

Transcript of 'The Psychological Threat of Climate Change'

Season 3, Episode 41, Transforming Tomorrow

[Theme music]

Paul: Hello, and welcome to Transforming Tomorrow from the Pentland Centre for Sustainability in Business. I'm Paul Turner.

Jan: And I'm Professor Jan Bebbington.

Paul: Today we're talking about how, as humans, we process the psychological threat of climate change.

[Theme music]

Paul: How are you feeling, Jan?

Jan: Um, I'm feeling quite warm today. What do you mean by, how am I feeling?

Paul: I'm worried about you.

Jan: [laughs] It's probably right to be worried about me. In what way are you worried about me, Paul?

Paul: Well, you know, there's lots going on in the world at the minute, as you say, it's quite warm today. That's because we're in a massive heat wave, not the first of the year and probably not the last.

And, you know, there's lots of things going on around sustainability that are maybe a bit depressing sometimes. So, I worry about you.

Jan: Ah, I see where this is going now, you wouldn't be the first person, uh, in this last year that sort of said, how are you, with that sort of nod or a tilt of their head that says they're asking after, um, heartfelt wellbeing?

Well, it's, uh, I mean, it's always good to be alive, but it's a tough time to be alive. I suppose that's, that's sort of part of it. And, um, the more knowledgeable you are about the state of the natural world and inequalities

and all of those sorts of things, and I think, uh, you'd be quite, uh, odd not to feel a little bit despondent from time to time.

Um, so yeah, despondency is available on, on occasion.

Paul: Do, do you think, oh, maybe it would be easier if I was just one of those people who, thought, oh, heatwave, great, an excuse to go out and sunbathe. It's just brilliant, it'll be gone soon and there's nothing at all happening to the planet that we need to worry about.

Jan: And if that's where you are, I think that's fine. I suspect not very many people who are listening to us [laughs] are in that place.

Um, but I suppose there's something about having a, a responsibility as, as a member of a university and, uh, having a responsibility as a, a member of an accounting profession, to think about things more structurally and more deeply, and how we can craft a, a world that might create better outcomes.

So I guess I'm, I can't just turn off so well.

Paul: Right. Uh, that'll be 50 pounds, please. [Jan laughs] Although I believe that's probably quite cheap for a, a therapy session, but yes.

Jan: But it's, but I also think there's something about, um, one of my, uh, colleagues that I, I worked with, and indeed my PhD supervisor, really amazing guy, did tonnes and tonnes of stuff, and towards the end of his career and towards the end of his life, he got very gloomy that nothing, that everything wasn't solved.

So I think there's also something about thinking about your own working life as a, a marathon not a sprint, which is, you know, sort of, very sort of old hat to say that. But it's also, I think, a multi-generational journey that we're on, to think about how we interact with the world, what appropriate might be, what good might be, what kind of outcomes we're looking for.

So I, I think it's not, it's not an individual fix, and it's not a quick fix. So it has to be a bigger societal thing.

Paul: It's something that we need to be aware of, though, is the effects on us emotionally, mentally...

Jan: ...absolutely...

Paul: ...of what's happening...

Jan: ...yeah...

Paul: ...and that's something we're gonna be talking about today.

Jan: Excellent.

Paul: Yes. 'Cause we're gonna be joined by someone who is another Lancaster University graduate...

Jan: ...woo-hoo...

Paul: ...did their PhD here at Lancaster, who is an Honorary Researcher at the Pentland Centre, and who is a mindfulness, nature connection and qigong [cheegong], do you think that's how I pronounce it? Or keegong? Cheegong?

Jan: I think cheegong, but we'll, we can find out...

Paul: ...yeah, we'll find out in a minute. Pronunciation may be lacking there. And, uh, facilitator of climate and ecopsychology processes. And she works part-time in the Scottish government bringing systems thinking, strategic research expertise to support organisational change.

It is Dr Nadine Andrews. Hello, Nadine.

