

Welcome to Turning Conscience Into Action, the Earth Charter podcast. Join Mirian Vilela, Earth Charter International Executive Director, in her fascinating conversations with great thinkers, scholars and activists from around the world who are working in the fields of sustainability, ethics, education and social transformation. Our purpose is to generate new insights on how to face current global challenges and inspire informed action.

Today we have the opportunity to have a conversation with Professor Donald Brown, who has written extensively on the ethical dilemmas of climate change.

Professor Brown is a scholar in Residence for Sustainability, Ethics, and Law at the Ribbner University Commonwealth Law School in Pennsylvania. Thank you Donald for accepting to join us today. Thank you for inviting me. And let me start by highlighting that in 2019 you received the UNESCO Abyssinia Prize for your extraordinary work on the ethics of the environment. Congratulations for that well-deserved recognition. Oh, thank you. It's really a good distinction for well-deserved work. You have done so much in that field.

And I have had the pleasure of interacting and reading about your work. And I thought it would be very nice if you could start by sharing with us some of your reflections and comments on the ethical dilemmas of climate change. What is that? Okay, well, climate change, more than any other environmental problems, has features that scream for attention to, for it to be understood and responded to in policy as, as after considering ethics. And those features include it's some countries that, more than others, that have been raising the atmospheric concentration of greenhouse gases.

But it's other countries who are hurt the most by, by raised greenhouse gases. The next thing is that the harms to the vulnerable people are not mere inconveniences, they're catastrophic, loss of death, destruction of ecological systems. And so it, climate change, more than any other environmental problems, demand that governments see and respond to the climate change as an ethical matter. And there's actually about 15 to 20 different policy issues that all governments face that raise ethical questions.

So actually, there's no hope for the world of stopping the scourge of climate change unless governments respond to their ethical responsibilities. One other reflection is that the, the world agreed the Rio Earth Summit to the 1992 climate treaty. And that treaty has a whole host of ethical legal rules that countries are ignoring. So for instance, right in the climate treaty is the precautionary principle. Yet for 30 years, opponents of climate change has made scientific uncertainty, proudly, their number one argument against doing anything.

It also has in the treaty the no harm principle, which means that governments have the ethical duty to consider what they're doing to other countries. And I've discovered up, even to this day, countries are ignoring the no harm principle, they're basing their, and their, their national targets on, on economic interests. So as, although climate change has to be seen, governments have to respond to specific ethical issues that arise in policymaking. They, they are not doing it. And I did a research project with Putele from New Zealand in 24 countries.

This is happening. The governments don't are not responding to even ethical issues that they agreed to. And what's even more troubling is the environmental community doesn't seem to spot the ethical issues that are being ignored by the government. So you, so you just shared with us two very specific points, no, the principle of no harm and the precautionary principle. Both are articulated in the 92 climate change treaty. But they're both in the treaty and they're being ignored. When they are being ignored.

Why do you think they're being ignored? Because they, they don't understand. It's not, they're not aware. Is it because it's difficult? Well, I believe sociologists have a lot to help us understand why this is happening. The sociologists claim that what is debated in public is often framed by the powerful who oppose action. So for 35 years in the United States, the debate, the public debate is been about scientific uncertainty and too much cost to the US economy. And so what the sociologists predicted what happened and has happened is that proponents of policies simply respond to the facts of scientific uncertainty or cost.

So the proponents will say, well, scientific uncertainty sign, this is not a problem because 97% of the scientists agree with the IPCC. So they make a factual argument to an issue that scientific uncertainty is scientists don't know that this, that who should have the burden of proof and what quantity of proof should satisfy the burden of proof is not a value neutral scientific issue. It's an ethical issue at its core. And if ethicists believe, but most scientists and engineers don't know that if you're doing something very dangerous and if by waiting it makes the problem worse, having proof before you act is not ethically the right thing to do.

You need to follow a precautionary approach. So the whole world, including the United States in 1992, put right in the treaty. They understood the climate change was that kind of problem that the longer you waited to act, the worse it would get, the higher the atmosphere concentrations would be. And so they put right in the treaty the precautionary principle. But none of the technical people that are called on as experts seem to have known that that's the case. Now, it is true that the science is really, really strong on climate change.

