S. remains the #1 historical emitter** in the world BY FAR. All told, the U.S. is responsible for about 25% of all past CO₂ emissions—far more than China, the nation in second place at 15% – unless you count the EU as one nation, at 17%. ([source](#)) (Note also that the U.S. is only a little over 4% of the global population.)

In short, the U.S. is by far the main cause of the present problem. On a historical, Polluter Pays principle, the U.S. should therefore bear the majority of the burden of fixing that problem.

Objections

- (1) **Ignorance:** For most of that time since 1888, we did not KNOW that our excessive emissions were causing harm. Arguably, if someone is ignorant of the harm that they are causing, then they should not be held morally responsible for it.

Reply: First, but we HAVE known since at least 1990, when the Intergovernmental Panel on Climate Change (IPCC) released its first report. And it was a focus of Al Gore’s 2000 presidential platform. So, even if ignorance DID absolve one of responsibility, it has not done so for decades.

Second, it isn’t even clear that ignorance IS always a legitimate excuse. If I lived in the apartment above you, and unbeknownst to me, my excessive flushing was causing leakage into your ceiling, it seems reasonable that it would be MY responsibility to fix it AND pay you for any damages. Right? That is, even if I’m not deserving of *moral blame*, I still bear full *liability* to compensate you for the harm I’ve caused. Just imagine that I told you, “Sorry, not my problem, because I didn’t know.” Or, even worse: “Actually, I DID know for the least 6 months, but I still didn’t do anything about it.” (!)

- (2) **Tremendous Burden:** Since the U.S. makes up only 4.2% of the global population, placing 25% or more of the burden on us would be TREMENDOUSLY costly. We have based our entire economy, our entire LIVES, on a certain standard of living.

Reply: Is the idea here that, if one is causing harm to others with their actions, they're not obligated to stop causing harm if doing would be BURDENSOME—especially in cases where they have gotten USED TO living that way?

That is absurd. Imagine your toilet again, leaking waste into your neighbor's apartment. "What!? The plumber said it would cost me \$2,000 to fix it! That's too costly!" would be no excuse. Worse still, imagine a slave-owner in 1850 saying, "End slavery!?" But, would be so COSTLY to us. Our whole economy and way of life depends on it!" Ridiculous.

[Rebuttal: Perhaps it makes a difference, morally, if the vast majority of the historical emitters in the U.S. are no longer alive? In other words, we the present generation might claim: Okay, we'll clean up the mess that WE the PRESENT people have. But, we're not responsible for all of the emissions of the past 150 years. Thoughts?]

3. Per Capita Shares: Perhaps instead of looking backward, we ought to just start with a clean slate and only look forward, to the future. Here's an end-state proposal:

Per Capita Shares: Determine the maximum amount of emissions our planet can absorb, and then set this as a cap, beyond which we, as a species, should not surpass. We then allot each person an equal portion of this global emissions limit.

Objections: But there are many problems with this proposal:

(1) **Tremendously Costly to Us:** Imagine that the proposal was to put the cap at the level of our CURRENT emissions. The U.S. currently makes up 4.2% of the global population, so we would be allotted 4.2% of the total cap on emissions—and yet we are presently responsible for nearly 14% of global emissions. In short, each American would be allotted only 30% of the amount of emissions that they currently emit.

But, clearly, our CURRENT global emissions are too high, so the cap should actually be MUCH LOWER than this. Suppose that we try to reduce global emissions back to the amount the world was emitting in 1990 (about 60% of what it is emitting now). On an equal per capita emissions allotment **with a 1990-level global cap, each American would be allotted less than one-FIFTH (18.7%) of what they're presently emitting.**

And of course, by 1990 there was already a problem, so we'd actually have to set the cap even lower still. In short, this proposal would be TREMENDOUSLY costly for us.

Not to mention, whereas the U.S. would be tremendously BURDENED, someone in, say, Afghanistan would be allotted about 25 times MORE than they are currently emitting—and someone in Chad about 200 times more! They wouldn't be able to reach that emissions allotment even if they TRIED. So, to others, the equal shares proposal seems far too generous.

Reply: Again, does this MATTER? Imagine my family of four came to your pot luck dinner, which has enough food for 100 plates/100 guests. We get in line first, and take 14 plates of food. "Hey, put those back!" you complain. "Every guest should get one plate of food!" I reply, "If everybody gets one plate, we'd have to give up 10 plates! That's more than anyone else would have to give up. That's not fair, it's too costly to us!"

