

Transcript of 'Sustainability Fairy Tales'

Season 1, Episode 17, Transforming Tomorrow

[Theme music]

Paul: Hello and welcome to Transforming Tomorrow the podcast from the Pentland Centre for Sustainability in Business, here at Lancaster University Management School. I'm Paul Turner.

Jan: And I'm Professor Jan Bebbington.

Paul: And today, Jan, we're going to be discussing some really interesting topics. Things such as fairy tales and sustainability. Things such as urban sustainability transitions. Lots of interesting stuff coming up.

Jan: Well Carolynne's a really interesting person so I think we should get on and introduce her pronto.

Paul: Yes. Because we are joined to discuss all these topics and I'm sure no doubt many more with Dr Carolynne Lord, a Senior Research Associate here in the Pentland Centre.

[Theme music]

Paul: Hello Carolynne.

Carolynne: Hi.

Paul: Thank you very much for joining us this afternoon and especially for coming off your sick bed, because I know you're not feeling particularly well. So thank you very much for taking the time to talk to us.

So can you first of all, Carolynne, tell us a little bit about your background and how you came to work on sustainability?

Carolynne: Yeah sure, so I feel like my, uh, career into environmental sustainability wasn't necessarily intentional. So I did start with Spanish with Computing, um, but when I started kind of looking for funding, uh for a PhD, I ended up in the Sociology Department, uh and with the DEMAND Centre here at Lancaster. So, DEMAND stands for the Dynamics of Energy Mobility and Demand. And that was in End Use Energy Centre.

Um, so whilst my PhD wasn't directly about sustainability and ended up actually being more of sort of a critique of, uh, user studies and the idea of a user in studies about technology, um, arguing that we should instead think about activities and the roles that technology takes in those instead, I was surrounded by, uh, lots of interesting people thinking about energy and sustainability for 5 years.

So when I was finished with the PhD, uh, it was almost kind of natural that I started applying for RA roles in that space. So since starting as an RA there's been, like, a few strands to my work, with environmental sustainability probably being the biggest one of those.

Uh, but I've been on a huge number of projects at this point, uh, which is kind of a privilege and a challenge of doing RA work in the way that that kind of, uh, career kind of shapes out.

Um, so some of these projects have been about social sustainability. So, for instance, I've worked on projects about the fairness of the gig economy and the algorithms that shape that kind of work. Um, as well as rural broadband development projects and how rural and remote communities, um, access funding to literally dig up their own fields and lay down the cables to make their own broadband networks.

Then on the other side there's, kind of, been the environmental sustainability kind of projects that I've worked on as well and again there's been like a quite a range of different contexts there. So the UK video streaming landscape, project also on large scale computing infrastructures and how those are used in academic research, which tends to be less, uh, about technical factors and more about social and cultural factors.

Projects also in the 'last mile' of parcel logistics and how to make solutions that would increase the sustainability of that. And then the final and more, I guess, developing strand of my work which is, as you've kind of already mentioned in relation to the fairy tales, but kind of more creative methods of storytelling for energy research.

So that, uh, interest started in relation to a project with the CREDS Centre, that being the Centre for Research into Energy Demand Solutions, where I developed online gallery exhibits, which translated some of the work that they'd been doing around energy flexibility and renewable energy for non-academic audiences.

So I had a really fun two years making, uh, exhibits like photo essays and online videos and trying to translate that work, and make it kind of more digestible for broader audiences and moving that outside academic spaces.

Jan: That's a fantastic array of really interesting things. But, from computing through the sociology, broadly social science, what are the common themes that have emerged out of that work that really make you, well shape how you think about sustainable development and also maybe sustainability in business?

Carolynne: Yeah, it's really difficult, I guess, to answer that question in the sense of like a, a commonality. I think there's something really context specific about the different problems of each context that you're looking at, and of each of the projects, you know, from the framing through to the different issues that have emerged out of these.

Um, but I guess actually what has been the huge shaping factor of it all has been the, my PhD work. So in working with a social theory, which in that case was, uh, theories of social practice, um, and looking and thinking about activities, and how those connect with other activities, it really, it kind of points to actually the complexity of sustainability.

You know, each of these contexts actually all interrelate and even when they're really different there are commonalities between them. So for instance, um, there's just some things that come up in all projects, especially those that relate to technology, so technological efficiency being one of them.

