AI and You

Transcript

Hello, and welcome back to the second half of my interview with Richard Foster-Fletcher. To remind you who Richard is, he is the CEO of NeuralPath.io, an Artificial Intelligence Advisory and Strategy Practice. Formally with Oracle Corporation, he is a graduate of the MIT Artificial Intelligence Strategy Course with the Sloan School of Management and a contributing author to the book *AI: The Future of Finance*, published by Wiley. Richard founded the Milton Keynes Artificial Intelligence (MKAI) community and is the host of the 'Boundless: Designing Our Digital Future' podcast, of which I was the very first guest. In the last episode we talked about some pretty weighty stuff: the relationship between AI and our socioeconomic culture, and how each needs to adapt in order to serve everyone's interests and leave no one behind. And that's what I stand for, on this show: A future that leaves no one behind, that isn't built on anyone's back or at anyone's expense. Either AI is going to be one of the technologies yielding a massive dividend that could be used to lessen human suffering, or we should go home and forget about it. With the kind of benefits that AI could give us, we should be ashamed to use it for anything less than ensuring that no one among us goes hungry, or is poor, or is sicker than they need to be. If we can't figure that out then we don't deserve that kind of power, and it most likely will not work out for us the way we'd like.

That's a lofty goal, of course, but that's the way my thoughts tend, especially after a chat with Richard. We're part of a class of futurists that have emerged as each of us has individually seen the perils and potential of this thing called AI. It's not just us individual futurists, but entire organizations that have sprung up in the last few years, organizations like the Future of Life Institute, the Future of Humanity Institute, OpenAI, GoodAI, the Center for the Study of Existential Risk, the Singularity University, the Machine Intelligence Research Institute, and others. Either we're all drinking from the same bucket of Kool-Aid, or there's something happening. The purpose of this show is to find out.

With that said, let's return to the second half of our interview.

It's just fascinating you know we are so aligned on this, our goals and our methods. Some people might think we're in competition, we're doing the same thing, here we are on each other's podcast, but I don't see it that way at all. I think we need as many voices as possible on this, and if they're saying the same thing, well, how many times do people need to hear that over-eating and not getting enough exercise is bad for them? It took a few thousand repetitions of that in different ways from different people before I got the message.

I remember W. Edwards Deming, the quality guru, berating a set of top executives about competition between each other and he said, you're acting like there is a pie and you want to

get the biggest slice you can out of it. That is not your job, you job is to make the pie bigger. And that is, in one sense a truism about our industry that productivity means making the pie bigger. But it also has a much larger message that our job as human beings on this planet is to make the pie bigger and not trying to grab a piece of someone else's. Once again, we see obvious comparisons and echoes in today's social issues.

Yes.

I know that you are deeply motivated by that and that's come out in this talk and this is reminding me of one of your events that I was at recently; the debate. Tell us about the debate and other debates that might be happening.

Well thanks for mentioning that. We had a debate about ethical AI and we talked about whether it was best to have the most productive, useful AI to flourish or whether it was better to have heavy legislation and have more ethical AI flourish. Now it's a good question but it's also a bit of a non-question and of course with everything it's circumstantial isn't it? I think innovation in way *has* to be able to flourish and it's the same with any sort of innovation: if somebody in a room immediately points out all the downsides then you'll never get any idea off the ground because there has to be some belief in there and there has to be an opportunity for something to flourish beyond a little, an acorn into something bigger before it can really be challenged. And so I have no problem with ethical legislative side coming slightly later.
But I think that's at the micro level and at the macro level we have to see that if the legislation is coming downwards then, like corporation tax we're gonna see the companies developing this just move around the globe to being at the right place at the right time based on financial regulation or development laws or whatever else as they naturally would anyway to access markets or access talent. So I talked about us breaking down borders. So that has to happen. These customers, these companies still want to serve a global market and the global market of consumers needs to be aware of that ethics and regulation is as much as in development of this. Just to pick up on your point before that as well: You ask if it is an offline or online problem and I think we also need to examine ourselves in this as well and acknowledge the innate biases that we have, that so few of us really want to embrace and look at.
There is a thing call the gambler's fallacy and it means that if you toss a coin eleven times and it's 'Heads' you just fundamentally believe it's more likely to be 'Tails' on the twelfth. We see people all over the world believing in conspiracy theories because we are wired for novelty and we have racism. Racism isn't really even a thing. Racism is either an angry person who is just picking on somebody, or it's just classic psychological in-group out- group. People that sound, look, act and behave like me, I'm more keen to do things with them, or hire them or elect them or look after them. It goes right back to basic human traits and we pretend almost that we've risen above that because - another analogy you know we've got very sophisticated software running we've got that basic hardware, hardware 1.0 that still looks at every situation and try just to work out whether there is a real opportunity or threat.