Nadine: Hello, hello. Good to see you both.

Paul: Is it cheegong or is it keegong?

Nadine: Uh, chee.

Paul: Chee, I was right the first time, I shouldn't have doubted myself...

Jan: ...no, no, have faith...

Paul: ...that's the lesson, have faith, uh, in myself.

Nadine, can you tell us a little bit, to start with, about yourself, your background, how you came to be working around issues of climate change and nature?

Nadine: Yeah. Uh, so I had worked in the arts and, um, heritage sector for, for quite a while, and then around 2010, there was a, a think tank at the time called Mission Models Money that worked in the cultural sector.

And, um, there was a national project, which I, um, a national research project, which I got involved in, which was, uh, what were the competencies needed, for working in the 21st century, um, in the, in this sector, right?

And so I was sort of diving into all of that literature. I had an awareness of environmental and, and climate change stuff, um, before that. But somehow, exploring all that literature took me into thinking about, what does, um, what does success look like, in terms of these competencies? Like, what is it for, right?

Um, and so we, we were exposing this concept of thriving. And that thriving isn't just, you know, making great art in organisations, but also what is the impact on, on people, planet, you know, on the workforce and stuff. Um, that took me, and I can't remember how, but I, I came across biomimicry and it was then, um, in a, a course on biomimicry, which must have been in 2010, I guess. It was in, uh, Schumacher College in Devon.

So it was there when I was, one of the people who was, who was leading that, um, it was just something about the way that he was talking about climate change, that the urgency of it somehow hit me in a way that it hadn't before.

Um, so that kind of then changed the focus of the work that I was doing to be much more kind of on the, in terms of the environmental impact of arts organisations. And then, that took me to, to, uh, Lancaster actually. [laughs]

'Cause there was a, it was a doctoral training centre, um, at the time, um, that was, uh, sort of transdisciplinary. It was set up as, well, post-disciplinary. It was set up between, the Management School, Design and Computer Science. And my proposal at the time did hit all three of those, [laughs] of those topics.

It then changed within the first year, which is kind of what they wanted as well. Um, and that then took me into the world of, looking at the, kind of the psychosocial factors that affect, um, how we, um, enact, environmental values. So [laughs] if that makes, if that was clear at all, that was the journey that I was on.

Jan: [laughs] It sounds, it sounds a brilliant journey. But, and when you say psychosocial factors, or psychosocial processes, can you unpack that for us? What does that actually mean?

Nadine: Yeah. So, um, I'd come across literature and also, um, academic departments, which were kind of, uh, on psychosocial studies. And, some of the, the kind of the key points, which, which I took from that was how, uh, what's going on psychologically within a person in terms of their own, um, how their own mind and body and, and thoughts and responses, that you can't

separate that from the context that they're in. Um, because we are always in a context.

And so to only look psychologically or only look at in terms of the individual, you're missing a big part of actually what's going on. And equally, if you only look at, at kind of social factors, um, and, and sociological approaches, then you're missing the, the psychological.

And so the, the psychosocial approach basically, um, comes from the view that these are inextricably linked. Um, I got really interested in, um, what was called in the literature then the values-action gap.

So you've got all these people who say that they have strong values around, um, you know, climate and nature. Um, and yet, you know, you're not seeing behaviours that's consistent with that. So what's going on? Um, what's influencing that?

So that's the territory I got really interested in. And so, the kind of the climate psychology perspective is, uh, really sort of dives into the unconscious processes, and emotional, um, dimensions around that.

Um, and what I did was to kind of combine some different, um, the theoretical perspectives into, into one. So I, I drew on, social psychology, which was self-determination theory. Um, so I was particularly looking at needs satisfaction, um, so competency, autonomy, and relatedness.

Um, and because the way that those, these are regarded as being kind of basic needs that, that we need satisfying in order to, to experience wellbeing. And if the satisfaction of these needs is, is deficient in some sort of way, then, you know, [laughs] then there'll be some kind of problems.

