

Claudia: Okay, so your point of view on other recent research emerging about people saying we're going to have less jobs because of artificial intelligence, and maybe to use the universal basic income as social cohesion. What do you think about this?

Dr Ewan McGaughey: So the first thing is whether we're going to actually lose jobs because of technology. So that's just an empirical question, and what I have evidence to answer [inaudible 00:00:37]. The problem is that all sort of predictions about which jobs are going to be lost are just predictions. It's like trying to guess how stock prices move-

Claudia: Yeah.

Dr Ewan McGaughey: ... in the future, or which race horse is going to win the Darwin. So you just don't know. And the method that people use started with the paper by Frey and Osborne about The Future of Employment. The group of method that they did is that they got a list of, I think it was something like [inaudible 00:01:06]- jobs.

Claudia: Yeah.

Dr Ewan McGaughey: And then they just got a bunch of their friends or colleagues also supposedly machine-learning experts. And they went down the list and said, "Do we think that that one can be automated » and then put a tick." "Do we think that one can be automated?" "No." "What about that one?" And they just went down the list, and that's how they came up with this idea that 47% would go over some ... And then they said over some unspecified number of views. Now, I don't think that's a credible method at all. Again, I think it's just like predicting race horses, you can't do it with any credibility. You can say, I think that if you might see technological change creating redundance, but unemployment is a completely different thing.

So in America, the White House did a paper. In America, every three months, six percent of jobs are destroyed and recreated.

Claudia: Yeah.

Dr Ewan McGaughey: Right? And so, that's people being redundant. That doesn't mean there's going to be unemployment. It's also cause of unemployment is completely separate from technology. Technology only [inaudible 00:02:17]. Now, then the second part of your question is about universal basic-

Claudia: Yeah.

Dr Ewan McGaughey: ... income, and how society could respond to technological - Let's not say unemployment, but technological displacement.

Claudia: Yeah.

Dr Ewan McGaughey: Now, now. There have been answers around for a long, long time about how we deal with redundancies. Lately more insurance that you have job security, so the

employer can't fire you without a good reason, or implore economically unnecessary leaving of them, you get compensation, so you get severance pay. And then the second thing is the social security system. So, everybody has a right to unemployment insurance, and you know, we've also got a right to old age pensions and the right to limited amounts of paying during childcare.

So the welfare state has all these different mechanisms to ensure that we have an income or relative wealth. So the argument of basic income is basically a good one in that it can sort of fill the gaps, and so you know for people who do not

Claudia: Yeah.

Dr Ewan McGaughey: ... necessarily fall into, "Well, I've been fired. Or I'm getting child care" price. So that's one of the positive things, but it's not really a new idea. It's just what we've been doing in social security for a long time. So, I'm in favor of universal social security.

Claudia: Okay. And let's say you're right, but for example, I read like two papers about paralegal work and how the semi-skill jobs could be automated easily actually because they don't require human subjectivity or for this kind of job, what would your response be to this then?

Dr Ewan McGaughey: Well, so I once did a paralegal job in the law firm. It's so boring, and you know, if that job could've been automated, that surely is going to make all of most society better off. Really good example of labor saving technology for people who are not working is the washing machine. When the washing machine was invented, it meant that people didn't have to spend like literally a whole day working once a week to wash all the clothes, and that's usually women. So the wonderful technology both for gender equality at the same time, so the technologies that would help the workload of people who are doing paralegals, would surely be a good thing. You've got to make sure that people still have other better jobs to do.

Do you know the book Animal Farm?

Claudia: Yes.

Dr Ewan McGaughey: By George Orwell.

So when the animals took over the farm, they thought that they every year they could use technology to improve everyone's lives. And gradually if people would be able to work less and less and less, you'd have more leisure time. And that's the goal that we need to get back. That's perhaps the third type of social policy, job security, universal social security, and progressive reduction of work time. It would be a great thing to see.

And I'm not saying jobs won't go. They will. But I don't think that all the hype is real.

Claudia: Okay, and so when you read that countries are preparing for this new technological disruption, what does it actually mean when they're talking about preparedness ?

