Flying, the absolute worst thing that you can do environmentally

It's true. Environmentally, flying is the absolute worst thing that you can do.

What is interesting is that air travel only accounts for about 2%, maybe 2.5%, of total greenhouse gas emissions globally (source). As such, it contributes far less to the climate crisis than something like automobile use or eating beef. Other things that you may not think about at all contribute as much or more to the crisis. For example, 2% of all greenhouse gases come from the manufacture of aluminum; 5% from making cement.

So why is air travel so bad if it is currently such a small percentage of the problem globally?

Like many things related to the climate crisis, it is useful to approach this personally. We often ignore or avoid this approach, as it can make us more than a little uncomfortable, as it requires us to look at what we are doing rather than the actions of some corporation or politician, but doing so is important – in fact, it's essential.

It's hard to imagine a way for one person to contribute to the climate crisis more quickly than by flying. If you take a round-trip flight from LA to Paris, which would have you in the air for a little under 24 hours, you will have caused three tons of carbon dioxide to be directly emitted into the upper atmosphere. Incidentally, if you fly first class, you will have contributed twice that amount, six tons.

The next time that you wish you were flying first class, remember this: it's literally twice is bad for the planet. And, of course, for all you aspiring Kardashians, taking a personal jet is off the chart when it comes to inflicting as much harm to the planet as quickly as possible. There really should be some sort of award for this kind of unconscionable behavior. Perhaps we could call it the "Worst Planetary Citizen" award.

Instead, we see it as glamorous.

In any event, in addition to CO2, other gases emitted by your plane, such as mono-nitrogen oxides (that's a mouthful!), increase your short-term climate impact by as much as two or three times more (source).

So, if air travel is so bad – which it absolutely is – how is it that it accounts for only 2% of global greenhouse gas emissions?

The problem is that traveling by air is a practice exclusive to the wealthiest, most privileged people on the planet. In fact, flying is in some sense THE iconic display of privilege. For over seventy years now, we have referred to the world's most privileged people as the "jet set."

Conversely, 19 out of 20 people on the planet have never set foot in an airplane. Even among Americans, half do not fly annually. Frequent, rather than occasional, flyers are obviously the biggest problem. By some estimates, 80% of flights are made by just one percent of all people on the planet.

Although the term "jet set" has obviously lost its cachet over the decades, now that all sorts of people can fly coach, it is nonetheless a global elite that is still doing all this flying and contributing to the climate crisis in this way.

You may not think of yourself as a global elite or as a member of the "jet set," but if you fly, you are. Put nineteen random people from across the globe in a room with you, and, just by virtue of the fact that you just occasionally fly, you may well be the only jet setter in the room.

If you are a frequent flyer, put a hundred random people in a room and you will be contributing more to the climate crisis in this way than anyone else in the room. You may not think of yourself as a member of "the one percent" (i.e. the world's wealthiest and most privileged people), but you would be among the the one percent doing the lion's share of all this flying.

In which case, air travel could be doubling or tripling your personal climate footprint.

Let's a pause on that for a moment: Even though you may be trying to reduce your carbon footprint in a variety of ways (such as by eating a largely plant-based diet, not owning a car, buying less stuff, etc.), if you fly, this activity could easily singlehandedly nullify all the gains from the rest of your otherwise environmentally conscientious lifestyle.

Let's get specific here. In order to meet the goals of the Paris accord, which was established at COP 21, everyone on the planet should emit on average no more than two metric tons of CO_2 per year. In a single 24-hour period, that flight from LA to Paris thus expends your entire CO_2 allocation for a year and a half. Three years if you fly first class. Factor in the other greenhouse gases emitted and it is two or three times worse even than that.

If only 5% of the world's population is responsible for air travel, what would happen if the rest of the world began to follow our dubious example? In fact, this is what is now happening. For example, air travel in China recently increased by 50% in just five years (source).

So, what's to be done?

Three things come to mind. One with respect to business travel, another recreational travel, and a third applies to both.

First, the one that applies to both business and recreational travel is simple enough, though not necessarily easy to enact: Fly less. Instead of multiple business trips or vacations, consolidate as much as possible. For example, instead of two short vacations that require flying every year, why not have one grand one every five years – thus reducing your flights by a factor of ten?

Flying less does not just mean consolidating trips, but breaking them into parts as well. For example, as travel by train is one of the most efficient ways of getting around (and hence has a relatively tiny climate footprint), as opposed to air travel which is arguably the most environmentally problematic, traveling overland by train and across oceans could make sense.

Let's say that I wanted to fly from my home in Santa Barbara, which is near Los Angeles, to London. First, I could take a bus or train to LA. While there are nonstop flights from London to LA, many in fact have connections in New York City. Instead of doing these two legs by plane, the first could be by train and the second by airplane, thereby cutting the airmiles almost in half. Having traveled across the country by train, I can tell you that it was a wonderful experience that years later I still look back on fondly.