Um, so I was drawing on, on that literature. I was also very interested in, the work around, um, stress and coping. And, um, so the idea of kind of psychological threat and what, and, and the way that climate change poses psychological threat, whether we're consciously aware of it or not, but then, you know, that then elicits a threat response in the body.

Um, and then, and then as a, as a result of that, um, we, we will then adopt various defences and coping strategies. And again, a lot of these processes play out below the level of our conscious awareness. And where the kind of the social contextual factors come in is that, um, depending on, you know, this could happen at an organisational level or at a group level or even a, a nation

level, that, um, how we perceive threats you know, is dependent on the context we're in.

We're influenced by that. How we then, the way that which types of coping strategies we might adopt is also influenced, um, by, you know, some will be more dominant in a, in a group or at society level. Um, and then also the, the, the kind of, the, the outcomes of those responses are then kind of adaptive and maladaptive in various ways, depending on the perspective that you're looking at.

You know, so something might be, work at an individual level, but it's not great at an ecological level. Like denial, for example. Um, so that's, that's kind of what I, I got really interested in. So it was a, it was quite a systems thinking kind of approach, 'cause I was really looking at all these different factors and how they interact.

Um, and I was particularly, my, my research subjects were, um, sustainability professionals. So I was interested in people who had strong environmental values. That was why they were doing the work that they were doing in their organisations.

And so, um, I was interested then, well, how do they enact those values as part of their jobs and, and what's influencing that? So that's, that's what I was looking at.

Jan: Wow.

Paul: What did you find then, Nadine, with regards to those sustainability professionals? How, were they enacting their beliefs within their work?

Nadine: Um, yeah, so I used a, I used a, a methodology. It was, um, interpretive phenomenological analysis, [laughs] always a bit of a mouthful, IPA.

Um, so I, so I worked with just a small sample, so I had, it was six people, you know, but you go really in depth. Um, so there was some variation, but, but what I found, um, was that, that often that there was a, um, a suppression of their deep green identity or of their emotions around climate change, which was a coping strategy, right?

And they were doing this in order to, in service of their relatedness needs in the workplace. Because their jobs was about influencing their colleagues, um, in some sort of way, right? And so they needed to be respected by their

colleagues, to be taken seriously by their colleagues. It was important to have good relationships there and, um, and trusted relationships.

And so for some of the, the research participants, I found some, some evidence in the, in my data that, that there was some suppression of those aspects of themselves, um, in order to fit in, right? Because to fit in was how they then achieved their competency needs, which is about how you are effective in the world, right? In the ways that you want to be.

Um, but there's a cost associated with that, which is, which is autonomy and inner coherence. Um, so you can see how these different psychological needs, um, can, can also be in conflict with each other in, in particular context. So that, I was kind of really interested in all of that.

And, and then all of that, like, if you're suppressing a part of yourself, and suppressing any strong emotion takes, takes effort. It takes energy. So there's vitality costs to that. And that was also showing up in the data. But, you know, so if people feel like they're fighting all the time, or they're, they're, there's, it, it fits in with this idea about congruence and incongruence. So the extent to which you're, you're, um, a fit with your organisation and its values and goals.

Um, so there might be a lot of work that people need to do and that, you know, that has a vitality cost. Um, so yeah, there's a lot of stuff in this [laughs] I was kind of exploring. And then also, well, what are their strategies and for, for revitalising themselves?

Because, you know, if we don't have good ways to do that, then that can lead to burnout, which is of course what happens to a lot of people. Or they just end up leaving their jobs. 'Cause, you know, it's, they can't handle it anymore, so.

Paul: So, when it comes to the climate crisis, do you think it's inevitable if people become more informed and knowledgeable about it, they're gonna be emotionally affected by what they learn?

Nadine: So, um, I don't think it's inevitable because, because I think it's to do with how people engage with the information. So, for example, you could, you could very quickly, at, within a few seconds of encountering some facts that should go straight into denial, you know, where you're kind of just immediately kind of with, you know, you might not even be aware of it, but you're already

rejecting, denying, pushing away information because it's, it's kind of too much, right?