Almost every project about technology I find myself, at least, arguing against a notion that technological efficiency is enough, you know, if we increase the efficiency of the technology then we're, then we're fine. Um, you know, that the, a context will be made more sustainable.

And whilst technological efficiency does tend to be at least a part of the solution, um, it's never the only solution. So, yeah, I guess having a, a set of orientating ideas holds all that together. But the more projects I work on the more, kind of, aware of the scale of the issue I become aware of.

Jan: Ah, that's very cool and I, I'm pleased you said practice theory because when you were talking about what you've been looking at I, I thought immediately of Katy Mason, who was a very early podcast contributor to us, and she has that practice theory element to her work as well.

Paul: Funnily enough I've also written down Katy's name whilst, um, we've been on, [Jan laughs] but more in relation to the fact that, that a couple of the things you talked about tie so nicely into topics we've discussed previously on this. Katy, we spoke about rural broadband...

Carolynne: ...mm-hmm...

Paul: ...and we spoke about, uh, 5G rurally, and the effects on rural communities. Not so much, you know, the digging their own trenches to put the cables down, et cetera, but more the potential positives for communities there. But also, I don't know if you remember, naughty trees...

Jan: ...I do... [laughs]

Paul: ...and inconsiderate weather and uh such topics. But, yeah, the many different logistical issues that there are around 5G in rural settings.

But then also you talked about the last mile. And we talked about the last mile with Jekaterina Rindt when we were talking about uh travelling to, uh, Eden...

Jan: ...mm-hmm...

Paul: ...and Eden Morecambe and the last mile and the journey there. And it's amazing how, I mean, you were saying that how there's lots of interconnecting strands of sustainability, but just from talking there you've already brought up some examples that tie in with other work of other members of the Pentland Centre, just demonstrating exactly that.

Jan: Indeed...

Paul: ...it's almost as if we planned it...

Jan: ...yeah. [laughs]

Paul: Not that we're anywhere near that efficient.

Um, so I do want to talk to you about fairy tales...

Carolynne: ...mm-hmm...

Paul: ...uh, your recent work that you did about thinking about how sustainability themes can find resonance in fairy tales.

So can you tell us a little bit about that work and what it entailed?

Carolynne: Yeah sure. So, um, not so recently I guess now, but in the last year or so I published a paper with colleagues, so that would be uh Katherine Ellswood-Krebs from the University of Strathclyde and Torik Holmes uh from the University of Manchester, on as you've said the topic of sustainability themes. And kind of translated these in relation to fairy tale characters.

We also ran an associated uh workshop with other researchers trying to kind of help them move through the method as we kind of designed and undertook it ourselves.

Essentially what that work was doing was, it comes back again to this creative methods of storytelling and academic research, right? So we have all these different problems and uh usually the people with the power to enact change based on the work that is being conducted, sit outside of academia. That's an issue.

You know there's so much interesting, and I believe truly useful, work within energy research and the social sciences. And when you look at different policy solutions to different problems it appears as though that work isn't resonating, reaching or changing, uh, the work of policy makers.

Uh, so based on some conversations that we'd had as a three, and some initial ideas from, uh, Torik. I wouldn't want to take the, the credit because the idea initially was his. We sat down and, and basically came up with a couple of ideas of characters in relation to some of the empirical cases that we were interested in.

So the three examples that we took on in the paper were renewable energy as mermaids, plastics as witches and cars as vampires. I'm going to focus here kind of on my favourite one which was the renewable energy as mermaids.

Um, but what we did uh to put together that case, was that we read the academic literature and specifically the social science and energy literature, in relation to renewable energy and some of the policy responses that have emerged in the UK, as well as different representations of mermaids.

So we read a whole bunch of interesting books around these characters, which was a really enjoyable week. And we read these alongside each other and basically pulled out repeating characteristics from this kind of folklore literature, as well as the repeating characteristics of the energy research and social science literature around renewable energy.

And came up with a translation, basically, of this work, arguing that renewable energy was distractingly alluring to UK policy makers and was leading them towards the rocks by distracting them from other routes towards net zero. For instance, like demand reduction.

