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[SPEAKER_00]
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[SPEAKER_03]
Hi and welcome to the episode 8 of the RegInno Podcast by Centre for Innovation Research, University of Stavanger.
My name is Muzamil, joined by my co-host Raj today.
And today we have with us Professor Andrés Rodríguez-Pose, who is Princesa de Asturias Chair Professor at Department of Geography and Environment at London School of Economics and Political Science.
Welcome to RegInno Podcast, Andrés.
How are you feeling today?

[SPEAKER_01]
I'm feeling very well.
Thank you very much for the introduction, Muzamil.

[SPEAKER_02]
And I think, hello, Raj.
Hi, Andrés.
But also to add, he's also a professor at the University of Stavanger, which he's visiting right now.

[SPEAKER_03]
How could I forget that?
Professor 2.
So, Andres, I would like to start directly by your story as a scholar, as a professor.
How did it all start?

[SPEAKER_01]
How did it all start?
It was not planned.
When I was little and growing, I never intended to become a professor.
I had other ideas, but then you start going to university, you like what you do, you have fun, you enjoy, you meet people, you meet new friends, and suddenly you go from doing an undergrad to a master's, and you find that that's interesting, that you're learning new things, that, of course, at master's we are abroad, that being outside home is...
exciting and interesting and then you end up doing a PhD and suddenly you find yourself at a certain age with a PhD and what do I do?
Well, university is a good option.
So that's how I ended up in university.

[SPEAKER_03]
Okay, yeah.
But then speaking specifically about the field of economic geography, what drives you to this field?

[SPEAKER_01]
Well, my mother says that I always had something in it, although my mother always insisted that if I were to end up as a geographer, I would die of hunger, and that I need to do something serious and relevant.
In the end, I haven't died of hunger.
And then she always told me that when I was little, I used to like looking at atlases, looking at maps, drawing my own maps, looking at the location of things, economic activities, but not just economic activities.
And that was something that was always simmering there.
And when I went to university, I discovered that this was already my passion.
And despite more than 30 years now since my PhD, I still enjoy it and enjoy it very much.
In fact, I think I enjoy it now more than ever.

[SPEAKER_03]
Yeah, I don't want to take over completely, so if it's completely fine.
On a more personal take, I realise that you have two PhDs, right?
Yeah.

[SPEAKER_01]
Yes.
How does that happen?
Well, one option, if it was the real serious answer, I would say I knew that it was a very competitive field and I had to get some advantage over potential competitors.
So I planned everything to get first a PhD and then get a second PhD so I'll be better in the label market.
But no, that's not true.
It was nothing like that.
When I finished my undergrad, I was admitted into the PhD program in Spain at the Complutense in Madrid while I was in my military service.
That program allowed me also to do a master's abroad and to do an additional master's.
There was this place in Florence called the European University Institute.
which offered the possibility of going there to do a PhD and to do a Masters.
So I applied with the idea of, this is good, I can go here for a year.
Of course the location is fantastic, it's on the fields overlooking Florence, with one of the best views of the Duomo, so it's a fantastic place to be in.
And suddenly I was accepted into the program.
And while I was there, I had so much fun.
It was so enjoyable that rather than, why do I want to stay one year?
I might as well stay for longer.
and do another PhD and enjoy life the way I'm enjoying it here.

So I wrapped up my PhD in Madrid and then continued with the second PhD.
My PhD in Madrid is in geography.
The second PhD is in social and political sciences.
And I just did it because, first, I enjoyed the place, I enjoyed the topic, I enjoyed doing the research.
but also because some of the friends I made in Florence are currently some of my best friends and I still go on holidays with them.

[SPEAKER_02]
But perhaps there is a correlation between being the GOAT in the field and having two PhDs, right?
Because you're now the best in the field of economic geography.
Thank you very much, Raj.

[SPEAKER_01]
I really appreciate that.
But I think there are a lot of people in the field that are extremely good.
And I don't think we can compare ourselves to either Tom Brady or, I don't know, Messi and Cristiano Ronaldo.
Most of us that...
do well, we do well, because we enjoy and many of us are actually very close friends.
Absolutely.

[SPEAKER_02]
And what you've done is fantastic in the field.
We'll talk about your current and recent research about AI and regional development in a bit, which I know you're also going to present here tomorrow.
But looking broadly, before we get into that, what are some of the themes that you've worked on within regional development over the years?
And what is that theme that you've enjoyed working with the most?

[SPEAKER_01]
Well, the good thing is that I am very curious.
This is something that came, I think, by default.
The way I was conceived is that I like learning things.
If I have something that I don't understand, I like to understand how it works, and that's from very little.
The problem might be that then I have worked on far too many fields.
which ends some for some people implies a lack of focus for me it's just intellectual curiosity so within the whole denominator of development economic growth and inequality i've covered virtually everything that moves yeah from a thematic point of view I started with uh
determining what or looking at factors behind regional development, fundamentally looking at human capital, looking at innovation, but also increasingly developing the whole idea of that institutions matter, but not just that they matter how they matter.
I have become really interested on issues related to

decentralization and specific to what extent does decentralization actually contribute to greater development.
I have worked quite a lot on public policy issues, looking at specific policies, not just regional development or cohesion policies across the world, territorial development,
but to a large extent also covering other types of transversal policies from education to infrastructure etc.
And of course what I've become known in recent years is by the link or the political economy of territorial inequality which now is the geography of discontent and the famous sentence that I put in my 2018 paper which is 'The Revenge of the Places That Don't Matter'.
the rise of anti-system voting linked to economic stagnation and relative economic decline and what drives that and what are the consequences of that.
But in between, I've been touching on quite a lot of other things like happiness, subjective well-being.
I have been working quite a lot on solitude
and other issues that I think are intellectually stimulating and sometimes keep me awake at night as well.

[SPEAKER_02]
Yeah, that's a really broad range of things.
And I've been very fortunate to be your student in your master's.
I've read
Many of those papers, almost never all, but I've read many of those papers and it's really interesting.
Now, getting back to your most recent work that you're also going to publish, AI and how it shapes regional innovation and regional development.
Can you share us what is it that you do and what is it that you find?

[SPEAKER_01]
Well, I've been working on AI with collaborators because I think one of the good things about doing research is that you get to work with a broad range of different people.
And by working with a broad range of different people, you make friends and you learn quite a lot from them, and hopefully they learn from you.
So this is work that I'm collaborating with two people, not simultaneously, but separately, with Zhuoying You, who is now in China, in Fuyao, who was in Europe finishing her PhD at Leuven and then with Federico Bartolucci who was also my student in Local Economic Development at the LSE and is now doing his PhD in Cambridge.
And why AI?
Because AI is transforming everything that we do.
And there's a lot of analysis about AI.
There's a lot of the implications whether AI is going to take over the world, not take over the world.
But what I realized is that there was very little about the economic development implications of AI.
and how does AI affect, in different places, economic growth, employment generation, productivity, and also innovation.

So with Federico I've done much of this work for Europe, and with Zhuoying it was focused on China, but also to a certain extent in Europe.
The one that is the newest and I think has got more promise is the one I'm doing with Federico right now on the difference between AI generation and AI adoption.
Most of the focus has been on AI generation so far and the idea that AI generation is going to
have significant implications for the concentration of wealth, because it would be a winner-take-all.
There would be either Anthropic, or there would be OpenAI, or there would be Gemini.
And as a result of that, it will be Google and Alphabet that will lead the field and would gather all the rents.
So there would be a massive concentration.
And of course, the implications, according to some, would be that that would mean a catastrophe for jobs, because it's not just...
the low entry jobs that were affected by robots, but it's now medium and high level jobs in white color fields that are at risk.
The idea that I could be replaced by a bot and do my classes much better than I can do.
But I thought this was one part of AI, and there was far too much doom and gloom.
So what about AI adoption?
And we are all, in one way or the other, using AI, and the fact that entry into AI is far lower in terms of costs and in terms of skills that are needed.
That, for example, doing the traditional route for innovation and economic growth, which very often implied significant investments in human capital, but more importantly in research and development.
And what we have done is we have mapped, in the case of Europe, the geography of AI generation on the one hand, which is massively concentrated geographically.
In fact, Europe is lagging behind, but there are only three regions where really there's some part of AI generation and patenting, which is
ASML in North Brabant in uh in the Netherlands or Paris with Mistral or if you want to go to Munich with Siemens and beyond that there's actually very little and AI adoption
which is far more widespread.
For example, a country like Norway, which has virtually no AI generation in terms of patenting mission, it's one of the pioneers and the leaders, not just in Europe, but in the world in AI adoption.
And what are the implications?
And what we found is that in terms of generating economic growth, AI generation leads to economic growth, but its impact is relatively limited and it doesn't spread beyond the centers of hubs or the foci where it happens.
AI adoption, by contrast,
has a significant impact across the field.
And what is interesting is that the returns are far higher in the middle of the distribution in terms of research and development, for example, or that the areas that are not at the forefront of