Dr Ewan McGaughey: There's a lot of things that different people could mean. So, you've asked me what I think-

Claudia: Yeah.

Dr Ewan McGaughey: ... would prepare us for technological change? I think that the countries that are going to best towards have the best social policy. America is in a really terrible state now in terms of social policy. There's no job security, unemployment benefits have been slashed. You have to get food stamps. People have ... One of the biggest causes of bankruptcy is medical bills. So technological change really affects American workers because they really have not a lot to turn to.

Claudia: Yeah.

Dr Ewan McGaughey: Countries like Norway, like France, do far far better because there's a good social safety net that make sure people [inaudible 00:06:40]. Another really important ... And tell me if this is too long.

Claudia: No, no. Continue.

Dr Ewan McGaughey: Another really important thing is who owns the technology.

Claudia: Yeah.

Dr Ewan McGaughey: So, the worst case scenario is you've got people like Mark Zuckerberg, Jeff Bezos, and Elon Musk. All people who are saying there's going to mass unemployment and you need basic income. The worst case scenario is that people like them own all the capital and own all the technology, and they're getting billions and billions and billions in their income's soaring off into the stratosphere, and everybody else is left with almost nothing. What we really need to see in every country that hasn't done it yet, is looking after who owns the capital. Who controls the capital that companies hold. Who are the shareholders? And one of the best ways to ensure that there's a more equitable distribution-

Claudia: Okay.

Dr Ewan McGaughey: ... on capital, is to look at how the pension system works. Most capital comes from people who are saving for retirement in pension funds. And we can make sure that people, through their pension money, can control who votes in company shares and more of the capital, that would be a very good thing.

Claudia: But are you saying regulation, is it first of all, actually to regulate what's happening now ?

Dr Ewan McGaughey: Yes. So there's two sort of basic different ways that you can ensure more equitable distribution of who owns the technology and who owns the capital. One way is through tax system, and of course there's a whole bunch of arguments about whether higher taxes are good or bad for equity and performance. But the taxes are so low now

compared to historically, and inequality is so high. So I think the taxes have got to go up on the billionaires who can afford it. They certainly shouldn't be less taxed, which is the case with a lot of the super rich.

The second thing that you can do is, make sure that collective bargaining is restored, so people have more of a voice at work. I don't know if you are a member of the National Union of Journalists, you've only just started. So there's a union for you, and I'm in a union. And what a union can do is it can ensure that we have a voice to get fair wages at work from our employer. If all the Amazon workers has got together and bargained with Jeff Bezos about what their wages were, they could take more of shares in capital. Jeff Bezos has gotten so much money now that he is talking about space travel. It's absolutely insane. A lot of Amazon workers are receiving welfare payments in America because they're wages are so low. So we've got to do something about tax, and we've got to do something about voice of workers.

Claudia: Okay, and one question from our community was raised by people from India. In this country, import and exports are extremely important...

Dr Ewan McGaughey: Yeah.

Claudia: It is then fair to wonder how this country will actually be affected because the kind of technological systems that are being used could be easily automated. So what's the solution for this kind of cases ?

Dr Ewan McGaughey: Yeah. I think there are sort of two basic views. One could be the different countries are susceptible to technological change. If you've got a big manufacturing sector, or if you're processing rapid development like India, then you can very easily see technology displacing a lot of job as automation takes place.

It's not the technology that creates unemployment and dislocation. It's the social policy. So just like any other country, India is capable of changing its laws to ensure job security, universal social security, and fairer tax and system. So, one of the best things that India can do is ensure that each state in the country that has a federal government in one of its states, that each state has the power to regulate wages. India's actually a fascinating case because worker protection has slowly been going on, and in some ways, compared to America, you can see India doing even better quite soon. America's in a really difficult position.

China's another fascinating example of labor rights protection even though its an authoritarian political system. Actually, in the equality, labor rights are certainly being improved on as well. Even though there's highly developed- quite rapidly developing society. Massive manufacturing center. It's really social policy that matters and how you respond to the technology.