And so you can respond to that. The scientists respond by simply saying it's strong, which it is. It's much stronger than most people understand. Just tell you one story. I represented the United States at the United Nations in the Clinton administration. Actually, you attended the many of the United Nations summits as part of the U.S. delegations, right? Yeah, I was the U.S. EPA liaison to the United Nations in the Clinton administration. So I was a negotiator on some climate issues. And I was assigned the responsibility by the State Department to negotiate agreement among all 190 countries at the five-year review of the Earth Summit, whether all countries would agree that the warming that had been predicted for 30 years was human cause, not natural variability.

And by the end of that negotiation, every country in the world agreed, including Saudi Arabia. That's how strong the scientific evidence is. So it is true that the claim that there's too much scientific uncertainty is an excuse for not doing anything is not right because we already agreed, the whole world agreed to the precautionary principle. But it's also true that the science is very, very, very strong. But the problem has been the fossil fuel

companies all around the world have created a disinformation campaign, which is a subject talking about on its own terms.

So a lot of people don't know that how strong the science is. But what's even more troubling to me, they don't know the whole world agreed to the precautionary principle. It's not discussed to this day. It's a principle that is already negotiated and agreed upon, the precautionary principle. It's an Article 3 of the 1992 treaty. The precautionary principle has already been agreed to as sort of an ethical normative principle that should guide nations. It's right in the treaty. However, it seems that it's a very difficult principle for businesses and governments to deal with in practical terms.

Now, it's when humans are facing really dangerous, if science can say this is very dangerous, even if there's some uncertainty, ethicists agree the fact that there may be some uncertainty left, that's not an excuse for doing something if by waiting you make it worse. The climate change is one of those problems that the international community agreed that scientific uncertainty should not be an excuse because by delaying you make it much worse. Now the science is much stronger than it was in 1992 when the precautionary principle was in there.

But what's so amazing to me is no one, even the academic communities never talk about the precautionary principle. And I gave a lecture to about 70 world-class scientists in Bangkok and I explained to them that if there are uncertainties about something that's really dangerous, waiting to resolve the uncertainties is ethically wrong, that the burden of proof should shift to the opponents of action actually, which is a whole nother discussion. So there's a consensus that this is the kind of problem that if there was some remaining uncertainty, waiting is not a legal excuse.

It's also in the 1992 treaty which has been ignored, what's called the no harm principle. The no harm principle, all countries agreed that they have a duty when they adopt their policy to consider what harm they're doing to other countries. It's right in the treaty, but it's not being discussed. And the no harm treaty has been interpreted by the courts to mean legally your duty to not harm other people doesn't start when all the uncertainty goes away. It starts when you're put on notice that what you're doing is dangerous.

So even under the no harm principle, the courts have said the precautionary principle applies. So what's so amazing to me is despite everything I told you, this is not part of the conversation. So what is at the core of the conversation on climate change? Well, the core I believe, which also sociologists predicted, is because these are technical issues, science and economics. People bring in academic from science and economics who don't know anything about the ethics. Okay. There's a failure in higher education to educate scientists and engineers that there are some problems that the ethics requires you to act once it's been established that it's very dangerous.

And that's just not part. My first degree was in engineering science, and I was never taught that. And I continue to run into scientists, world class scientists that don't know that you don't have to have scientific certainty to create a duty to act. Now, that's a very important point you're raising. So it's really about, it has also to do with the education of the scientific

community. It is. It is. It's a problem with the scientific community. And also the policy makers around the ethical dilemmas of climate change.

Yeah, it's also becomes a problem about how the press is reporting this. Okay. So because there is this large, well-funded disinformation campaign, the press is making scientific uncertainty is implicitly communicating to citizens that scientific uncertainty is something that you really, really should stop action. So the press isn't reporting on the fact that the whole world agreed on the precautionary principle. They have probably forgotten that. Yeah. Well, the, I believe that there's a group of people that predicted that this all goes back to the power of those who oppose policy to frame the public debate.

There are sociologists, which started with sociologist Max Weber that predicted that public debates would be framed by those who oppose it. And I have seen that I'm still startled how few scientists in the country, and this is also true of economics. Okay. So, cost to a country is not an excuse for this problem, the no harm principle, and other principles that we've already agreed to. If a country is violating someone's human rights under international human rights law, the fact it's going to cost you a lot to stop behavior that is violating human rights under international human rights law is not an excuse.

But still it's not part of the discussion. And so what has happened is those who oppose climate change in the United States, this has been particularly true of the fossil fuel industry. The fossil fuel industry has been funding disinformation about climate change. And as we're speaking... In confusion, no? It generates a lot of confusion. Yeah. I believe another conversation that people should...that believe we need ethical rules at the global scale should have is what do we do about misinformation about important global environmental problems?

I wrote an article on my blog, and by the way, sociologists have completely documented who funded the disinformation campaign, what they did with the money, they hired public relations firms to undermine people's confidence in the science. They held fake conferences where they brought climate skeptics who never published in the peer reviewed literature. So there's been a large, well-funded 15 to 20 year effort to undermine the public's confidence in the science. And the more I thought about it, I thought, oh my God, this is some kind of new kind of crime against humanity.

And it's manipulation of information now in the era of social media becomes even worse. You're absolutely right about that. Because of social media, those opposing climate change can get all of this on social media. So there's a large campaign to undermine...one of the contracts, and by the way, the people that ran the climate change disinformation campaign were the same public relations firms, the tobacco companies hired in the 50s and 60s to get people to think that smoking wasn't a interest. So an important global ethical issue is what rules should apply to disinformation, which is something I now see after working on this for 30 years, is really should be really important on our agenda.

The Attorney General in a number of states are suing some of the fossil fuel companies for doing what they're doing, but we need to raise this...we need to have a global conversation about this problem, I think. Of information, misinformation and manipulation of information. Yes, yes. And it's making the world very polarized because you read from

the surface and have a very shallow information about everything and generates your fees, our... It's very ugly. I agree completely. It's very ugly. It's also very well funded and the fossil fuel companies...and I've written about the tactics of the disinformation campaign.

Every speech and getting people to express their opinions should be encouraged, but if you're making false claims, okay, it's really, really ugly what the fossil fuel companies have done, I believe. And of course, the other things that they're doing is funding politicians. The United States, unfortunately, has been corrupted by money in a big way. It's much worse now than 20 years ago in the 1960s when we were...so the power of money to spread misinformation is a huge ethical problem. And there's no clear legal remedy.

I just want to tell you one thing that I've written a lot about this and I've relied upon there are 20 sociologists that have written and documented in detail who did this, what they did, what their tactics were. So it's all documented in peer-reviewed literature. I wrote on my blog ethicsandclimate.org what they were saying. And one of their tactics, there's an organization called Climate Depot, which was funded by Exxon in part. What they do, they cyber-bullied anybody that gets international attention.

So I list eight or nine tactics that they use, all of which are deplorable. But one of them is cyber-bullying. So I was at Penn State at the time. I go back into my office and I get a call from a professor in Kennedy, says, Professor Brown, you have been targeted by Climate Depot. This is what's going to happen to you. You're going to get hundreds and hundreds of really nasty emails in the next two weeks. Don't worry, it will go away. But there's an organization that is organizing this. No longer quicker, I put my phone down and hundreds of really ugly emails came in.

One of them was, if you have any children, get them off the streets because we're going to kill them, kill your children. And so this is this really ethically despicable behavior that the cyber-bullying is up to. Now, what's so disturbing is that a couple of the prominent people that have been engaged in the disinformation campaign are now part of Donald Trump's cabinet. So an under-focused, I think, ethical issue for the world is what to do with dangerous disinformation. But that's only one of many ethical problems that climate change raises.

Yeah. Well, let's talk about the two books that I think are relevant to this conversation. You first published a book called *American Heat, Ethical Problems with the U.S. Response to Global Warming*. Can you share with us the gist of it or make a comment about the key ideas and highlights of this book? Well, by sheer luck, I happened to have education and law, ethics, and science and engineering, and I was an environmental lawyer. I started to notice how bad the U.S. was since the big, since I was at the 1992 Earth Summit when George H. W. Bush signed the Climate Change Treaty and all the other things that were signed at the Earth Summit, but how bad the United States was on ethics.

So I decided, and I was also writing in the environmental ethics as a discipline didn't even start until the mid-1980s, but it was focused mainly on ethics was anthropocentric and the ethicists thought you simply solved the problem by putting non-anthropocentric values, and my experience continued to say, well, that's a problem, but that's not the big problem.

The big problem is get ethics talked about at all that even in the 80s, science and economics was the language in which environmental policy was discussed.

So let me see if I understood well, you were mentioning that when the whole field of environmental ethics started, it was very anthropocentric. Does that mean that the concern was really focused on caring for the environment because it's important for human beings? Is it with that kind of lens of what is important to humans? Yeah, the people that were prominent in environmental ethics, when it started as a serious academic discipline in the early 1980s, was they diagnosed the problem that every policy claim already has an ethical premise.

So ethics is already there, although most people don't know that. So every claim that you should do something has an implicit ethical and ethical norm, which is often hidden. But the beginning of academic environmental ethics, they assumed that the problem was that we use human-based ethical considerations and ignored nature and the duty to protect nature. So for the first 10 years, almost all the literature was how to replace anthropocentric ethics with a biocentric ethics. And none of the literature dealt with applying ethics to policy.

Now why I noticed this is because I was inside the government while this was going on. I was actually on the editorial board of the first serious journal was called Environmental Ethics. And all the articles were about replacing anthropocentric ideas about ethics with biocentric ethics. And I kept saying that's not the problem. That is a problem, but that's not the major problem. The major problem is that the language of science and economics, because the arguments being made against policy were scientific and economic claims by those who opposed environmental policy was at the focus of the political debate.

So I thought it is in fact the case that the United States, which sort of began the modern environmental movement, by the time climate change came around in 1992 with the Bush administration, the United States was more of an obstructionist than a leader on global environmental problems. And more and more I saw that the public debate about global environmental problems was missing all the ethical considerations, including some that the United States already agreed on, should guide their policy. Right in the 1992 treaty, George H.W. Bush agreed to the precautionary principle.

Right in the treaty, the United States agreed to the no harm principle, which means governments have a duty to not only consider their own interests, but how they're hurting other people. And none of that was part of the discussion within the United States. And so I wrote, it is unfortunately the case that the United States has been, along with a couple of other countries, the major obstructionists to progress on some of the global environmental problems. So in that first book, you would expand on that, right?

Yes, and it's, if anything, it's gotten worse. In 2013, you published Climate Change Ethics, navigating the perfect moral storm, which I believe is a book that has influenced many, certainly provides an influential analysis of why ethical principles have been neglected over the years, and how to include them in climate change conversation. Can you give us an overview or share with us some key ideas in this book? Okay, well, the second book,

between I wrote the first book and the second book, other books on global environmental ethics came out.

And I continue to think that the major problem for the world is to get ethical principles part of the public debate. And it wasn't simply getting the ethics right again, although that was important, that the important problem is to help citizens see, if you don't understand the ethical issues raised by climate change, you can't effectively evaluate your country's response, nor can you respond to the arguments made by opponents of climate change. So let me give you a couple of examples. The sociologists were right.

The reason why the debate is so narrow is because the people with all the money are framing the public debate in a way that excludes consideration of ethical issues. So the other main argument and still is the case that the United States shouldn't do anything because it will cost us too much. It will cost the natural gas industry, the coal industry. And to this moment, this is the central issue that is preventing the United States from acting more rigorously. President Trump continues to say that the Paris agreement is unfair to the United States because of the imposed costs.

But they're not saying that not addressing climate change might raise the bill to even higher to what they might be costly. Well, first of all, we already agreed, but most Americans don't know, that we agreed we have duties to not hurt other people with our greenhouse gas emissions. And most Americans don't know that greenhouse gases go up and mix and raise global atmosphere concentrations. And so our greenhouse gases are responsible for the enormous human suffering that we're already seeing around the world that was predicted.

We are the leader in which raises another important ethical question that no one talks about, but you need to understand to critically evaluate what your country is doing. The 1992 treaty, all countries agreed to reduce terminations at levels based upon equity or fairness. And Americans have tried to make economic costs to this country a consideration of fairness, that's not a legitimate consideration for what equity requires. I was on the IPCC chapter, what does equity mean? And there is agreement about, although people disagree on what equity requires, there is agreement that cost to you is not a consideration for equity.

Not only that, but the no harm principle, the duty to not harm other people, you can't, it's not a legal excuse that it's going to cost you too much to take seriously your responsibility to not harm other people. So here you have an argument being made which fails to pass both equitable or legal scrutiny, the politicians are not being forced to respond to that fact. So President Trump continues to make lies about climate change or arguments which are contradicted by ethical principles that the whole world already agreed to.

So rather than making progress on ethics, I think reintroducing ethics, the conversation is now more important than ever because the world is literally running out of time to prevent the nonlinear tipping points in the climate system from tipping. So if there, even right this moment in history, there is even a more of a reason to get people to understand why the excuses being used by those that want to do anything, pass neither ethical or legal scrutiny. So when you talk about the principle of no harm or precautionary principle, is it envisioned

only at the national level, at the level of government, or can it also be envisioned at the level of private sector or any institution to internalize that as part of their *modus operandi*?

The no harm principle has written clear that all up. It says that governments have a duty to prevent activities within their jurisdiction from hurting other countries or other people outside. It's very express. Now all of this has very important practical significance for how you set your greenhouse gas target. As this is going on, economists are saying only cost and benefits to you should be the criteria of whether a environmental regulation is acceptable. They're unaware of the fact there's already legal rules based upon ethical principles.

The countries have a duty in setting their policy at levels to prevent harms to other countries and other people. For reasons which you may understand, I am amazed, staggered, that the fact that we agreed to the no harm principle and the precautionary principle is still not part of the US national debate. The courts have also, there have been litigation on which could mean that the US is responsible for all the climate damages around the world. Although most lawyers think that's probably not going to happen, not because they're not ethically and legally responsible, but because the international legal system hasn't developed a set of rules of how you allocate the responsibilities among all the pollutants.

So there's still a practical problem. But the developing countries and negotiations are demanding that the developed countries who are most responsible create a fund for losses and damages. So this is a hot topic. Sorry about that. Development countries are saying you've got to help us with our adaptation costs and our losses and damages. And by the way, the US has been the country that has been resisting doing that. So yeah. Okay. Any other thoughts on your book, *Climate Change Ethics*? No, in that book, there is a list of suggestions about how do we get traction for ethics.

I think if everything I said is true, we all should be thinking about practically how do we get traction for ethics. And I would like to continue your work with the Earth Charter Project and UNESCO is really interested in trying to figure out how do we get traction for these ethical issues. What's the kind of moral leadership in ethics that you have been talking and writing about that is so much needed to address climate change? Yeah, it's a very, very important question. And it's not the kind of moral leadership.

It's the understanding of the need to get people to understand that certain specific policy issues and raise ethical issues. I've been asked to write and I think you've actually agreed to write a chapter in a book on applied climate ethics. So every, when you do policy, there are about 20 issues in climate policy that raise ethical issues that should be considered. And part of the problem with academic environmental ethics, it's not been focused in on when do these ethical issues arise in policy.

They've been abstract ethical conversations. So part of the getting traction is to help people to see that when you set a greenhouse gas target, for instance, there will be three issues that arise that raise clear ethical questions. Let me tell you what they are. When you set a target, you're already taking a position whether you like it or not, on how much harm you think it's okay to do to other people. It's implicit in what you're doing. If you're setting a

target that you're taking a position on how much greenhouse gases for the world is okay and what your contribution to that is, your target setting is also a position whether you like it or not on what equity requires of you in setting your target.

Because there's something called a carbon budget, the total number of tons that are left for the whole world to achieve any warming limit goal. So whether you like it or not, you're taking a position on equity. Now the Paris Agreement requires countries to be transparent about all this, but they're not. So part of the, in the case of climate change, is to make sure the governments are transparent on what decisions they are making on these ethics and justice issue. As I said, the target is implicitly whether the country likes it or not on how much warming, how much harm it's okay to impose on the rest of the world.

We should make countries describe that, but they're not. The mechanism is already there in something called a transparency mechanism. So part of the solution is to force governments to say explicitly what position they're taking on these questions which are ethical, ethical core. So the other thing I think, again, it's not only the United States, it's other countries are actually setting their climate strategy based upon how much it will harm their national industry. And all around the world where you have petroleum industries are strong.

The government's position is in almost all cases weak. And so this is a, we need to help citizens understand that everyone gets hurt if countries base their climate strategy on their economic interests of their petroleum industry. So I think other people will have some ideas about how to get traction for ethics. Yeah. Let's move on to our last question. We are coming to almost the end of our podcast today here. You were part of the initial work of drafting the first charter. You have probably seen that during the 92 process, but then during the first first charter workshop that was held in May 95 in Peace Palace in the Hague, you also part of that.

So what do you think is the uniqueness or the current value or the current relevance of the Earth Charter as a document? And especially how do you think their shatakin addresses climate change? Well the goal of your charter is incredibly important. There are some human problems that you need global solutions to. And the global solutions will require the governments to abide by ethical principles that they agree to. That is going to even get more important as technology increases. So to have an Earth Charter, to have a set of shared ethical principles is going to become, it's already urgent, but it's going to become more urgent in the future.

I think, of course, the original goal of the Earth Charter was to make it into a soft law norm. But I think the problem, you know more than I do, that some countries would object to making, to giving it legal status. So I'm not so sure what to do about that. I see the principles and the goals of the Earth Charter to be very solid in terms of what ethics requires. The way progress is made, I think, in human history on this is to get, help people understand who's opposing, what's actually going on, who's opposing it, and for what reasons.

So I think as the Earth Charter project continues, you might consider who's objecting to applying these principles. The principles I don't think are that controversial as a matter of

ethics. That's why you could get all countries around the world to agree to it. But part of the problem is we have to make government work for the common good. And we've got to prevent those with economic power from preventing governments from working for the common good. And it's a particularly obvious problem in the United States.

I am surprised to learn how eloquent some of the US founding fathers were about this problem. Jefferson and Adams said, everybody should be, citizens need to be trained on both science, but also ethics. Because the powerful were going to try to manipulate governments for their own interests. And certainly ethics has been removed from the education system in all levels, I would say. That itself is indefensible. The US, the universities are part of the problem. And a philosopher who I really liked about how to resolve ethical conflicts is Habermas.

I mentioned him. He said that the way to solve ethical problems is through discourse, which is fair. But the public gets to see who's taking what positions. And that's the best hope that I have. As a US politician said the other day, we have to let the world know what's going on. And we have to let the world, who's causing the injustice and on what basis the injustice is caused. This guy, John Lewis, the American civil rights worker who died, he was eloquent on this. And I've been influenced by Hannah Arendt, I don't know if you know who she is or not.

She was a teacher of mine at the new school. And she said that we have a duty, as a citizen, we have a duty, if we can, to stop the injustice in the world. And I think she was right. So we have to encourage and sociologists say the way to make that happen is to get more people to see the injustice and who's causing it. Yeah, you mentioned a lot these two principles that are very important to address climate change. No harm and precautionary principles. They are both articulated in their charter in principle six, which I think clearly links many of the ideas on climate change.

But I wanted us to talk a little bit about the whole notion of responsibility, because you were talking about the notion of duties. And in the climate change discussion, it's very important the principle of common but differentiated responsibility. And in their charter, this is articulated partly in the preamble, the whole notion of highlighting the notion of universal responsibility. But also in principle 2B, when it articulates the importance for us to understand that with increased freedom, knowledge and power comes increased responsibility to promote the common good, which is something that you were referring to.

Can you speak a little bit to that, to this whole notion of responsibility, universal and differentiated, with more power increases our level of responsibility?

Yeah, it seems to me obvious that if those governments or entities that have great power, because they have more power, they have more responsibility. And I believe we, like Hannah Arendt said, if we see injustice, and if there's anything we can do to prevent suffering and injustice, we have a moral responsibility to try to stop it.

And so that seems to me we need to let the citizens know that we have the power to stop it.

And the citizens of the world know what's going on, who's stopping it. And a lot of the ethical principles have already been agreed to, but at the global scale as technology advances, this is going to be even more important.

Because another person, I went to this wonderful place to do my philosophy work called the New School for Social Research, and Hannah Arendt was there. And another wonderful philosopher was Hans Jonas, you probably don't know him, but he is the inventor of the precautionary principle.

And yeah, well, he wrote a book and he claimed in the 1970s, 60s or 70s, that being clear on the precautionary principle, he claimed was the, I thought it was an exaggeration. It was the most important ethical problem facing the world. He said it was the most important ethical. And he said the reason for it was because technology could now create great good and great harm.

And then he said, the people that have economic interest in this new technology that could create harm will demand that you don't stop it until you prove the harm.

And I'm seeing in the climate debate how wise he was. You are probably not aware of this, but it looks like the suite of models the IPCCU has used even up to the last one, which is called AR5, the Fifth Assessment, still didn't have the positive feedback loops, the tipping points in them. And why that is the case is, gets is such an interesting and troubling question because the scientists thought that they can't make any claims until they prove a cause and effect. Most scientists don't know that science is set up to prevent what is called a type one statistical error, a premature claim of cause and effect.

Which is the right ethical norm. A lot of people don't know that sciences are guided by what are called epistemic norms that determine when you can publish a cause or claim or not. And they're all set up to prevent a false positive, a premature conclusion that you've established cause and effect. But Hans Jonas said, science has a role in helping people see danger. And that's the wrong epistemic norm.

That a precautionary norm should be applied in science when it's trying to describe harms when for practical reasons, you can't resolve all the uncertainties. So I'm involved with a whole bunch of people around the world. Why did IPCC ignore the methane permafrost feedback, which up until the last assessment is still not in the suite of models?

And they didn't quantify some of the most worrisome things because they couldn't establish a risk assessment which was, which could be verified empirically on what was going on. So now I see how wise Hans Jonas was about the importance of the precautionary principle. And I discovered that most scientists don't even know that it exists. And they don't know that it's already been agreed to in the climate treaty. Yeah. So. Donald, would you share with us one last comment on this notion of difficult choices and tensions between important values?

In the last part of the shot of the way forward, there is a sentence that talks about the tensions between important values and the difficult choices that these may represent. And it brings to our attention that we must find ways to harmonize diversity with unity, the

exercise of freedom with common good, short-term objectives with long-term goals. I think a lot of this has to do also with this lens of looking at the dilemmas of addressing climate change. Can you share with us some of your own reflections on this?

Yeah.

It's really, if you go down this road, you're going to have people with there's going to be some conflict in terms of what ethics requires. And that's always been the case. But the best hope for human race is that you force, you get people to agree that they will expose the basis for their ethical or normative claim. They will make it, they will describe on what basis they are making the claim. And that you solve some differences of opinion. Many of them can be resolved by very insightful discussion. So I have a friend whose PhD was how did we make progress on human rights when initially there was big global differences about human rights that over 20 years we've made progress. And he made, his PhD thesis explains how the progress was made.

And now a lot of people would run away from this because you don't solve these differences by doing hypothesis testing. But you do make progress by showing every religion in the world, every culture agreed that we all have duties to treat other people with respect and to not do harm to them based upon our own interests. So at least in my experience, a lot of these conflicts go away when you when you point out that there's a deeper ethical principle that it's already been agreed to.

And so yeah, we should expect conflict as you resolve these ethical questions. But I believe that there's hope because the ethical principles that we that resolve a lot of this that have already been agreed to such as I shouldn't be able to use my economic cost to violate your human rights.

I teach international human rights law and I'm amazed how all of the world's governments who are not tied to what other courts are doing are agreeing without any legal duty to do this, how governments should treat prisoners, for instance.

So the solution to these conflicts is to create discourses which have certain rules of respect. And that's where I think the hope is. Yeah. Well, thank you so much, Donald. It has been really incredibly interesting to hear you, to talk with you. We're certainly living or facing a civilization crisis and many challenges. And certainly climate change is one of them, but it also involves ethical and moral problems around that. So I invite all who are all the audience that are is hearing us today to follow your website and blog on ethics and climate change. And hopefully to have the opportunity to read your books and your articles. Thank you so much.

I really privilege and value working with your charter project and anything I can do to have you, you can tell I have the passion to try to make it work. So thank you. Yes. Thank you. If you like this episode, please share it and support our movement by making a donation. This podcast is developed by Earth Charter International. As part of our work, as UNESCO chair on education for sustainable development with the Earth Charter.

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