But hogging all of the food was wrong IN THE FIRST PLACE. Taking more than your fair share to begin with doesn't entitle you to continue taking more than your fair share.

Second, the alternative is a historical proposal—and we've already seen that the U.S. would bear the largest burden in that scenario too! It's not clear that the present proposal would be costlier than a historical one—in fact it might even be LESS costly!

- (2) **Population Growth:** The present proposal gives very little incentive to reduce greenhouse gas emissions by having fewer children. Sure, having a child decreases everyone's per capita allotment—but only by an imperceptibly tiny amount.

Furthermore, if several nations were recklessly overpopulating while some were conscientiously decreasing their populations, over time the responsible nations would STILL receive smaller and smaller per capita allotments over (due to the increasing population). This seems unfair.

Reply: We could modify the proposal to give each NATION a cap based on their present population (or their expected population in 20 years, etc.). Then, one country's population increase would not decrease the share of another country's citizens.

- (3) **Allotments Should Not Be Equal:** There might be reasons to distribute the emissions allotment unequally. Arguably, for instance, Canadians require far more resources to achieve the same standard of living as someone in, say, Italy. This is because the climate in Canada is so harsh that much of the country would be uninhabitable without constant indoor heating. So, perhaps each country should not get an EQUAL share per capita, but rather a share that would yield an equal STANDARD OF LIVING—and this share might differ from country to country (e.g., due to climate).

[Also Mentioned: (4) **Trickle Down:** Sometimes allowing some people to have a larger share than others ends up benefitting EVERYONE. For instance, imagine that doctors and fast food cashiers made the same amount. It seems beneficial to everyone to pay doctors more, since that will likely result in better medical treatment to everyone. Similarly, some claim that, because the U.S. consumes so much, we've been able to benefit the global economy, and provide everyone with beneficial technologies, cures for diseases, military aid, etc.

Reply: But, Singer objects, the U.S. is mostly just making ITSELF better off, not poor nations. First, most of what the U.S. produces could be made more efficiently and with fewer resources if they were made in other countries. Second, the U.S. consumes the majority of what it produces.]

4. Cap and Trade: In light of the problems above, Singer proposes a system called “Cap and Trade” (he calls it “emissions trading”). We take the Per Capita Proposal, and permit countries with excess emissions allotments to SELL them. Some benefits over the previous proposals:

- While this would still be demanding on the U.S. and other developed nations, it wouldn’t be AS demanding. It wouldn’t require emissions cuts quite so large, because we could purchase emissions allotments from other nations.
- It greatly improves the well-being of the worst-off, least-developed nations. For, suddenly every nation in the world would have something of immense value to “export”. Huge amounts of badly-needed wealth would flow into nations like Chad.

Objections

- (1) **Over-Emitters Get Off Too Easily:** On this proposal, the U.S. might keep emitting just as much as it is now—provided that it could purchase enough of the emissions quotas from other countries which don’t need them. While this would make energy and resources COST more in the U.S., an increase in cost seems like a mere slap on the wrist.

Reply: Singer reminds us that the purpose of the present proposal is to SAVE THE PLANET—not to punish over-consumers. And Cap & Trade is the best way to do this. *[But, those inclined toward historical principles will not agree. What do you think?]*

- (2) **Measurement Would Be Impossible:** These measurements aren’t possible in practice.

Reply: We would have to begin with very rough estimates (which we already have), while working toward more precise measurements.

- (3) **This May Promote Corruption:** In some countries, corrupt leaders may confiscate the emissions trading money coming in, so that it never benefits the people there.

Reply: First, even so, first world nations would still be motivated to decrease emissions since they would become more expensive. Second, we could set up a global committee to assess and enforce sanctions on any governments who could not demonstrate that they were using the revenue from emissions sales for the good of their nation.

- (4) **Selling an Intangible Good:** How can you SELL an emissions allotment, or a “share” of the atmosphere? To many, this proposal seems to amount to nothing more than most rich nations continuing with business as usual, but just GIVING some of their money to poor nations. Is this proposal sensible?

[What do you think? What is the best way to distribute the burden of fixing climate change?]

Traxler on the “Fair-Chore” Division

1. Preliminaries: Martino Traxler begins by pointing out that both our duty of **non-maleficence** AND our duty of **beneficence** give rise to a moral obligation to mitigate climate change.

- **Non-maleficence:** Our emissions are harmful and we have a duty to not harm others.
- **Beneficence:** Many people will be in great need, and we have a duty to help them (regardless of whether we’ve personally contributed to the problem).

