Episode 10 Fire and Wire transcript: Climate and human rights

In this episode of *Fire and Wire*, Vice-Chancellor, Professor Irene Tracey speaks with Oxford experts on the University's interdisciplinary approach to climate research:

- Professor Helen Johnson presents the Oxford Climate Research Network, which fosters collaboration across departments to tackle both climate mitigation and adaptation.
- Dr Roberta Wilkinson highlights a recent global summit co-hosted by Oxford and the UN, focusing on climate and human rights, and amplifying voices from vulnerable communities.
- Professor Lavanya Rajamani explains the growing role of human rights law in climate litigation, referencing a ground-breaking legal case led by Swiss elderly women.

The discussion emphasises the need for interdisciplinary solutions and Oxford's proactive stance in shaping global climate responses.

Transcript

Please note that this transcript has been slightly edited in places to make it easier to read. We've removed some of the natural quirks of spoken language, while keeping the original meaning intact.

Professor Irene Tracey

Welcome everybody to this edition of Fire and Wire. I am thrilled to be joined by three of our fabulous colleagues from around the University.

I have Professor Lavanya Rajamani from the Law Faculty, Professor Helen Johnson, who is in the Department of Earth Sciences, and I have Dr Roberta Wilkinson, who is in Atmospheric Physics but works with Helen for the Oxford Climate Research Network. Today's podcast is all about climate.

Coming into my role as Vice-Chancellor at this University, it has become very clear to me that we have got extraordinary depth and breadth across our divisions. Whether that's in our physics, whether that's in our policy, whether that's in our legal thinking, whether that's in our humanities – and just our historical understanding of that.

So, we've been thinking about how we can benefit the world in terms of coming up with solutions around climate and thinking about how we can draw that extraordinary strength together.

So, I'm going to turn, first of all to Helen, who I mentioned was in the Department of Earth Sciences, and she's been leading this extraordinary group of people, the Oxford Climate Research Network. I think it would just be great to start, Helen, by telling people a little bit

about what the network is, why you formed it and just bring to life a little bit about how you see that network going forward.

Professor Helen Johnson

Absolutely. So, the Oxford Climate Research Network (OCRN), is a network for anybody at the University of Oxford who has a research interest in climate. So that's people from PhD students right up through to senior professors and emeritus faculty.

And it's there to connect us all internally, provide a coordinated window for external and internal audiences who are interested in climate at Oxford, and to help us identify and take advantage of interdisciplinary opportunities. So, after the success of the PAD website launch…

Professor Irene Tracey

I should just say that this is from our Public Affairs Directorate. They've produced a climate media package to share some of that knowledge – and think about how we can showcase what we're doing.

Professor Helen Johnson

Absolutely. And that's done a really nice job of showcasing what we're doing right now. And, since then, OCRN have been trying to think about what's next.

We think about this in terms of addressing the challenge of climate change, which you really think of as two challenges. So, one is, of course, ending climate warming, but the other is responding to the warming that's already going on. You know, addressing the impacts, both of the climate changes already underway, and what's going to happen between now and when we solve the problem.

So, on the ending of climate warming, we're thinking about mitigation. How can we just put less carbon dioxide in the atmosphere? We've got people across the University thinking about innovative technological solutions around renewable energies, thinking about the governance of the transition to a lower carbon economy, thinking about the critical metals we're going to need, thinking about the kind of accounting in terms of policies, holding other institutions and businesses to account on the kind of adaptation side, if you like.

We've got people thinking about the impacts and that's where our members in health come in. Are people thinking about the health impacts and the impacts on children specifically?

We have a large group of scientists who are working on improving climate models, understanding the fundamentals, Earth observation, making sure that we've got that underpinning knowledge which we're going to need – it makes the predictions to which we are going to respond to.

The information we're going to adapt to, has to be as reliable as we can make it. In order to provide the regional information, we need to really take steps on the adaptation side. We need smaller scale information, reliable information, on shorter-time horizons.

Professor Irene Tracey

I hadn't really thought about that, but it's a blindingly obvious thing that one needs to do if you're going to adapt locally.

Professor Helen Johnson

And the models are less good at that for now. And so, there's a lot of action around, for example, understanding aerosols, effect of clouds, convection over Africa, which isn't very well represented in global climate models, but in regional scale models.

We can do much better at understanding things like shifts in the southern hemisphere jet stream and thinking about impacts for the Global South.

And it's been really important to think about the people angle. So, what's the narrative we're going to need going forward to encourage everyone – from institutions and corporations, right down to individuals – to take the necessary action? That's got to be a human-driven endeavour.