Uh, this isn't necessarily a deliberate, conscious thing. So if people are kind of immediately going into that space, then um, it's, it might not even go as far into as actually having a subjective sense of feeling and emotion, um, in terms of what they're consciously aware of, right?

Um, but if you're going through a process where you are reading stuff, you're listening to stuff, or you're, you're, if you are opening to the facts of what's going on and you don't feel, um, worry, concern, fear, and all the rest of it, then, then somehow you're not kind of really in touch with the reality of the situation.

So, um, the answer is kind of yes and no. [laughs] Um, but broadly speaking, yes, right? And, um, most people will be feeling something.

Jan: And, uh, I know that you've been doing some work with climate assembly and climate assembly members. So that, if you like, is a group of people who have come together to actually absorb this knowledge and information and to sort of formulate ideas about what should happen next.

So it's not just, you know, hearing the information and seeing how you feel about it, it's got a sort of proactive part to it. Could you tell us about that work and how climate assembly members respond to their experience of the activity of being brought together to address, um, things collectively?

Nadine: Yeah, so this is, we're going back to 2021 here. So this was, um, this was me in my Scottish government role. Um, so I led the research on that. So, uh, a climate assembly was, was in process. Um, the members met up, over seven weekends, um, over, over several months. And then the Scottish government then had, and ministers had, had six months to then respond to the assembly members, um, to the report, the recommendations that they then, produced.

And what I was interested in was, amongst other things, [laughs] was, um, their emotional experience for exactly the reasons that you just asked me about. You know, they're encountering all this information, you know, it's gonna have, I, we had some responsibility to be able to monitor, to, to monitor their wellbeing, and for the organisers to then provide some wellbeing resources around that, if that was, if that was needed.

Um, and then just from a kind of academic point of view, I was interested in how their experience compared to the population as a whole. So we, um, we also did a, a population survey that summer after the assembly, had produced their report, so we could actually sort of compare what was going on. And then we did, um, another survey with the members after they'd received the Scottish government response.

So, you know, we, we were able to track stuff over a bit of a period of time.

Paul: And I know that some of the results that actually suggested that assembly members, after they'd taken part, were actually feeling increased levels of optimism, maybe, about the situation and what could be done. Was that something that surprised you?

Nadine: I didn't kind of go into it with the hypothesis, but it was, it, yeah, it was interesting. Like I wasn't expecting it, I guess. So, um, to see that they did have these, kind of, higher levels. I mean, it fluctuated over the weeks, but broadly speaking it was, it was higher than the population as a whole. Um, yeah, so that was very interesting to us.

And, and we don't know for sure, but we thought that that was because they had a strong sense of purpose and direction. So, so there was, it was it, to them it felt like meaningful work at that time because they were, they were being tasked, you know, big question, you know, how should, how should Scotland change to tackle the climate emergency in a fair and effective way, something like that.

Um, and they knew that, you know, the Scottish government and ministers were, were gonna have to read what they came up with in response to it. So, um, that's what we thought, that they would've had a strong sense of agency around this and, and meaning and purpose.

Jan: And then how did that, uh, evolve once the, the, the Scottish government had, had looked at the, what they'd put together and started responding to it...?

Nadine: ...yeah...

Jan: ...so that later part of the process, how did that go for them?

Nadine: Yeah. [laughs] So this was interesting. So that was the, the final time that people met up. And on the whole, um, you know, on average the, the kind of, they were more similar to the population as a whole, let's say. [laughs]

So the kind of the hope and optimism was, was kind of moderated. And I think probably what was happening there was that the reality of how, how government works, because the, the climate assembly was just advisory. Although there was a Climate Act that said that there had to be a climate assembly, it wasn't that the government had to take its recommendations.

So the government response, the, um, many of the members felt disappointment around that, um, for whatever reason. And, um, yeah, so I think that that then affected, you know, the way that they felt because, because it would alter their sense of meaning and purpose, right?

Because they've, they've now seen, oh, we, you know, we thought we were gonna have this, this big, um, influence. And then they get a response back, and, and for some of them, at least, it, it didn't meet whatever they thought was gonna happen.

Paul: What did your work, then, tell you? What did you learn from it with regards to the value of climate assemblies, how they might be used, whether they could be more valuable?

Nadine: Well, I think if, if we were just thinking about the, the kind of the emotional experience, because we weren't able to do any follow up stuff, we have no idea what, what people now feel, right? Um, but generally speaking, deliberative processes have, um, have great value. You know, a citizen's assembly is one type of a deliberative process.

But for something which is complex, we know it makes a lot of sense for, uh, and there's obviously a lot of research around this as well, that for people to be learning about the topic that they then have, or are being asked to, to take a view on and make recommendations about, is so much more worthwhile than asking people for their views on a topic that they haven't, for some of them, you know, they haven't encountered all the different scientific evidence on it.

Um, the, the main issues I think, are to, in, in general, not just kind of climate assemblies, but are to do with, having very clear upfront and throughout who is, who is this for and how is it gonna be used? And if it is for a government, then exactly how is that government then going to respond and what is, what are all the expectations there?

Because I think, you know, we already know that trust in government generally is, is low, in, in Scotland and UK and, and worldwide. Um, so if there's kind of ambiguities around that, about, about how people are going to respond to recommendations, then that can potentially damage trust, rather than boost it, which is really what you want from a, from a, a, deliberative process that's bringing citizens into decision making.

Jan: You've used some really interesting words in our conversation to date, and I'm thinking about vitality, wellbeing, hope, optimism, and thriving.

They're really amazing words. Are they words you use a lot, and words that you are drawn to because of the field that you're working in?

Nadine: [laughs] Um, it's probably 'cause I, 'cause I also teach mindfulness and stuff, so, um...

Jan: ...yeah...

Nadine: ...but, but I wasn't expecting my PhD result to, to really be about vitality. 'Cause it, you know, it was about values and how people enact their values, but actually the amount that people really talked about energy was, was remarkable.

And, you know, and vitality in psychology is, is energy that's available to the self for action. And so I, I got really interested in that concept. Because for all of us, to be engaging with something which is so, poses so much threat to us, you know, in unprecedented ways, it makes big demands on, on us physically, psychologically, emotionally, you know.

Um, and so it's really important then how we look after ourselves and keep our own resilience. And not just like me as an individual, but, but to be able to do that in ways which is, which is ecologically beneficial. Um, 'cause there are ways to look after ourselves like, you know, materialism and just consumer behaviour, which isn't, you know, beneficial in a more ecological way. So.

Jan: Yeah, and I suppose what I like then about that, the, the fact you're putting the social with the psycho part of it as well, is actually...

Nadine: ...yeah...

Jan: ...spending, you know, ways to spend time with people that build your, you know, that help you thrive, that help you be vital, et cetera. It's, maybe it's,

you know, it's not a solo game, is it? It's something you'd want, want to do with other people, ideally.

Nadine: Yeah. And also, um, the other thing which came out really strongly was, was about connecting with nature. So we can think about people more broadly as kind of non-human people...

Jan: ...yes, indeed, I'm, I'm with you, I'm with you...

Nadine: ...as well as human people. [Jan and Nadine laugh]

Um, but yeah, that was a really important, um, not just in terms of people's all wellbeing, but also reminding people about why they're in this work in the first place, particularly if that work is something which is, um, is difficult.

You know, if you're in an organisation that that doesn't entirely align with your own values, you need to be having 'this is why I...', reminders of 'this is why I'm doing this'. You know, so that kind of, it helps to kind of keep that, that personal motivation going.

Paul: You've had a few hints at this already of certain techniques and ways of doing it. What advice, though, would you generally give to people when it comes to dealing with how they're feeling, when they're thinking about the climate crisis or similar issues with the environment and such, that you've come across?

Nadine: Yeah, so we've got a few kind of like top tips that, that I tend to give people, um, when I do workshops and this kind of stuff. And another thing for language is we, we don't talk about negative emotions, because all emotions have a purpose. So we talk, we talk instead about difficult emotions, because some emotions like fear, anxiety, sadness, you know, all the rest are, um, appropriate, right, to the situation that we're in. But they're, but they're difficult emotions to engage with and to, and to feel. So we talk about them as, as difficult emotions.

So for one thing, a lot of people that come to, I'm part of the Climate Psychology Alliance, um, and a lot of the people that would come to us, um, wanting to be part of the events and activities that we do, or asking for workshops and things.

A lot of the distress that people feel is because they think that somehow they're on their own, uh, nobody else feels the way that they do, and that there's something wrong with the way that they're feeling.

And actually just reassuring people that, no, it's completely normal to feel this stuff. In fact, it's appropriate if you, if you don't feel this stuff, you know, you're somehow not in touch with the reality and the severity of things. So it's good you're feeling this stuff.

Um, also, we know from surveys, roughly two thirds of the population feel worried about climate change. Not everybody talks about that. Most people don't. So often we think that, you know, some of our friends and family, um, we can't talk about it with, with some other people.

And maybe that, you know, they might not be able to handle that, but to, to then let people know, no, this is common. And actually there are spaces, where you can talk about this that are facilitated, you know, by Climate Psychology Alliance and others where you, so that's a really important thing, is offering spaces for people to, to be able to, in a safe way, express how they feel, knowing that they're, they will just be listened and heard and, and understood.

Um, understanding a bit just about, as I said before about just how the nervous system works in terms of, you know, it, it, our nervous systems are always looking out for signs of, of threat and safety. Um, below the level of conscious awareness, normally kicks in with a, with a threat response. All the stress hormones going around the body, anxiety is associated, you know, with, so even just kind of understanding, oh, this is just a normal part of, of human functioning.

And to be understanding that then the, the things like denial and, and emotion, suppression and all the different things that we might use to, to then deal with the threat that we're facing is also just part of normal functioning.

So that can, that can be reassuring to people that this is just kind of what happens. And then, and then it focuses on not specifically what emotion you're feeling, but how can I learn to regulate in a way that's healthy.

Um, and so as I've said, some of that is to do with spaces where you can express how you feel. Um, there's various kind of mindfulness movement exercises that can help to just calm the nervous system down, release tension.

Um, being aware of how stress shows up for you. Because what we want is, is feeling the emotions and working through the emotions is really important

rather than just suppressing them and, and, you know, because they don't go away. They're still there in the body affecting us, right?

But we, but so it's, it's how we can regulate our emotions, in, in ways, which means it doesn't lead to, um, kind of mental illness or, or exacerbates any sort of, you know, mental distress.

And then the kind of more, sort of, practical ways that, you know, I'm sure you talk about a lot on, on your podcast around then, what meaningful action can you take? And also as you said about how you do that then with other people, you know, and having, keeping a sense of perspective so it's not all on you as an individual...

Jan: ...yeah...

Nadine: ...um, so there's a variety of, of different things. Um, but it's remarkable how just letting people know that the way that they're feeling is actually normal and appropriate alone can be, take away a lot of the, the anxiety about feeling anxious, you know. [laughs]

Jan: [laughs] So it's complex territory that you're working in there. So what's next for you in this space?

Nadine: So after my PhD I worked in the Intergovernmental Panel on Climate Change for, for a short while, um, in the technical support unit. On Working Group Two, which looked at adaptation. So I'm, I'm kind of more on the adaptation side than, than mitigation really.

Um, and that took me into, you know, some of the, some of the territory around deep adaptation and, and stuff. And so I'm, I'm kind of really interested in, accepting that some stuff is already too late. Um, we can make some stuff not get a lot worse, but some stuff is, is already baked in. And so if you accept the reality of, of that, the question then is, okay, what, then, you know, what, what's the role then?

Um, so I run a monthly group in Edinburgh, an in-person group, called Breaking Well, which is, it's a kind of collapse aware group. So it's kind of people who accept that there's already, you know, some stuff which is collapsing, which isn't necessarily negative, but it's kind of just, it's processes, it's kind of what's happening.

Not just ecologically, but you know, there are social systems which are kind of collapsing around us. Uh, and then, and then, okay, well what's my role in this

and what can we do around this? And I, and for me, that's where a lot of the climate justice work really sits...

Jan: ...mm-hmm...

Nadine: ...um, and how can we then build community resilience? So yeah, at a very kind of local level, 'cause obviously mitigation can't be done locally, but adaptation is, is really where you, you can have community empowerment.

Um, so that, that's kind of where I am. And, I just had some conversations, um, with a colleague in Scottish government and we're sort of interested in, you know, would it be possible to have to, to take some of these ideas about, um, if you accept that, that some stuff is [laughs] you, you know, how would that land? We don't know.

Uh, but yeah, so I guess, I guess the, kind of, building resilience is kind of where I am and I tend to focus on that in, in terms of the psychological resilience, I guess, and how that shows up on an individual and sort of group level.

Paul: Well, Nadine, thank you very much for joining us today, and confirming that it is indeed good to talk [Jan and Nadine laugh] and that it's good to get our emotions out there. So Jan can have one of her primal screams as soon as we've finished the record. It's been really good speaking to you.

Nadine: Yeah, thanks for the invite.

[Theme music]

Paul: There's always lots to think about whenever we have any episode, Jan, about how we feel about what's being spoken about. But this episode has been all about how we feel.

Jan: Absolutely. And I was really taken by a phrase that Nadine used, which was 'breaking well'. So if, if we are, and I sometimes think of this myself, if we are in free fall, um, the best thing I can do is to make the landing as safe and as soft and as you know, uh, the best standing that you can have for, for a system that's in the process of breaking.

Paul: And it's also interesting to hear how lots of people will be feeling things or having emotions and reactions to what's happening with the climate, and not necessarily realise that this is their body, their mind reacting to that particular thing. That sometimes you have a reaction without consciously deciding that's what your reaction's going to be.

Jan: And I tell you what, it made me feel much more sympathy for people who are in climate denial, who I don't always feel warm and sympathetic towards. But if there's something inside of you, and without even realising it, that you just sort of push back this, this knowledge and information from the outset, then that's, you know, that's kind of fascinating that that happens.

Paul: Mm-hmm.

Jan: Um, because denial isn't necessarily a logical, you know, thing that happens in your head. It has other elements to it, including, you know, just emotionally thinking, oh, it's hard to think that we, we are going, we are collapsing this planet. I mean, it's a really hard thing to be thinking, actually this is real.

Paul: Yes. There might be some people who are purposefully denying it. Uh, they might have a reason for doing it, but there might be other people who are in climate denial because of that...

Jan: ...yeah...

Paul: ...they're, they're not doing it to be contrarian or anything like that. They're just doing it for reasons that are beyond the easily understood on the surface.

Jan: Yeah.

Paul: Yeah. Talking about things that are not very easily understood on the surface, [Jan laughs] shall we have an episode on AI?

Jan: Yeah, go on. You know, you'll love it. You'll love it. [laughs]

Paul: I don't know. I, I'm getting my emotions out of the way now. I will not love AI. [Jan laughs]

Yeah, next week let's look at the potential positive uses of AI and let's bring in Dr Mahmoud Gad, who we've spoken to before, and find out how he's been using artificial intelligence to help analyse modern slavery reporting.

Jan: That sounds a really, really good plan.

Paul: Until then, thank you very much for listening. It's goodbye from me, Paul Turner.

Jan: And from me Jan Bebbington.

[Theme music]