Furthermore, he claims that ‘**subsistence**’ emissions are excusable, even though they are causing harm, because they are necessary (the alternative is death), and so are morally akin to harming in self-defense. Meanwhile, ‘**luxury**’ emissions are not excusable in this way. So, he concludes that we have a moral obligation to reduce our luxury emissions.

[Question: What about in-between emissions? For instance, simply driving to work? It’s neither a luxury nor a requirement for bare subsistence.

Reply: We might try to extend the exception for subsistence emissions to these in-between emissions by defining subsistence as “the preservation of one’s way of life”. Certainly, in societies that were built and designed around heavy carbon-dependence, some emissions that extend beyond bare survival are similar to subsistence emissions. For instance, consider a city where it is far too expensive for people to live right next to their workplace, such that commuting to work is necessary; now imagine that there is no good mass transit infrastructure there.

Worry: Stephen Gardiner worries that extending our understanding of subsistence in this way will be abused rich, extravagant emitters who claim they’re just “preserving their way of life”.]

2. The Prisoner’s Dilemma: Traxler then argues that the climate change problem is just a large-scale prisoner’s dilemma. Consider the following scenario:

Two Prisoners: Anne and Brett are arrested for a crime, but there isn’t enough evidence to convict either of them fully. Both detainees are offered the same deal: If they testify against the OTHER prisoner (i.e., accuse the OTHER person of the crime), they will go free, so long as the other person remains silent. The four possibilities are as follows:

	Brett remains silent	Brett betrays Anne
Anne remains silent	Anne: 2 years Brett: 2 years	Anne: 10 years Brett: Goes free
Anne betrays Brett	Anne: Goes free Brett: 10 years	Anne: 6 years Brett: 6 years

Now, Brett will either remain silent or betray Anne. Let's consider those two possibilities.

Imagine that Brett remains silent. What should Anne do? Well, if she betrays Brett, she goes free. But, if she remains silent, she gets 2 years in prison. Which is better: 0 years or 2 years in prison? Clearly, zero is better. So, **if Brett remains silent, Anne should betray him.**

Now imagine that Brett betrays Anne. What should Anne do in this case? Well, if she betrays Brett, she'll get 6 years in prison. If she remains silent, she'll get 10 years. Which is better: 6 years or 10 years in prison? Clearly, six. So, **if Brett betrays Anne, Anne should betray him.**

In short, **no matter what Brett does, it is ALWAYS in Anne's best interest to betray him.** But, the same is true of Brett. No matter what, it is always in his best interest to betray Anne. Unfortunately, then, the result will likely be that they'll BOTH betray one another, and each get 6 years in prison.

But, now add up the total sentences for each scenario. The scenario where they both betray one another has a total of 12 years in prison—that's the WORST scenario of all! What they ought to have aimed for is the scenario where they both remain silent, and the total prison time is only four years. In short, the TOTAL harm would be minimized if Anne and Brett made a deal with one another, both agreeing to remain silent. The trick is: Once they're separated into their interrogation rooms, how can either of them be sure that their partner isn't in the other room betraying them! How can either guarantee that the other will hold up their end of the deal?

3. The Tragedy of the Commons: As it turns out, the climate change problem is a "tragedy of the commons" scenario—which is, in turn, just a large-scale version of the prisoner's dilemma.

Consider: The atmosphere is a "commons"—that is, a common good that we all have access to. Solving the problem (the best scenario) will require global cooperation between nations. However, without any international oversight to ENFORCE any agreement that the nations make, every nation will have an incentive to defect from that agreement—that is, it will be in each nation's self-interest to take on NONE of the burden, and just let everyone else fix the problem instead. In short, any plan of action faces a defection problem.

(This is true for all tragedy of the commons scenarios—e.g., it is in a voter's self-interest to not vote; a fisher's self-interest to over-fish; a Brazilian farmer's self-interest to slash and burn more acres of rain forest; a Californian's self-interest to water their lawn during a drought; etc.)

Don't believe it? Consider the three major international climate agreements since 1990:

- 2015, **The Paris Agreement:** President Trump defected in 2017
- 1997, **The Kyoto Protocol:** President Bush, jr. defected in 2001
- 1992, **The United Nations Framework Convention on Climate Change (UNFCCC):** No formal withdrawal, but we defected with our ACTIONS (we failed to hold up our end of the agreement to not increase emissions, by increasing them by 14% instead).