Professor Irene Tracey

It really is. We'll come back to hear a bit about your research, but should we now go to Roberta?

Roberta, you've been, amongst many things, helping hugely on this recent summit that we held here in Oxford, which was a resounding success. But we'd love for you just to describe a little bit from your perspective, how the summit went and why we did it – and what were some of the highlights for you?

Dr Roberta Wilkinson

Absolutely. Thanks for the opportunity to talk about it. We co-hosted this global climate summit on climate change and human rights in partnership with UN Human Rights, the International Universities Climate Alliance, the Right Here, Right Now Climate Alliance, and ten universities from around the world – plus one university consortium.

So, it was a real global effort looking at the human dimensions of the problem of climate change and its threat to people's rights. You know, the right to life, to property, to social security, to health, food, housing etc. But also, we need to construct our solutions, ensuring that we don't create human rights problems *with* the solutions.

An easy example is to think about mining for the green transition. The sorts of minerals that we are going to require in order to facilitate the green transition and making sure that people's rights aren't affected.

And we wanted to do this in a global way, because to have meaningful engagement on these issues, we need to be listening to the communities that are impacted the most.

Professor Irene Tracey

Absolutely.

Dr Roberta Wilkinson

The people who are the most affected by climate change, are not the ones that have caused it. And so, it is our responsibility to bring the microphone to the world.

So, motivated by that, and also motivated by wanting to do a global summit without the huge environmental impact of lots of people flying to Oxford, we made this into a global event. And we co-created it.

I can't thank our partners enough. It started here in Oxford, and we kicked it off with the launch event with yourself in the Sheldonian Theatre. And then we handed over to Fiji, and we heard from the University of the South Pacific – and that was a fantastic demonstration of why we needed to hear from all these other partners.

We heard from the Pacific Island Students Fighting Climate Change Campaign. Now, they have brought the issue of climate change and human rights to the International Court of Justice for an advisory opinion. And that is a group of students campaigning and saying, we are going to lose our islands, we are going to lose our lands. We must do something about this.

So, we went to them, and then we went all around the world over those 24 hours. We had contributions throughout too – from UN human rights and from IUCA, the International Universities Climate Alliance. We had contributions from young people, from indigenous communities and people in business, trade union representatives and many researchers.

Professor Irene Tracey

I do encourage people to sort of – I mean, 24 hours is a long time, none of us has 24 hours – so dip in and out to get a little taster. One of the things that we've discussed before in preparation for this was the lack of voices. At some of the big climate meetings – like COP – it isn't there at the forefront.

Dr Roberta Wilkinson

One of the big key takeaways for me was that the worst impacts fall on the most disadvantaged in society already, and that was emphasised across those conversations. Inequities are only exacerbated by climate change and by our kind of current global systems.

Research institutions have an extremely important role, and an obligation and a duty, really, to support human rights responses to climate change – through the production of scientific research, social sciences research and that those things can help to hold the big polluters to account. These were some of the big things that came out of this summit.

Professor Irene Tracey

Big things! You've flagged the centrepiece of human rights. Lavanya, you're a professor of law, and you've worked in this space of law and climate, which is the lens for the summit.

Roberta has just described very much from the United Nations human rights angle. Is that the right lens? Is that the only lens? And what else are you doing in this area of law and climate?

Professor Lavanya Rajamani

So human rights is *not* the only lens, but it is a really critical lens in this area. And what's intriguing is that this is a lens that wasn't actually brought to bear on the climate change problematic until fairly late in the game.

UN climate negotiations started in the late 1980s, but it is only in the last decade and a half that actually UN human rights, and all these sorts of human rights: special rapporteurs, institutions, have started pressing the international negotiations to integrate human rights considerations into their work.

The Paris Agreement does contain a preamble or recital that references human rights, but it's not in the operational provisions of the treaty. It's not an obligation in and of itself, but it is a lens through which you actually approach the climate change problematic.

First, putting people and planet at the centre of the discourse is critical because we are looking at impacts on human beings. People are losing their homes, people are losing ancestral burial grounds, which are close to the shore. They're losing their entire nations.

Professor Irene Tracey

It's existential, kind of, from the activists' perspective.

Professor Lavanya Rajamani

Absolutely. It's a civilisational challenge. It's a challenge for an entire civilisation, right? So, it's surprising that it wasn't at the forefront of the negotiations right at the beginning. But we are sort of plugging that gap – in the last decade and a half that gap has been plugged.