innovation are the ones that are getting the biggest returns of AI, both in terms of innovation, but also in terms of economic growth. And as a result of that, AI can be a phenomenal machine for economic development in areas that until recently have been falling behind, albeit there's a problem, especially for those at the very bottom of the research and development distribution.

[SPEAKER_02]
That is super interesting, Andreas.
Does it also have implications beyond just AI?
I mean, in general,
Because now research has been focused a lot on how to focus on making the most complex technology.
Can we move from that to say how regions can adopt the most complex technology, recombine them and use them for something differently?

[SPEAKER_01]
I think this has phenomenal implications for policy.
The obsession virtually across the world is how can we replicate Anthropic?
Or, how can we replicate OpenAI like it was in the past?
How can we create the new Google?
Of course, the problem is that when you start from scratch and you're so far behind, so let's talk about the case of Europe.
For Europe to catch up with the Americans or even the Chinese that are already miles ahead, that are investing massively
and that have got and are attracting the human capital to do these things, very often from all other parts of the world, means that it's going to be very difficult to catch up.
We're always going to be not just one, two, three steps behind.
If any of you like cycling, I would compare this with the Tour de France and we're climbing
one of the famous mountains, for example, Alpe d'Huez or Tourmalet.
And we Europeans are starting the climb with a bicycle that has got three or four gears and a basket with the food to go to a picnic.
at the front, and we're seeing the Chinese and the Americans at the summit there with state-of-the-art bicycles, and of course with a massive amount of doping, which is state aid that has gone into that.
So catching is going to be almost impossible.
Having said that, adoption offers a far more promising sort of route, because it means that, yes, we're going to be dependent on others.
which is problematic from a geopolitical point of view on AI generation, but we can use AI adoption to actually build on our strengths, on areas where Europe is leading or has the potential to compete and lead.
And as a result of that, generate other strengths that would be the choke points.
So we become a more interdependent economy, which is what we have been doing.
And following the principle of, let's say, comparative advantage that was settled by Ricardo, that you specialize in those areas where you have the most significant potential.

You don't try to chase pipe dreams that might end up in a situation in which you invest into something where you might be just completely lagging behind and never achieve it and create a significant opportunity cost because you are undermining investment in those sectors and areas and places where you have a significant potential to make a difference.

[SPEAKER_02]
That's super interesting.
And I can also, before I give to you, I can also think of a parallel industry that might not have the exact same implications, but similar.
Some of my colleagues are doing research on battery value chains, right?
High energy density value battery.
They're significantly well developed in China and Europe cannot really compete with the technology, but probably they can adopt it and systematize their existing competitive advantage and adopt batteries and do something better super interesting and relevant, Muzamil.

[SPEAKER_03]
yeah uh Andrés i have recently been uh reading a lot about economic history especially the British industrial revolution you know Europe was at the forefront of innovation. According to you where does the Europe lost the train?