Indeed I was reminded there of a company called BiasSync run by a friend of mine, Michelle Ruiz, that analyzes surveys of a company's employees, and if the company has enough employees for them to come up with anonymized aggregate data they'll do this and they can report to the company what the levels of bias they are operating with among their people are

and make recommendations. But she made the point that everyone has biases so they don't let their technology be used for hiring because people would say, oh this person is biased, I'm not gonna hire them; but guess what? You're not gonna find anyone who isn't. This is used for assessing an organization's overall stance so that it can't be used to discriminate against someone; that would rather vitiate the point. I found that the debate format actually very stimulating. I wonder if you have any plans for more.

I enjoyed the debate and we've had lots of discussion and feedback around this. For me I felt it had a level of seriousness that didn't necessarily suit the format and I think we had professional debaters who excelled in debating and I don't know if we were inclusive enough or we discussed the material enough in a way that struck the chords and notes for what we stand for around inclusiveness and kindness and compassion as a group and that's – so I do want to do more debates but I want to try and marry those things together. I felt it was very masculine energy in the debate which I'm sure some people really enjoyed and to some extent I enjoyed and I think it has an opportunity to go beyond that because debating in itself is a little old fashioned. A right and a wrong, or a winner or a loser; I think we straddle the fence more as a community than that debate style. What do you think?

You are bringing up an old pet peeve of mine about the justice system which is, it's like a cage match: You get two sides in there that are motivated to have diametrically opposed views and the system is set up so that one of them will win regardless of which one actually has the truth, and I think that the debate format encourages that because it invites a winner and a loser as opposed to let's bring everyone together and synthesize the best we can from all of this. I think that perhaps there's a way of extracting the fun part of the debate, the aspects for that, that make for vibrant challenging conversation and maybe using it to build up an outcome rather than tear one of them down. What do you think?

Well that is very interesting. The wonderful thing and the problematic thing of talking to you Peter is that we agree on many things and that's wonderful for my enjoyment of this conversation but it doesn't necessarily challenge me to say what's wrong with that position? I've been sort of almost vegan completely vegetarian for three years now, but I challenge myself to read from the other perspective and find articles last week showing for some people the vegan diet was not optimal and they really were gonna be so much more healthier eating meat. So I completely acknowledge that and I have to accept that as a valid viewpoint for eating meat and if we can achieve that in the group where the likes of you and I can be challenged to say we recognize all the disastrous things that could come from a runaway general artificial intelligence now spin it on its head, and for five minutes Peter for example take the other side of this. And then you might go on to say, but what is it that we're protecting what do we think so sentient and important about being human and if machines can do that then aren't they the same as us anyway? So I think that could be a lot of fun, definitely. Do you think so?

Yes I'd like to see that happen. Maybe we can work on that together. Let me pose a question here it may or may not be hypothetical, but let's say a large corporation comes to you and says Richard we've been listening to what you're saying we want to make some of this concrete. We have the resources; we have people here and - make up whatever sector that they're in - but

they want you to help them make a positive difference in how they use the technology of AI and the effect that they have on the world with whatever their products or services are. What are you going to look for?

A massive question. Peter, and I'll try and steer away from just the philosophy of this. Of course, we want companies to take their role in the world more seriously. The developments, the technology they bring to the fore, change lives immeasurably for the better, but they still seem to be a by-product of chasing of profit. I would encourage a company - and I've been thinking about this for a while - to turn the light on themselves first and you were describing this earlier with your friend, Michelle I think you said the name was - where I would run an entirely internal exercise and I would run extremely carefully to collect data from a number of sources and I would look at email and Slack and potentially some others, and I would use artificial intelligence neural network models to try and understand the nuances that were happening within this company, and why certain outcomes were coming up internally in terms of who was promoted and why, who was in leadership positions and why, how decisions are being made and why, by looking at the way that people speak to each other, the communication nuances as well as the words and if I was brave enough I would benchmark that against my peers outside of the industry, or if I was brave enough, still in the industry and see how do they talk to each other, how do we talk to each other and what millions of micro-effects is that having every day in our business. If I may continue?

Sure.

The biggest win right now for any company I believe particularly corporates is to get more from their staff by creating a level of psychological safety that doesn't exist at the moment. Asking your staff to work harder, everybody works as hard as they can already. There's really not much to be gained in that in terms of productivity. You can give them better tools and whatever and maybe that'll help. Some companies go their own direction and they think oh let's monitor our staff online now that they're working from home let us make sure that they're clicking and doing things for 8 hours. I mean I'll save that for another day but utter madness to think that that's the road. Other companies want to give staff productivity scores. One company I heard about recently just won a hackathon and they wanted to monitor the state of mind for employees, and if they sensed that they're from reading what they're writing that they weren't in the best headspace they would try and cheer them up with a video from YouTube and so on. Well fine ok maybe and then if that still didn't work, they were gonna send an email to HR automatically and say this employee Peter Scott isn't happy and it's like you are missing the point in all sorts of ways about being human there. So, to come back to my point, what can you do to get more out of your staff? You can create psychological safety.
This doesn't mean you can be mediocre at your job. It doesn't mean that you can be rude or outlandish or unpleasant in the place of work. What it means is that you can go into your work, not worrying that you're at any point about to be fired, which is an incredible level of uncertainty and it means that you can go into your workplace and ask questions and speak up and say why are we doing the things that way? May I challenge the status quo in this? - because you think about any corporate -and I've worked for one many years. You know all of the senior vice presidents are told every single day they are brilliant. They give a mediocre presentation and a hundred people go: greatest presentation I've ever seen in my life. Because why wouldn't they,