Traxler writes,

The typical fate of a commons is a “tragedy” in which each individual’s rational choice to defect brings about a collective setback in the exhaustion or destruction of the public good from which all or many previously could benefit. ... Climate change presents a commons precisely because ... it is in each person’s or nation’s interest to let others bear the burden or costs of preserving this global good. ... [I]t is in its interest not to contribute or do its share, regardless of what other countries do. ... This problem of commons is exacerbated by the awareness that there is no overseeing authority ... In short, in the absence of the appropriate international coercive muscle, defection, however unjust it may be, is just too tempting. ... Short-term national interests and the interests of national leaders have tempered the dictates of long-term prudence or morality.

If we’re being realistic, Traxler says, we’ll admit that the U.S. and other major culprits (such as the EU) will never agree to a historical principle. If we tell the polluters that THEY must take on all of the burden, and there is no international oversight, those nations will simply defect.

So, Traxler concludes, we ought to look for a suitable “fair” (i.e., end-state) principle rather than a “just” (i.e., historical) principle of justice—something that nations like the U.S. will agree to.

*(Note that this is a **pragmatic** objection to historical principles, rather than a **moral** one.)*

4. Fair Chore-Division: Note that ‘Per Capita Emissions’ is an end-state principle, and it claims to be fair to everyone because of its egalitarianism (i.e., it treats all people equally). Traxler proposes instead that we distribute the BURDEN to all people equally.

Simply put, **we have a chore to do**—namely, clean up the world’s emissions. The fairest proposal, without looking backward and trying to point fingers or lay blame, is that everyone take on exactly the same amount of burden to help with the chore.

Specifically, Traxler proposes that we start by giving up whatever is LEAST COSTLY to us (in terms of **well-being** rather than money, etc.). What could we give up that costs us zero well-being? As Henry Shue writes,

“Even in an emergency one pawns the jewelry before selling the blankets. ... Whatever justice may positively require, it does not permit that poor nations be told to sell their blankets in order that the rich nations keep their jewelry.”

In other words, the the least costly thing to give up is LUXURIES. For instance, imagine that you’re trying to decide between purchasing a luxury SUV for \$75,000, or a really nice fuel-efficient hybrid car for \$30,000. You could buy the cheaper, more fuel-efficient vehicle in order to reap essentially the exact same benefits. Plus you save a lot of money – it’s win-win! (Even better: Donate the \$45,000 saved to an offsetting program.)

After “sacrificing” costless emissions (i.e., emissions cuts that do not lower well-being at all), each nation will then sacrifice very low-cost emissions; and then relatively low-cost emissions; and so on, until the problem is solved. (The last to go—or rather the NEVER to go—would be emissions cuts that are the most costly to well-being, namely subsistence emissions.)

On this proposal, ALL nations would be expected to make exactly the same sorts of cuts (e.g., inefficient emissions that could be cut without a reduction in well-being would be cut REGARDLESS of what nation they occurred in). For this reason, Traxler believes developed nations are less likely to defect.

Objections

First, those who prefer historical principles will not like this proposal. Asking someone to help clean up someone else’s mess EVEN A LITTLE seems unfair. [*What do you think?*]

Second, Traxler thinks that developed nations like the U.S. would be likely to defect on this proposal. Why in the heck would that be? On this proposal, the U.S. would STILL be making by far the largest sacrifice (simply in virtue of the fact that our citizens enjoy more luxuries, on average, than most of the rest of the planet).

The REASON for why the U.S. will take on the largest burden may differ from, e.g., the Polluter Pays proposal, but the end result is nearly the same. Traxler thinks his proposal will put “maximum moral pressure” on developed nations, such that they will not defect. But, is it realistic to think that “moral pressure” will be a successful motivator of the U.S. government? [*What do you think?*] (Furthermore, Gardiner adds, if we DON’T explicitly say we’re holding developed nations accountable, then the UN-developed nations will likely defect!) In short, Traxler’s very reason for preferring his proposal (preventing defection) doesn’t seem true.

[Side note: Traxler brings up another historical proposal that we did not previously discuss:

The Beneficiary Pays: Each nation pays the cost in proportion to how much they’ve benefitted from harmful emissions.

Objection: This proposal does not punish inefficiency. For instance, consider the U.S. (25% of historical emissions) and the E.U. (22%). Imagine we discovered that the E.U. has derived TWICE as much BENEFIT from these emissions as the U.S. The Beneficiary Pays principle entails that the EU must pay MORE than the U.S. even though they have emitted less. And why? Because they used their 22% more efficiently than the U.S.! Thus, this proposal might punish efficiency.

Furthermore, depending on how we interpret this claim, it seems like nations living at near-subsistence would be required to make huge payments too. After all, isn’t the benefit derived from survival itself the greatest benefit of all?]