Speaking of Research

South Coast Doctoral Training Partnership Podcast

Series 1 – Episode 2 – Nishit Srivastava

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SPEAKERS

Catherine McDonald, Nishit Srivastava

Catherine McDonald 00:04

Hello and welcome to Speaking of Research, a podcast from the South Coast Doctoral Training Partnership. I'm Catherine McDonald, and in this first series of our podcast, we're talking about impact and how researchers can achieve it. We're recording at the amazing Cumberland Lodge, and we're speaking to doctoral researchers about their research, who might benefit from it, and how they hope it will make a difference. In this episode, I'm joined by Nishit Srivastava from the University of Portsmouth, who's researching policies enabling sustainability transitions in the UK heritage sector. Nishit, that sounds fascinating. Can you tell me a bit more about the research?

Nishit Srivastava 00:48

It is fascinating indeed. Mine is an interdisciplinary research which focuses on the role of policies which affect sustainability transitions within the UK heritage sector.

Catherine McDonald 00:59

Can you give me an example of that?

Nishit Srivastava 01:01

So right here, right now, we're sitting in Cumberland Lodge, 17th century, grade two listed historical home. Historical building, it's old, but is built to last. However, when it was built, it was built to be run on traditional sources of fuel, but increasingly so policies in the UK require sustainable fuels, which require energy transition at a sectoral level. So, if we were to consider

our example in Cumberland Lodge, you require retro fitment of novel technologies within the old structure. So, you have this peculiar problem of trying to decarbonise old structures, old artifacts. And this ranges from build structure, built environment, as well as mobile structures or mobile environments. So, you're looking at historical homes, historical buildings. One out of every home is a historical home which is built before 1919, right? So, you have a sizable building within the building sector which are historical. Mobile artifacts, you have heritage railways, steam locomotives which run on a steam coal. You have a traction; you have road vehicles which run on traction engines. You have steamboats. In Bristol, there's a massive maritime heritage, which people of this country adore, right? So, you want to save old artifacts in a new policy environment, which requires them to be repurposed to adopt novel technology. So, this is where my research comes to the fore. Where I want to, I want to go from theory to policy to practice. I want to see what the pending sustainability challenges within the academics are. Then I want to search for best fit policy mix, net zero policy mix for the sector. And then I want to propose a novel business model for the fragmented, unfortunately fragmented sector, which is heritage, which sort of combines everything together to make it future proof and built to last, like it always has been.

Catherine McDonald 03:31

And can I ask, what motivated you to look into this? What's the story behind why you wanted to do this research?

Nishit Srivastava 03:38

So I did my masters from Manchester Met, and parallel to my masters, I was selected as a senior research assistant for the university's Bio Coal Project, which I was from the business side of the project, the engineering side wanted to create a novel product as possible replacement fuel to steam coal within heritage locomotives. Now me as a person, I love all things. And myself career wise, I did six years within fossil fuel industry. So, I was in bulk, liquid handling, operations, etc. So, I love all things. I wanted to steer my career into sustainability or the drive towards net zero, and this was the perfect opportunity available to me, and that's how I you know, I got lucky, and I got interested.

Catherine McDonald 04:33

And tell us about the methodology that you're using. What research methods are you using to conduct your PhD?

Nishit Srivastava 04:39

For sure, so I have three research questions. Per research question, I have a set of methods. I want to flow from theory to policy to practice, as I mentioned before. So, within theory, I want to follow a problematizing review, which wants to look at the pending challenges or remaining research areas within the field of transitions, sustainability transition or energy transition. So, I

want to see what the academic says, you know, what are the theoretical constructs and where are certain theories not available. You know, then I want to follow through to policy. So, I want to conduct semi structured interviews with the who's who of the Heritage sector, not just heritage sector, but also certain sectors upon which heritage is dependent on. So, for example, iron and steel. That's where the sector gets its goal from, right, which, as it happens, has been banned in the UK, but it is still being managed. So, I want to study heritage, I want to conduct interviews with immediate heritage sector and some of the more dependent, horizontally dependent sectors. Now if I move to practice, theory to policy to practice. Within practice, I intend to use social network analysis to study the value chain level leanings, or supply chain level leanings of various entities within the built and mobile features of the Heritage sector. And see what is the level of centrality? Which is more, which entity is most important, which allows me to, you know, direct my solutions to those who are highly influential within this fragmented, yet very diverse sector.

Catherine McDonald 06:48

So talking of your solutions, what new insights do you think your PhD is going to provide? And then how do you hope that those insights will benefit people? And so how are you going to try and ensure that your research has the impact it should have, that it deserves? What are you going to do to try and get it in front of the right people, if you like?

Nishit Srivastava 06:59

So I will take the latter half of the question first. In terms of benefiting people. So Centre for Economic and Business Research in London, which is a consultant in its 2024 report, consultation report to Historic England, studied the gross value add of the Heritage as a sector to the UK GDP, and they found out that it was economically, it was it came to £15.3 billion pounds. And that's that is the those are the direct effects, the direct contribution, aggregate contributions, because you obviously it interacts with a host of other sectors, such as construction, et cetera. It was three times as much. So, you're looking at a massive, massive economic contribution employing half a million people in the UK, and increasingly so because of the triple effects of pandemic cost of living crisis are rising out of energy crisis. And then, you know now the geopolitical situation, the worsening geopolitical climate, many of these entities have started to lose business value. Add to that, primarily the green energy drive. So, you have a perfect storm of issues. There is net zero or green policy driven at one end from the centre. But then there are, there is a sizable gap or lag in how these policies play out at the ground. So for economically, if it is about saving heritage, saving heritage by sustaining it and making it viable. Novel insights, in terms of, in terms of novel insights, I think if I am to apply the concept of sector coupling, which is, which is primarily the bit in sustainability transition, which I am focusing upon. And it is a very novel concept. It is still at a conceptual level. But if I am to provide some link of this novel concept to the use case of heritage, I will expand the ambit of this concept so it will have academic, novel insights, and it will also provide with

transformation of the heritage business model. Obviously, I mean, the current dissemination activity in the form of podcasts is a big one. I mean, I am looking to connect with people because it will greatly impact my own research. It is a prime part of my research to connect with people. So definitely your medium is a big one in this endeavour, and plus, previously, I have, since I've worked, I've worked in a project which concerned the mobile features. I did connect with some of the people, some of the decision makers from Heritage Railways or Steam Boat Association, etc. I want to expand that to the built side as well. Earlier I did LinkedIn, emails, cold calling, etc, all the shoddy work. So this is a very refined, a very refined way of trying to approach people. This is my hope.

Catherine McDonald 10:39

Well, Nishit I wish you all the best for such important work. Thank you for talking to us today, and thanks to you for listening to this episode of Speaking of Research from the South Coast Doctoral Training Partnership. To find out more please visit southcoastdtp.ac.uk. Don't forget to subscribe wherever you get your podcast to access earlier and forthcoming episodes. This was a Research Podcast production.