Um so in our translation we, we suggested that we understood completely why renewable energy is so attractive to policy makers. Uh so it's relatively tree, cheap, sorry. It increases energy security. And when you focus on it, the focus suggests that the organisation of everyday life and the levels of energy demand that come with it, isn't actually the problem.

So it's simply the technologies that are being used to generate our supplies, and that's a really comforting thought really, isn't it? That if we just change the technology, um, the issues around electricity generation in the UK and the sustainability of that will be resolved.

However, we also argued that this was dangerous. Um so the literature suggests that, kind of, a move to renewable energy by itself isn't enough. Um so for instance the conditions needed for energy, wind energy for instance, production are intermittent. And we're not able to currently stop gaps uh in a way that's needed for intermittent weather conditions through storage technologies.

Um so that's partly because they're expensive but partly also because it's not possible to store energy at the levels that it's required for the moments in which it's needed. That problem is only going to become more of a challenge because weather conditions are supposed to get more variable.

Now, at the same time we did argue that renewables do have a role. So uh we weren't suggesting that renewable energy was bad, not at all. And they can actually be used to accompany us across the seas towards net zero.

So in the same way that mermaids were used as figureheads on 16th century sea vessels, as they were understood as figures to appease the sea, um there are clearly roles and ways for renewable energy to accompany us on the journey towards net zero as well.

The point of the translation, however, is to say that we need to think of another, other strategies, sorry, that go alongside renewables like demand reduction. So how do we get handle on the peaks and smoothing these out?

And how do we reduce overall levels of demand alongside moving towards renewable energy?

As I kind of implied in my, uh, explanation of kind of some of the projects that I've been on, the solutions will be different for different contexts. But if we take one particular context, for instance business demand, so in offices, we might think of ways that we could reduce data demand or we could uh get a handle on the energy demand that's associated with heating and cooling.

The point is that whilst there are clearly roles for renewable energy, for instance, in keeping remaining fossil fuels in the ground, the literature is currently suggesting that the demand policy measures are currently far lower than what's required.

Uh, so I think it's something like an expected 5% reduction by 2050 is, is where we're kind of heading if we carry on along the, the route that we have in UK policy.

We need to broaden the focus from renewables alone and think of these other routes. That's including, but not exclusive to, demand reduction.

Paul: What's really getting my attention there Jan is how much this echoes with what we spoke about a couple of weeks ago with Georgiana Allison about here at Lancaster University.

The wind turbine, the solar plant and how they are double-edged swords. They can be absolutely brilliant for solving certain issues but it can drive focus onto one particular area.

It might be seen as like the sexy area of sustainability is having that kind of thing. And it's really echoing that kind of message isn't it? Which I guess demonstrates exactly what you're saying there and the need to make sure that people aren't, uh, being pushed in one direction rather than going and looking at the bigger picture.

Jan: And my eye was caught by her metaphor of a cake and the icing, not surprisingly. [Jan and Carolynne laugh] And what she was saying, which I think you would have really enjoyed Carolynne, is that um some people think of sustainability as the icing but actually it's what you do in the cake.

So again, you know, sustainability might be what technology you use, but what demand you have is, is this, is the, the central question as well. So I think *and* is always a good word.

Paul: Exactly. So how effective have you found this being as a methodology for communicating this kind of academic research to the more general audience, Carolynne, by using the fairy tales as a medium for that?

Carolynne: I guess time will, will tell with that. But I have to say in terms of the, the work that I've done this seems to have had the most legs on it [laughs]. So this is the, the piece of work that I've received kind of most emails about, and I mean even from people outside of academia.

So I had an email at some point from someone from America who'd come across the paper and said that she'd spoken about it with her child, which is just, it's really nice to receive emails like that and see that like other people are picking it up.

I would hope that there's further legs to it, but I think there's, the next step with that would be moving it from a journal article, right, and, and taking it to someone. So at the minute just because of the way the academic work works when you write a paper you, or when you do a piece of work you put it into a journal article or into a conference proceeding.

Um so the next step is to take it out of that sort of academic space and put it into a non-academic space and see how it does there. It does seem to be the kind of piece that you know is, has received the most attention and is the easiest to speak about with non-academics.

Jan: The other thing I really loved about the work that you're describing is it was visually exciting and visually arresting. And it's quite hard for us to describe this on a podcast 'cause it's a, a sound-only medium, but we will make sure that we have links through to your work on the, the accompanying podcast's web page so people can see for themselves.

But maybe I could challenge you [laughs] that, can you have a go at describing what these illustrations were like? Because it wasn't just the metaphors, it was the illustrations and the creativity of that artist that really sort of inspired the work as well.

Carolynne: Yeah, course. Not an, an easy task to try and to explain them, I guess, um, in an audio format. But they're the result of the hard work by Veronique Heijnsbroek, the illustrator with whom we work with, um, and she was amazing not only for the kind of final product of the images themselves, but because of the types of questions that she asked us as, uh, writers of an

academic journal piece, uh which helped kind of really push the metaphors along and really, kind of, helped develop the translations that we made.

Uh but essentially for each case, so again renewable energies as mermaids, plastics as witches and cars as vampires, we also had an illustration, um, which tried to really pull out some of, again, the main characteristics of uh those translations.

So for the renewables piece it is three wind turbines that are actually uh mermaids, and you can see the sort of the ship heading towards the rocks and you've got the mermaids with plugs as hair, and you know they've got, really kind of capturing that sort of electricity generation part.

And then we had, uh, so I'll also explain the cars as vampires one, because that one was also really quite arresting as well I think. In the sense that you had there the kind of , and you can see their fangs and you know the eyes are certainly, not as headlamps, but more kind of that vampire-esque look, uh with a policy maker standing in front of them, uh, waving garlic rather than the stake. [Jan laughs]

But I really do invite you to take a look at the, the paper to see those and also to kind of see what we did with the other translations.

Paul: And of course we've used Veronique's work ourselves Jan as the Pentland Centre. When Transforming Tomorrow first became a thing it wasn't actually a podcast, it was a little brochure, a little book, that encapsulated the research and the activities of the Pentland Centre. And the cover for that was illustrated by Veronique.

Jan: It was indeed and she drew Desna and I, and always recommend being drawn rather than photographed, it was fantastic.

So what I'm really interested in as well, Carolynne, and I, I know something about it because we're, we're working with, um, Adrian Friday who was also on the podcast earlier on together, is that you're looking now at urban sustainability transitions and particularly how we might integrate insights from the environmental social sciences.

So this is a really good follow on from the kind of things that you've done before, looking at that context specific application, but also I, I know that you're having to be pretty creative as well in the, the projects that you're looking at.

So maybe you can tell us something about that understanding of urban sustainability transitions and what you're finding in that project?

Carolynne: Yeah sure. So the work that I'm currently conducting for the Pentland Centre, um, is a project, as you've said, about urban interventions research.

How we're thinking about that is, projects which are designed with the intention of changing something in a particular city to influence the sustainability of that something, whatever that something may be. So as a, and as, as an example you might have projects around food or transport systems that are taking place and targeting a particular space.

Broadly what we're interested in is how those projects are designed, so how do they decide what actions they're going to take? How do they connect with other projects in that space? And how do they connect with the literature around, so the academic literature, and what is kind of suggested as a means of, of tackling and targeting sustainability in a particular space.

And what we're finding with that project is that there's a huge variety of different projects which are interested in, in creating an urban intervention. Um, but there doesn't really seem to be much of a cohesive record of what projects are happening.

Um, so sometimes you'll find in a particular city there will be two projects that are doing very similar things which don't appear to be talking to one another. There doesn't seem to be, either, any kind of record of the impacts of particular urban interventions. So that can be really challenging in terms of understanding how one project might learn from a project which has already taken place.

Uh, so yeah, I think the, the research itself, like, the more scoping we seem to do the more significant it seems to be that this kind of work takes place. But it's, it's been really quite confusing as a project, to start, because even just trying to get a sense of what's happening in one particular area and who you might contact to kind of learn more about what work they're doing has just been really, really challenging.

So there's been a lot of, sort of, um, circling around what the problem space is, and what we might do to try and understand it further. But I'm, I'm hopeful that you know in the next couple of months or so we'll get to the point of, of

speaking with a few of these projects and really trying to dig into how do they design their work, how are they articulating what they're doing, and how does it connect with other, other projects.

Jan: And I think one of the things, I think there's two things that we're starting to suspect, I, I think diagnose would be too hard a description, is that we kind of suspect that everyone who writes about the work that they do are writing about it for slightly different academic audiences.

And the academic space is so huge you can be writing about something and, and taking your slant on it, but no one else other than people in your wee sub-community will read about it. So there's something about that, that lack of generalisability, because we're all writing in, in deep wee silos. So I think that's one problem.

Paul: That's something that always amazes me about academia, is that you can have people, even within something like a management school where we're based, you can have people within one area of a management school, say, accounting, who has no idea what's going on in entrepreneurship, which is within the same management school.

It might be one floor above them, they might pass these people every day, they'll have no idea who they are [laughs]. They'll have no idea what work they do. It always fascinates me that that the organisation is split into such rigid silos, and it can be hard to find out what other people are doing.

And you, I guess the Pentland Centre comes into this in lots of ways, because the Pentland Centre crosses those disciplines, it brings people with an, a shared interest together...

Carolynne: ...mm-hmm...

Paul: ...we've got people from law, we've got people from computing, we've got people from all across the Management School, the Environment Centre. Would they have ever come together without the shared, without the shared hub of the Pentland Centre, to discover the fact that they've got people working on similar projects?

Jan: Exactly. And the topic they're working on might be the same thing. So if we go back to the very, um, you know smart earlier example you talked about, it might be about demand management for electricity. But you might look at that from you know six or seven different perspectives.

But you, but those perspectives don't naturally talk to each other. So when they do get the chance to chat to each other I think it creates really synergistic insights about the whole system rather than just the bit that anyone expert knows about.

Paul: And that ties in, when we spoke to JB, um, a few weeks ago about the projects you're working with, sorry working on with him, SeaBOS, the, the seas, the oceans, the ecosystem there, and how you've got people from accounting working with ecologists, and all together projects like that sound oh, so essential.

And it sounds Carolynne that it'd be nice if there were more projects like that when it came to urban sustainability, if you had all the people from all the different areas working together, rather than working individually, off in different directions.

Carolynne: Most definitely. And I, I would imagine that there is some kind of centre, or collection of people, thinking about this. But there's, you know in order to find that, like I've found a, so far a lot of this project has involved me putting particular things into Google, or it might even be looking at different papers and, and just trying to capture sight of something that I feel is probably happening but it's really hard to find.

And why that's important is, I guess, if you've got people like urban policy makers trying to make decisions, like, how are they supposed to find, within the context of, you know, all the time pressures of all the different things that they're doing, some guidance or some, some way to link with academic work in this space?

Um, you know I have the privilege of you know a full working day to try and find these things and even then it can be really difficult [laughs] to try and find it! They don't have a full working day to do so.

So we need some way to kind of increase those connections and, and to try and make that easier so that academic work can have a, a sort of easier role within this broader, these broader efforts that are going on in urban spaces to try and make, uh, cities more sustainable.

Jan: The other people we think might be interested in this work are the funders. Because they sort of fund episodes, they fund projects. And it's quite hard, well there's not much money around to fund processes that reintegrate

and re-explore things that have already been found, because that's not really seen as being new and exciting.

So we think there might be a really nice conversation to be had about the value for money that you might get if you take these research episodes and actually tie them together in a, in a more complete way...

Carolynne: ...mm-hmm...

Jan: ...but that's, that's ahead of us, that's a, that's a 2024 [laughs] ambition at the moment.

Paul: We are only at the start of the year, so there's another 10 months, [Carolynne laughs] 11 months for you to solve all of these problems and get it all, all wrapped up with a nice little bow.

Speaking of, let's wrap this episode up with a, a nice little bow. Thank you very much, Carolynne, for speaking to us about all this. It's been a really interesting conversation. It's been great to have you on the podcast.

Jan: I hope your...

Carolynne: ...thank you so much for having me...

Jan: ...I really hope your cold recedes into the distance very quick.

Carolynne: Me too!

[Theme music]

Paul: So, next time Jan we'll be joined by Dr Lucy Wishart from the University of St Andrews. Not speaking to us about golf [Jan laughs] which is what immediately comes to my mind when I think of St Andrews, but rather speaking to us about things such as circular economy, waste and policy.

More policy discussion fits in nicely there, because obviously she's done work with people such as the, the government up in Scotland and such.

Until then, I'm Paul Turner.

Jan: And I'm Professor Jan Bebbington.

[Theme music]