Claudia: Okay, and how do you believe artificial intelligence could actually recreate new demand for services and create new jobs. Because there is the social policy part, and there is this other idea about how this is going to bring new demand.

Dr Ewan McGaughey: That's an interesting question. Maybe I can sort of answer a slightly different question because I think the really important thing is that technology can allow us to work less. I think you can think of it examples of technological change where new jobs are created out of the new piece of technology. If you bought an iPhone, you need iPhone technology in order to repair. That sort of new job for-

Claudia: Yeah.

Dr Ewan McGaughey: But the really important thing, the really great thing is if new technology allowed us to work less. So European Social Charter of 1961 [inaudible 00:12:53] section 2-1, says that all European countries that are signed up to the charter should be able to progressively reduce working time.

Claudia: Okay.

Dr Ewan McGaughey: And we can see that happening a lot faster. Back in 1930, famous economist called John Maynard Keynes proposed that if we continued on the trends back in the 1920s, we could be working 15 hours a week by the 21st.

Claudia: Sorta amazing.

Dr Ewan McGaughey: It's really achievable. The work weekend did not exist before 1920s, and so a two-day weekend is a creation of collective bargaining in the 20th century because before, everybody just had Sunday off like the Sabbath, one day of rest a week. And collective bargaining created a two-day weekend, and there's no reason why we couldn't go towards a three-day weekend quite soon with the right social policy.

Claudia: Okay. And I have another question. As we hear a lot about the ethical question of artificial intelligence, where do you think ordinary citizens stand in this debate actually ?

Dr Ewan McGaughey: What exactly did you mean by this ?

Claudia: Okay, so Google can make actions for us, but how do we make sure at our scale, without not that much power to decide what's going on at work or house, to be included in the debate. Because as you said, we need to make sure that it's not only the big players who will hold all the assets.

Dr Ewan McGaughey: Well, we have helicopters around us right now because there's massive protest about Donald Trump. So almost everybody in the UK thinks he's sort of a total maniac, and he's a perfect example of somebody ... He might not be a billionaire. He might actually not be very rich at all. But somebody who still represents the billionaire class, and so what citizens can do to stand up to the billionaires who are holding the power, is that they would go into protest, and they can organize into the workplace.

So there are ways I think citizens need to make their voice heard, and especially young people.

Claudia: What kind of jobs do you think are less likely to be replaced, in terms of AI couldn't replace human activity and human skills.

Dr Ewan McGaughey: It's a really good question, and I think it's hard to predict. We just don't know which jobs will be affected by technological change until we've actually gotten the technology. Let me just give you one more anecdote about predictions. Microsoft, a couple of years ago, predicted that they would solve cancer within 10 years. What does that mean, solving cancer? It hasn't happened yet. You've got all these companies making predictions because they want to draw up demand for their own product. They're trying to sell something. That said, I think there's some sort of basic things that make biological organisms in the human brain, different from computers.

So computers can take and aggregate data, and they can process it to rapid speeds. But having data is not the same as what the human mind does, which if you don't understand without having a certain knowledge. The way that computers sort of work and think is sort of rote-learning rather than critical thinking. I mean we all know the difference between somebody that regurgitates something for an exam rather than actually knowing what it means. So that's what a computer is. So, when it comes to creative thought, I think that computers are certainly far behind us. Probably, the most important services that will be very, very hard to replace will be ones that require human contact. Education, I think is important. I mean, I would say that because I'm a teacher, but also social care. Old age care. Young childhood care. People like having a lot of people around them. So anything with that kind of human knowledge.

Claudia: In terms of rights actually, what legal right do robots have in case of mistakes ? Who is to held accountable ?

Dr Ewan McGaughey: There is a very simple set of legal answers to all those questions. So if an enterprise or company controls a piece of machinery or robot and that robot or piece of machinery harms somebody or does something which causes some loss, then the enterprise has to bear the risk of what's happened. That's the same with an algorithm in a piece of software. Whoever owns the software is responsible for what the software does. So a human being can't just say I'm not responsible because a robot did it.