Regarding business travel in particular, a big part of the solution may be telepresencing of one sort or another. I know, when may people think of telepresencing we imagine the transporter from Star Trek.

Telepresencing is indeed being transported across great distances by way of some form of technology.

But the fact is that practical telepresencing is already here – and has been for over a century. Radio technology allowed our voices, at least, to be present at far off places. Not long after, television also allowed live images to be transmitted at a distance. Telephones, first wired though now largely radio, allowed us to conduct realtime, interactive conversations around the world. And, of course, the Internet and cellular networks made practical and affordable technologies like Skype and FaceTime that allow two or more people to see, hear, and interact with each other in realtime.

This technology has now advanced to the point that well over a billion people on the planet now literally carry highly advanced versions of it in our back pockets, as smartphones allow us to conduct conversations with high-definition video that rival broadcast standards.

What does all this have to do with the climate crisis?

It is simple enough: we expend an enormous amount of energy transporting our bodies around, often in environmentally disastrous ways like automobiles and airplanes, when just seeing and hearing each other would do. This is not to say that such telepresencing is the same as a face-to-face encounter: however, when we consider is that the climate footprint of such encounters can be 100 times smaller than the face-to-face meeting, the trade-off is, as far as I am concerned, well worth it for the sake of the planet and our future.

Moreover, social media has challenged us to reconsider how meaningful human interaction occurs. Many people find the relationships that they make and maintain online to be nearly as valuable as their face-to-face ones.

Regarding recreational air travel, let's say that you make a commitment to stop (or dramatically reduce) flying, starting today. How, then, do you travel, in the sense of visiting new places and experiencing new things there without flying?

You could just throw up your hands in frustration and say "Screw it, I guess I just won't travel then"! Unfortunately, when they hear about the environmental problems of air travel, many

people may well assume that this what the future holds. Is it, then, any wonder that they want to hold onto the present (and their boarding passes)?

Alternately, you could accept the challenge of the future and start imagining possibilities, in some cases really appealing possibilities.

With respect to recreational air travel, an interesting alternative is the emerging slow travel movement.

Slow travel? Yep, it's a thing.

For example, let's assume I wanted to take a vacation from my home in Santa Barbara to San Francisco, which is about 300 miles away. I could fly there, which would take just over an hour and which would be unpleasant and an environmental disaster.

This is not, however, my only option. I could, for example, take the train up, which would add about 9 hours to my travel time. Even setting aside the environmental advantages of such a trip, I imagine that it would be pretty nice way to spend a day, just sitting back and enjoying a large chunk of the California coast.

Of course, I would also have other options. One of the most radical would be if I traveled up on my pedalec bike (which is an electric assisted bike that I still pedal), riding four or five hours a day and spending the rest of the time exploring the local areas and staying at Airbnb's. Such a trip would take around 3 days. And then 3 days back.

Now, some people will scuff (maybe even laugh) at the very idea of traveling in such a way.

However, the nascent "slow travel" movement argues for trips of just this kind (as well as mass-transit options like trains). Like slow fashion, and before it slow food, this movement challenges the cultural status quo. Indeed, it seeks to upend it.

Spending hours preparing a meal, starting with buying the ingredients at a local farmers market to slowly preparing all its dishes (let alone if we grow the food ourselves), can seem absolutely absurd when compared to a fast-food restaurant, where you can buy a meal and eat it in under 10 minutes.

Similarly, spending hours of your spare time knitting a hat or sewing a shirt may seems ludicrous when you can buy one from a fast fashion outlet for less than $10.

Nonetheless, in the past few decades slow food has become a real cultural force. Slow fashion may not be far behind.

Decades ago, the architects of the slow food movement, frustrated with the present, imagined a bold new future. It took quite a while, but, at least where I live (California), the future has arrived, and for many people it definitely includes healthy portions of slow food. One of the reasons that the slow food movement succeeded was that it had much to recommend it.

The same can be said of the slow travel movement. At the risk of rolling out a cliché, life really is about the journey, not the destination. This truism is completely lost on the fast travel industry, where the journey is reduced to a few altogether uncomfortable hours packed into, and jostling around in, a loud airplane.

Let's return to my imagined trip up the coast on an electric bike. Frankly, making this trip with my wife and young daughter sounds like it could be a pretty magical experience that would stay with us for years. I can't think of no better way than to experience the California coast. Of course, it would not be all about the destination of San Francisco. Indeed, San Francisco would just become part of the journey.

Yes, the transition to slow travel would impact the air travel industry, but whole new possibilities would open up, such as better mass transit and bicycle infrastructure (both of which are sorely needed). Whole towns that are not traditional "destinations," will nonetheless be able to play a role in a new slow travel industry.

In any event, I am curious to hear what you think. Is it time to write air travel out of our lives, or at least greatly reduce it? If so, how do we begin?

Flying less? Telepresencing? Slow travel? Other ideas?