[SPEAKER_01]
Europe hasn't lost the train.
We are taking a train to a different place, which is not the train going in the same direction.
In fact, Europe is leading in quite a few areas.
Let me just give you some examples.
We're talking about AI and the AI revolution.
The AI revolution cannot happen without Europe.
So ASML, which is...
one of the largest, if not the largest, it has been the largest companies in Europe, is a company that emerges virtually out of nowhere, a spin-off of Philips in Eindhoven.
In fact, engineers from Philips that were dismissed, and because of family reasons, they didn't want to leave the region, so they settled in nearby Feldhoven, 55,000 inhabitants, by the way, and created a firm that generates the lithography machines that are behind the chips that propel the air revolution.
So in that, we are leaders.
And at the moment, no one can replicate that.
The Chinese might be close, but this is where Europe has got significant lead.
When we're talking about the vaccine that went from COVID, of course, there was a lot of competition in terms of research, but the actual leader turned out to be BioNTech.
And here's also another interesting fact, is that it was not in Paris, it wasn't in Munich, it wasn't in Rammstadt, it was in Mainz.
And Mainz is by all means a good university, but if you look at the

rankings in Germany,
It was a mid-ranking university by two researchers of Turkish origin, so migrants, that create their own spin-off and they are, because of the research they were conducting, much more ready to actually accept the challenge.
and provide the innovation and the research that goes behind the vaccine.
The main problem they had is that they had to partner with Pfizer, a big company, to actually produce it massively.
So that was... But...
We're also leading, for example, in diabetes drugs and weight loss drugs, like the work that has been done by Novo Nordisk in Copenhagen.
And if you push me, I can mention Spotify, I can mention Skype that emerged from Tallinn, that was then bought by the Americans.
But it doesn't have to be high tech, medium tech.
what do we have in medium tech?
Firms that emerged not that long ago.
So from Lego in Billund to IKEA in Älmhult, or for example, the biggest apparel company in the world,
which happens to be Spanish like me, not from Madrid or Barcelona, so Inditex, but from a place called Artesio, which is the suburbs of a city like La Coruña, that is really at the end of Europe, in a place that is called the Finisterre, so the lands end of Europe, overlooking the Atlantic Ocean.

[SPEAKER_03]
Yeah.
Then we could maybe talk about the keyword.

[SPEAKER_02]
I think I want to ask one question before we do that, which is, I want to, I mean, ease down the tension a little bit and go to a more casual question.
From your experience, Andrés, reflecting on your own life and what you see around you, would you have some suggestions for aspiring and upcoming students at the PhD as their postdocs?
What advice would you have to be really good at what they do?

[SPEAKER_01]
Well, the first thing that you need to do is, there are two things that people always ask me.
Well, more than two things.
People always ask me about what should I do?
How can I become a researcher?
How can I make sure that I actually deliver on something that is going to attract attention and be cited?
And there's not a simple answer.
The main answer is if you're obsessed about trying to be successful and getting a lot of citations or getting a lot of publications from the very beginning, probably you're missing all the fun of the whole process of doing research.
That would come.
And try not to get obsessed.

What is the next fashionable topic?
Because fashions come and go.
My advice is twofold.
First, you need to be interested and passionate about what you're doing.
Of course, your passion, like all passions, may come and go.
So when I finished my second PhD, despite the fact that I was having a lot of fun, I couldn't actually read the thesis.
It took me two weeks before my viva to not even finish the thesis.
And then I didn't touch my topic for about eight years in the thesis.
And then one day that passion was rekindled because I was bored in my office, got the book of the thesis and something that right before my viba, I was so bored that it took me two weeks to almost not be able to read it.
I read it in four hours and I said, this is really good.
So I might as well do something else.
So that passion is rekindled, but you have to be interested in what you're doing.
And in the process, you have to have fun because if you have fun, then the passion doesn't wane, or you can actually move into something else that is highly related.
If you have those two things,
Publications will come.
You'll eventually, if you're patient enough, become fashionable because fashions come and go.
So when I started working on institutions, institutions were not fashionable and then they became fashionable.
When I started working on innovation left behind areas, people would say, why are you doing that?
And then they became fashionable.
And then they might disappear.
But if you have
a different, a large array of topics or summary.
Eventually, there will be a point in your academic life, sooner or later, that where you'll be riding the waves.
Of course, you need to have patience and to have a bit of luck.

[SPEAKER_02]
Yeah, but I remember very well the words you said in probably our first class at the LSE.
You said, we don't only teach science, we shape science.
So it's probably you creating the fashions as well, like you creating the waves, you know, in a way.