why do they wanna be the ones that get shot in the head, Peter, for saying actually, you know you could have done that so much better? But if they can't say that, if they just become Yes men and Yes women, if they're worried about whether or not they can speak out against policies, decisions, hiring, excluding, racism, that they see all these sort of things *and* they're worried about getting fired, well you've just filled a lot of headspace for your employee with stuff that is not useful, not helpful, and just gets in the way. So how can they solve that with AI?

Wow so much to think about there. I think you've hit on the important thing of making us as a race- human race ready to use the technology that is coming whether we like it or not. That we're bumping up against the point where human nature has got to shift in order to use the technology we're going to be given responsibly; otherwise it's like giving a toddler a chainsaw: they'll just end up cutting their leg off. So the focus has got to be on improving how we respond, how we communicate, how we behave, what we believe, and how we think. And what encourages me about the dialogue that is taking place in the world right now is that people are willing to examine those things on a deeper level that I have seen in forty years.
So although it's going to be painful, it's going to hurt, I believe that we can come out of the other side of this a better people and better position to deal with the disruption that's awaiting us there from other things. Climate change is not taking a break because we're focused on something else. We need as a species to be able to handle more than one existential threat at a time. And yet our attention span makes that very difficult, and we only want to look at something when it's become so much of a problem that people are dying in the streets - literally. So we've got to grow up, we've got to mature, we've got to be the kind of people that deserve to inherit the technology that's going to give us access to the universe that you're talking about.
Wow! Now you've got me going off on these grand flights of fancy. Thank you; I like that; hopefully our listeners do too. Let me ask you, because you have gone so far ahead in this podcast thing, now how many episodes have you done? What suggestions do you have for me just starting out on that journey?

Well we're officially on Podcast 55. But we did do a mini-series around COVID and we've done a few bonus episodes that I think actually take us to about 91 so we're not too far off the 100. I was just reflecting on that anyway and the way that you're running this podcast Peter and you're giving me, your guest the time and the space to speak, knowing that I'm not going to be interrupted by you any second and I haven't got a continuous sort of 'uh-huh, yes, mmh' happening in my ear which would keep breaking up my thoughts, which just meant that in speaking to you I got a page of notes in front of me with ideas and connections of thoughts that maybe I hadn't made before that you've allowed me to create. I'm not saying anything particularly interesting or world changing on there. I'm not trying to say I'm that person but for me and my own journey of understanding, it is very important and so creating that for your guest is an absolute blessing to them and hopefully create a very enjoyable experience for people to tune in as well.

Well I think we've made the pie a little bigger in this talk and all the ideas it's given me and the notes that you're taking there. So, let's look at another vision and start moving this towards a conclusion perhaps. What's one thing that you'd like to be true about the world twenty years

from now? Give you a time machine, door opens (TARDIS, right?) and you stick your head out. What do you want to see?

I wrestle with this question all the time, Peter, because it makes me question what we really are. There's a part of us that wants to believe that we're special, because of the things that we can do and the communication and the libraries of information that we've created. But if you look at where we are now and where we started in terms of our human journey, yes, it looks like it's a miracle but actually there was just many things along the way, micro-things that lead us to this path of what we might consider to be a path of sentience.

In the next decades, we're accelerating so quickly it's impossible to really understand what exponential growth means. The futurists don't get, we don't get it, nobody gets it and that means that we can't predict the future, but we can still have a goal. My goal for this species if I was able to be asked what it is, is that we become the guardians of the galaxy. That we're able to go out and turn what look like dead planets like Mars and beyond from rocky lifeless rocks into flourishing biospheres, where life in the universe flourishes, Now imagine that we can do that. That we could go out one by one we could turn cold dark planets one by one into flourishing worlds of life. That's a wonderful thing for us to achieve and the journey to there doesn't have to be too far into the future, but we have to make a major step change and we have to realize that we're the same. A black person and a white person are the same genetically, we're absolutely no different, and if we can't get pass that, Peter, we are *screwed*. We're completely screwed, and I don't know if we can, and in 20 years we can be in exactly the same place as now with people on the streets asking for equality. We can be exactly in the same place that we are now where 28 people hold half of the world's wealth. Money was just invented as a system where I can have more than you and any one particular product and rather than trying to find more of that product, I could just have a system of credit. That was why it was invented, and now 28 people are hoarding half of it. We can still be in exactly the same position, or we can start right now and in 20 years have systems of leadership and autonomy and relationships with AI and other technologies that really push back hard on our biases and allow us the things that we're good at and stop doing the things that we *pretend* we're good at. