Do we need a climate vanguard? (Food, today and tomorrow)

Are you an architect of the future, part of what I like to call the "climate vanguard"?

As I have argued throughout this series, the climate crisis is going to necessitate sweeping cultural changes if we are to mitigate it successfully. To quote Greta Thunberg: "<u>Either we do</u> <u>that or we don't</u>." If we don't, this planet will become unwelcoming, perhaps largely uninhabitable, for our species. Consequently, there are, as far as I am concerned, no two ways about it, we need to make these changes.

The question is do you want to be part of the group rushing out ahead of everyone else in boldly forging a new future? In other words, do you not only want to voluntarily take part in this extraordinary reinvention of our culture, but do you want to take the lead?

Allow me to flesh this out a little, beginning with a sobering thought:

Many – probably most – people will likely not make the necessary personal changes to adequately combat climate crisis until required to do so. Although unfortunate – and more than a little depressing – this is the sad reality of the situation.

What can we do about this?

First, we need to elect politicians that will implement programs pricing carbon, such as a "carbon tax," which would directly tax fossil fuel suppliers, thereby resulting in higher costs on all products and services that one way or another require the emission of greenhouse gases. Over time, such a tax would increase.

Pricing carbon would mean, for example, that the cost of air travel would increase and continue to increase over time. (Incidentally, as I note in another episode, air travel produces tons of greenhouse gas emissions – literally a ton or more of GHG emissions for just one passenger for a long flight!) Thus, air travel would become more and more expensive as the price of carbon emissions increased over time. Consequently, people would, on the whole, be traveling less and less as a result of carbon pricing. Eventually, if the cost became prohibitively high, most people would largely stop flying.

Since air travel is an environmental and climate disaster, this would be a very good thing indeed.

We all should, consequently, support legislation pricing carbon to get the ball rolling on this. But can we do more – and do it directly, right now?

The answer is, of course, "yes." We can, staying with this example, make a personal decision to stop flying now – today, in fact. Sadly, it will likely be years before the rest of America catches up with us. Nonetheless, we would be charting the future for the rest of the country. Indeed, charting it for the entire developed world that shares our love of air travel.

In that sense, although it may sound like an odd way to think about it, we would be living in the future, working out what the future will be like.

Let's stay with our example of air travel in order to explore this idea before moving to our primary topic today, which is food.

If you decided to stop flying today, you would then be confronted with all of the challenges that come with that decision. Let's be honest, it would likely impact you both professionally and personally.

For example, when I decided to stop flying a few years ago, I was immediately confronted with the challenge of how to attend academic conferences and present papers, which are an integral part of my profession. As I have noted elsewhere, the academic truism "'[p]ublish or perish' has a less famous corollary: present or perish. At many institutions, conference and lecture presentations are tallied up alongside publications at tenure and other merit reviews."

Unfortunately – and astonishingly – this means that many professors double or even triple (in some cases far more) their individual carbon footprints by flying to academic conferences.

What, then, was I to do? Since I was no longer able to attend national and international conferences, I started thinking about how such conferences could work if we took air travel out of the equation. Since computer programing is a hobby of mine, I started working out an online conference that addressed some of the shortcomings of conventional virtual conferences, which often use some sort of Zoom-like technology to coordinate real time events. In the intervening years, we have coordinated half a dozen of these nearly carbon-neutral (NCN) conferences at UC Santa Barbara.

Now, let me be very clear here – and this is in no way false modesty on my part – I doubt very much that the conference model that I proposed will become any sort of standard in the future.

My point is simply that I found myself strangely confronted with the future. In other words, I was confronted with challenge of a travel-free conference, which the rest of academia may not face until years from now.

Let's put this in a more general way. We all are going to need to significantly alter our day-today lives in order to mitigate the climate crisis. Sooner or later, this absolutely needs to happen. Unfortunately, for many Americans it will be later rather than sooner, as they will not likely make these changes until they are, to be blunt, forced to do so.

The good thing about this situation (I always look for silver lining wherever I can!) is that it gives us time to prepare for this transition. Returning to my example of the academic conference, this means that we have a number of years to experiment with options and come up with a viable alternative to the conventional, fly-in conference. Unfortunately, we are not there yet, but if enough people take this job seriously and work hard enough at it, I am confident that online

conferences of some sort will supplant our aging and environmentally disastrous conference model. If all goes well, we can transition into new conference models as we transition off flying.

This is just one example, as many, many of our day-to-day practices need to change: where we live, how we get around, what we wear, what we eat, the stuff that we own, and so forth.

What is needed is a bold group of people to take on the formidable job of being architects of the future. I know, that sounds pretty intimidating. However, it can be pretty simple. As author Jonathan Safran Foer recently noted, it can begin at the breakfast table

Which brings (finally!) us to our topic today: food. As I noted in a previous lecture, the #1 thing that we as a species can do to roll back global greenhouse gas is to waste far less good and to switch to largely plant-rich diets.

This is easier said than done, as the way that we eat is at once, somewhat paradoxically, deeply personal and almost always a shared experience.

Of course, we all like to choose for ourselves what we eat, but this choice is deeply influenced by the culture into which we are born. When reflecting on what makes a people a people, we often consider things like the language that everyone speaks and the laws that everyone follows, but scores of little things unite a people, such as the food that we eat.

These shared practices are often little things that we often take for granted, but can become present themselves as big issues if transgressed. For example, if a child were to tell her parents that she was going to adopt a new way of eating, perhaps by switching to a largely plant-based diet, she would risk disturbing and perhaps even offending them, as her actions could be seen as an affront to her cultural heritage.

There is often a great irony here.

I grew up in the Philadelphia area, which has a large Italian-American population. Consequently, from a very young age, I was exposed to this cuisine, which very often contained beef, from spaghetti with meatballs to cheesesteaks to pepperoni and sausage pizza. However, this is not at all what the traditional Italian (aka Mediterranean) diet is like, as it usually involves very little beef – indeed, not much meat of any kind – but rather is based on vegetables, fruit, beans, nuts, grains, and oil.

When a range of cuisines were imported in the US, they were reinvented to include large portions of meat, usually beef, which was often considered a sign of affluence. It's true, eating a meat-rich diet was yet another way of announcing that you had, financially, arrived.

In one sense, there is no one American diet. As we are a country of immigrants, every day across America people sit-down to meals that in one way or another often resemble the cuisines of the county from which they hail.

However, in another sense, although varying widely, these are all distinctly American diets if they contain ample servings of meat and animal products – which in all likelihood were far less common in the original cuisine a few generations ago. Hence, when the US. beef industry announced its "Beef. It's What's for Dinner" ad campaign in 1992, it could do so confident of the fact that all sorts of Americans from all sorts of places were sitting down to eat beef at many, if not most, meals.

Returning to the example of the child seen by her parents as offending their cultural heritage by eschewing meat, the irony is that she may well be reclaiming a heritage that had been corrupted by American consumerism in the 20th century. A second irony is that this is strange thing for a loving parent to object to, as traditional, largely plant-based diets are often far healthier than the beef-rich American diet

But turning from past to future, what will the diet of the future be like? Let me rephrase that, what will the diets of the future be like, as a range of cultural traditions will no doubt inform how we eat in the future?

Well, it seems clear that, if we are to successfully avert climate catastrophe, these diets will involve largely replacing vegetable protein for meat.

But exactly how will this be worked out? With vegetable protein processed and fashioned to look like meat, such as hamburgers? Or with, for example, legumes unprocessed, such as in a traditional lentil curry? Or perhaps in some new way altogether?

I don't have an answer here, as these "diets of the future" are in the process of being worked out now.

And this does not just involve reducing animal products in our diets. As I have noted in elsewhere, in terms of mitigating the climate crisis, reducing food waste would be every bit as important (in fact, a tad more important) then switching to largely plant-based diets.

Aside from simply throwing food away, this also means that we should rethink what we eat. For example, when we think of vegetables like beats, we are often just thinking about the root (and are consequently just eating the root), even though the greens are tasty and very nutritious. Similarly, while most people discard the rind, pickled watermelon rind has long been a delicacy in the Southern US.

When people think about what they can do to help mitigate climate crisis, things like the production of electricity from solar energy often comes to mind. However, it is clear that working out how best to eat is also profoundly important. And make no mistake, there is still much to be worked out.

The good news is that, while making solar panels more practical and efficient will require a broad range of technical expertise, anyone can begin working out the future of food in their own kitchen, today.

Which returns us to my opening question: Are you an architect of the future? Do you want to be?

There are all sorts of ways that you can take up this challenge, including by making photovoltaic panels more efficient. However, for most people, there is a simpler way, as we can take a long hard look at our personal practices, beginning with what we have to eat today.

This is not to say, however, that this will not be challenging.

Although it may seem that this is simply a matter of going vegetarian or vegan, the situation is more complicated than that.

For example, studies have shown that "<u>diets that only included animal products for one meal per</u> <u>day were less GHG-intensive than lacto-ovo vegetarian diets</u>." So, while becoming a vegetarian is certainly a move in the right direction when compared to the average American diet, it is not necessarily the best solution.

Similarly, it is not as simple as just becoming a vegan. For example, eating asparagus in the Winter in most of North America is often no better for the climate than eating chicken or pork. Why? Because it is generally flown in from South America – and air travel has a huge climate footprint.

This is why Denmark is planning, as part of his effort to become a carbon neutral country, to put "climate" labels on food in the same way that we have nutritional labels. In this case, such a label would tell you just how good or bad the food is – not for your body – but for the planet.

Food is such an interesting example because an individual really can take the bull by the horns and address the climate crisis at, as Jonathan Safran Foer noted, the breakfast table.

Again, this is not to say that this is easy or that our decisions are clear, but rather that we can begin working out this important climate issue right now – and quite a bit really does need to be worked out, as simply shifting to a largely plant-based diet does not, for example, address the equally large problem of food waste.

Unfortunately, not every issue can be worked out primarily by individuals.

For example, if we want to write cars out of our lives, we can make a commitment to use mass transportation, biking, and walking. However, we can't easily and effectively do this alone, as we need politicians (from local to national) that will similarly make a commitment to mass transportation and bike infrastructure. Otherwise, taking the bus could be an unnecessarily long and unpleasant experience, and riding a bike downright dangerous if we are forced to share busy roads with automobiles.

Consequently, in future sections we will taking up the importance of becoming politically active.

This is to to say that we cannot personally and immediate eschew car use, but simply to make clear that we need elected officials that support this choice rather than car use, which is unfortunately, but generally, what they support today.

In many respects, this course is aimed at the climate vanguard. Early adopters; early rejecters. People who do not need to be dragged, kicking and denying, into a sustainable future, but rather want to leave the present behind, as it is clearly in so many ways unjust to all the beings on this planet, from animals, to other people, to generations yet unborn.

In this sense, this course is aimed at people who are so profoundly distressed with the present that they just can't wait for the future. Consequently they are pushing forward into it now, not only by imagining what the future can be, but, as paradoxical as it sounds, living it now.

So, here is my question: do we in fact need a climate vanguard to begin working out what life in the future will be like? Or should we simply wait for the rest of the world to come around to the fact that we need to make sweeping cultural changes in response to the climate crisis?