[SPEAKER_01]
I wouldn't... Raj, I don't know whether I said that and I wouldn't overstate it.
One of the things you have to realize is that if we write a paper
We're lucky if the reviewers of the paper actually read the paper.
Most papers that we write are read by no one.
Just by writing a paper, you're not going to become fashionable.
Papers don't promote themselves.
If you're passionate about something, you need to write a paper

because that's the way of being recognized by the scientific community and getting options to get a job and be promoted and things like that.
But you have to do all the other things that come with it.
So you have to go and knock on doors and talk to industry or talk to decision makers and say, look, I'm finding new things.
This might be important for your firm or this might be important for your, let's say, decision making.
This might be important if I can get some funding in terms of pursuing this type of research.
But it's also that you need to go and trumpet what you're doing.
Do the podcast that you're doing.
I come and I talk about AI and people might say, well, perhaps that's interesting.
And if someone hears what we're talking about, they might say, well, maybe we might think about the use of AI in a completely different way from what is being said by others.
And then you are putting the seeds of ideas that would influence not just further research, but that will help shape attitudes towards things, policies, in my case, and also, ideally, shape societies in a way that would impact for the better in the lives of individuals.
That's really beautiful.
I think now we can go for the keyword.

[SPEAKER_03]
Yeah, so we have a keyword left by our previous guest and that's uh WebAI so you have to speak maybe two sentences and after that you have to give a keyword to our next incoming guest

[SPEAKER_01]
Who will have that keyword?

[SPEAKER_03]
I think it's Gesa

[SPEAKER_01]
Okay.
So I have to talk with her because I know what web means.
I know what AI means.
I'm not sure what web AI means.
But anyway, I'll talk about the role of AI and AI that can be used by everyone.
The advent of AI is fundamental.
It's like any sort of
let's say, innovation revolution that we have had in the past.
And this is something that is going to transform societies.
What is the role that we have as researchers?
We need to understand how it works, and we need to understand how it works much better, which means engaging with it, not as researchers, but being users in some cases.
I know that some researchers like Pierre-Alex Baland is becoming sort of developer in this field as well.
So we need to work with it in order to understand what the

implications are.
What the advantages and what the shortcuts in my view like all let's say technological revolutions in the past I'm rather optimistic I think that AI is going to help shape societies for the better improve the quality of life of individuals and in the long long run generate more jobs increase productivity and increase the well-being of people wherever they live. Having said that
that would be, like with other technological revolutions, a transition period.
And that's important because the transition period is fundamental. If the benefits of this AI and technological revolution accrue to very few people located in very few places, whereas the immediate impact would be negative for the rest.
We might risk derailing any sort of future benefits.
So we need to understand how can we make AI a source of benefits for a much larger group of firms, and as a result of that, individuals, living in many different places in a way that we can harness the benefits, minimize the risks, and at the same time, making sure that we can use AI in a responsible way, in a way that is going to transform our societies for the better.
The keyword for the next guest?
Okay, the keyword for the next guest.
I don't know who the next guest is going to be, but I just put a general one, which I think is an everlasting and evergreen sort of question that still hasn't been addressed, which is inequality.

[SPEAKER_02]
Inequality, that's a very important keyword.

[SPEAKER_03]
Yeah, interesting.
Well, thank you, Andrés, for this wonderful conversation.
I really enjoyed it.
And how did you enjoy it?

[SPEAKER_01]
So it's always very nice to be with you, Muzamil and Raj.
And thanks for the question.
And I just hope that our readers, or not readers, in this case, listeners, will enjoy what we have said.
And I would encourage, if I have managed to encourage anyone, to say, look
follow your passion, follow your ideas, just live by your standards and make sure that you have fun while you're doing it.

[SPEAKER_02]
Thank you very much, Andrés, for the conversation and also the motivation.

[SPEAKER_03]
Thank you very much for joining us and we'll keep uncovering stories, ideas behind academic papers that shape our understanding of innovation and regional economic development.
Thank you very much, Andres.

[SPEAKER_02]
Thank you.

[SPEAKER_00]
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