Claudia: So is that law already in place?

Dr Ewan McGaughey: Yes.

Claudia: Does it already cover most of areas ?

Dr Ewan McGaughey: Yes.

Claudia: Fair enough.

Dr Ewan McGaughey: Product liability directors is a really good example. So the product liability director covers all of the European Union. So for instance, if a prints manufacturer puts out a bottle of ginger beer, and it's got a decomposed snail inside and I drink it and I get sick, it's not the guy who owns the company that made the mistake, it's the ginger beer. It's an inanimate object, but the company is still responsible even though it's been passed lots of different things. So it's exactly the same as robots. Robots are just like products, so if they cause harm [inaudible 00:19:47].

Claudia: Okay, I have another question. There are some predictions of automation in some newsrooms in the U.S, or here in the U.K, or even at Facebook actually, where it is used to fact check some sentences, statements... What do you think of this ?

Dr Ewan McGaughey: If an algorithm can do it, and it works, or computers can do that work, then that sounds great. It means that great journalists, like you, can do other things that are more important. You can devote your talent to doing the, sort of, the investigative stuff, or the interviewing, things that can't be replaced.

I should say, I forgot, when I heard the anecdote about Microsoft about solving cancer in 10 years ... This was at a conference in Portugal, so there was a representative at Microsoft telling us this. And the next presentation, we tried to load up the PowerPoint presentation using Microsoft, the operating system. And it kept on crashing. So we were saying, it's all nice to think about solving cancer in 10 years, but if you can just get your computer working first, that would be very nice.

Claudia: Yeah, yeah. Okay. And in your article for LSE blog, you wrote that actually those figures are really trying to scare people about the future of work. What did you mean in the article when you were saying that consulting companies' aim was to actually scare people ?

Dr Ewan McGaughey: Well, so after Frey & Osborne wrote this saying 47% of American jobs are going to go over some unspecified number of years, there were all these firms like FISCO to Deloitte [inaudible 00:21:54] with Kinsey, City Group, and they produced reports saying similar things. I mean, they didn't say 47%. They had some people saying that certain number of jobs are going to go. Consulting firms have conflict of interests in my view because what consulting firms do, or what part of their businesses, not all of their business but part of their business is, they sell services to companies who want to restructure and often fire people. And they also advise companies about how to implement new technology, so what they're doing with this research is not through neutral or credible or defensible academic methods.

They are generating research because it's linked into them making profits, and if their services are involved introducing new technology. And if they've got a narrative that says that this is a negative, then that helps them do their job. I think that's very, very dangerous actually because job security and redundancies is not [inaudible 00:23:02]. at all. Everything that we do with social policy is contraceptive choices, so pretending that all of this is inevitable is trying to take away the elements to keep jobs, which is very, very, very dangerous.

Claudia: Okay. And if I can go back to the point about a law to protect mistakes made by artificial intelligence. I forgot to mention that I believe the most recent widespread examples was the self-driving car, and after this arrived, I read a lot of articles asking these kinds of questions. So, are regulations already put in place also for this kind of case ?

Dr Ewan McGaughey: It depends on the country, right? So to my knowledge, in the U.K., we don't have a comprehensive licensing system of driveless cars, but they're being tested, so I think in Milton Keynes, they've already been testing driveless vehicles. In California, you see lots of examples, so I think that it'll take some time for legal systems to be accommodated. Fundamentally, we don't have a driveless car yet that works really well and is a 100% safe, so when we see that, that's the time we really need regulation. We can think in advance, but I think it would be a great thing to see driveless cars, especially if it can reduce accidents.

It won't affect jobs as much as people think, so about 4% of U.K. jobs are driving jobs, so that's not sort of just bus drivers and taxis. It's all the delivery vehicles and trucks and that sort of things, and those jobs can often be sort of stressful. If you're driving on the road all the time, constantly concentrating and it takes a heavy toll on people who do it. So if we can ensure that people have better jobs, then that would be good.

Claudia: Okay. Thank you very much. You answered everything I wanted to ask.