So, what does it mean when we bring a human rights lens to this problem? It means that we can have some accountability for the harms that have been created, because human rights institutions are at multiple levels. So, we have human rights institutions at the domestic level. There are legislations and institutions that support delivery of the goals and the action plans within those legislations.

Across countries, we have institutions, including courts at the regional levels, including the European Court of Human Rights, that produced a landmark case last year in response to petitions by a group of Swiss elderly women. And then we have the international level. We have human rights institutions and fora, including the Human Rights Committee.

Professor Irene Tracey

You've left us hanging on the Swiss elderly women. I think I have to go back to that and find out, what is that about?

Professor Lavanya Rajamani

So, it was a case brought by a group of really dynamic, forward thinking Swiss women who took the case to the national courts first. They went through every sort of level in the national courts, lost, lost, lost – and then eventually took it to the European Court of Human Rights to say that climate change was impacting them as an especially affected group – but in addition, the Swiss government was just not doing enough on climate change.

And the European Court of Human Rights agreed with them that Switzerland was not doing enough on climate change. There were also lots of interesting arguments raised by the claimants about what each country's fair share should be in addressing the problem.

One of the challenges with litigation on human rights, and in relation to is a state doing enough on climate change, is that when a claimant goes to court and says: '*Well, you know, my government is not doing enough on climate change*', the court's going to say: '*Well, how do we know what's enough in the context of a global collective action problem?*' Right. It's about what every country is doing.

This issue – which has not been addressed, and in fact was deliberately sidestepped in the multilateral negotiations – the burden-sharing question, is actually being raised in courts. Part of what the human rights intersection with climate change movement and focus is doing, is filling some of the gaps in the Paris Agreement and the international regime.

The international regime, ultimately as a result of a consensus-based process, and international law fundamentally is about consent of states. Human rights-based litigation, like this case and like several other cases, are actually challenging that and saying, '*Well, no, it doesn't matter whether the international community or the international process is telling a state to do X, Y or Z – we need to do our fair share*'.

Professor Irene Tracey

I mean, are there examples that we can look to, that can give us some hope that we can do this across the divide of geographies and politics in terms of laws and regulation, that make everybody have to do their bit?

Professor Lavanya Rajamani

There are examples across international environmental law, for instance, in the Montreal Protocol, which addresses the ozone layer.

Professor Irene Tracey

That's true.

Professor Lavanya Rajamani

There are examples of success. You know, there's a very successful instrument, but it was not as polycentric or 'super wicked a problem' as climate change. It didn't fundamentally challenge our lifestyles.

It was a much simpler problem; there was a technology fix. There was funding and we fixed it. There are some technology fixes, but the risks and uncertainties and the scale issues on the technology fixes with climate change are just enormous.

Professor Irene Tracey

Roberta, back to you then, just for a little bit more on what we did last week. It would be great to give the listeners a taste of some of the other events and the celebratory side. Because I do like to be hopeful about our ability to step up and meet the challenge.

Dr Roberta Wilkinson

I think what we saw last week in the Global Plenary was, as Lavanya has been speaking about, the importance of global climate litigation. And I find that to be really a source of hope and a coming together of research, data, activism and law.

We also did loads of local events. The COP30 presidency in Brazil is trying to encourage people to build momentum around climate action all around the world and across all sectors of society.

We were very proud that this summit could be part of the COP30 presidency's global 'Mutirão', which is a word that means coming together to work on a shared task and support one another.

We have to recognise the activism there is in Oxford amongst students and amongst the local community. People across the University and local environmental groups put on events.

We had the people from the Global Centre for Health Care and Urbanisation do a panel on deliberative democracy. They've been working on citizens' juries and how to democratise decision-making around climate policy.

We had the Young Lives Hub on Environmental and Climate Shocks from the Department for International Development. And then we had a series of other events. We had a Late Night at the Museum, which was, a kind of celebration of climate justice. There were many local activist groups there. We had songs, performances, authors…

Professor Irene Tracey

And whilst you were at the museum, I was – with Helen and Lavanya – listening to Ellie Goulding who did the concert. She's very supportive of the UN's efforts, and we were just thrilled to have her come and perform.

And Essence Martins did the warmup. She was great too. Wasn't she fabulous! And then we had some dramatic readings – and it was a great celebratory way to end the week. It really was knockout.

I'd like to just finish by hearing what the research is that you're doing now. Helen why don't you tell us a little bit about your current work and what you're doing at the moment and what's exciting you?

Professor Helen Johnson

I'm a physical oceanographer. My main focus and love has always been the overturning circulation in the Atlantic and its links to the Arctic Ocean. And so, I have various research projects around that. Thinking about how that circulation works – very much the nuts and bolts – because you have to understand it if you want to be able to predict it and get it right in climate models.

Professor Irene Tracey

And things are obviously changing a lot. I mean, has it been more than you would have anticipated? You look back ten years to where you were sort of modelling and seeing, mixing and changing temperatures?

Professor Helen Johnson

Yes, in terms of the changes we're seeing in the Earth system. In the ocean, it's challenging because the timescales are longer. And so, it's still quite hard to distinguish in some parts of the ocean between natural variability, which occurs because on decadal timescales it can be quite large in amplitude.

And the forced climate change signal. That's why we want to understand ocean circulation – so we know how it varies naturally, and we can really split that apart from the signal of anthropogenic change.

Professor Irene Tracey

Yes. What's normal? And then you know whether it's gone wrong. So that's the challenge isn't it, when it's such a complex system.

Lavanya, what is it that you're working on at the minute?

Professor Lavanya Rajamani

There are two strands to my research. One strand focuses on the international climate change regime. I'm looking at how the Paris Agreement is evolving – especially in response to the science – and how decisions are being reached at the Conferences of the Parties. Within that, I'm also examining the broader tapestry of international obligations to understand, ultimately, what the rights and obligations of states are in relation to climate harms.

And the other strand of my research, which complements that, is essentially to look at ways of plugging the weaknesses or gaps in the international climate change regime. That means, for instance, providing an evidence base for litigation. One of the pieces I worked on – with a group of really fabulous quantitative social science modellers – was on fair shares, which I mentioned earlier. That work has actually been cited by climate claimants in the Swiss climate case.

It includes a set of worked-out shares for states. While this may not be the version the court adopts, it has been carefully reasoned. Social science modellers and lawyers have come together and said, this is a good way of doing it – so, it *can* be done. Even just demonstrating to courts that these things are possible, and that governments should be doing this kind of research to determine their own actions, is important.

Another project similar to this one, states are saying: '*we'll do X today, but we will dramatically remove carbon dioxide from the atmosphere in 10 or 20 years*'. And so, we will get to net zero anyway by using CDR, carbon dioxide removal methods. But there are lots of risks and uncertainties associated with that.

I've been working with a group of great scientists in Oxford. Essentially, they're highlighting what the risks and uncertainties are. And I'm saying, well, given these risks and uncertainties, there are legal norms at play which say that states should not be going down this path. If they are going to use CDR, they should be telling us how much they're going to use, what kinds of methods they're going to use, how they've accounted for the risks and what institutions are in place to manage those risks. And they're not doing that. So, it's just a way of postponing action.

These are interesting opportunities, I think, for academics to come together across disciplines and do research that fills a need in terms of litigation but also fills a need in terms of trying to plug the gaps in the international climate change.

Professor Irene Tracey

So, it's a really interesting intellectual point, but it's very immediately translatable. It is absolutely at the cutting edge of being applied.

You've both spoken, Helen and Lavanya, about the interdisciplinarity, which of course is just in the DNA of this institution. You know, we have such depth in our subject areas, but we also have incredible environments where interdisciplinarity is made easy and very natural, I think right from the student experience and up.

And Roberta, of course, your job is all about trying to bring all of that together. So, tell us a little bit about the role you have and how you want to take that forward.

Dr Roberta Wilkinson

We stand at a moment now where climate research is under threat. You know, some of the biggest funders of it have just gone. It's an important moment and we must step up to the plate and we must work together – work out how our research can have the most impact. And climate change is not something that respects subject boundaries and so, our response must meet that challenge.

Professor Irene Tracey

Absolutely right! It is behoved and honest to step up to the plate – and we can. And, you know, my sense is that the timing couldn't be more important than now for us to be very public about our commitment to utilising all that interdisciplinarity, but also deep expertise – to really come together collectively and ask: actually, institutionally, what is it we're going to do? And who do we work with to achieve that?

And I'm really excited. I've been thrilled at just the enthusiasm, and I'm really grateful to you all for what you're doing to help push that agenda forward. And I'll do my bit as Vice-Chancellor to make sure that we get you the support and the funds and everything that you need in order to meet that challenge.

But I have to say, having listened to you all, I feel once again very energised and inspired and reassured that the climate is in great hands when we've got people like Professor Lavanya Rajamani with us, Dr Roberta Wilkinson and Professor Helen Johnson.

So, thank you for all the work that you do and good luck going forward.

And thanks very much for joining me on *Fire and Wire*.

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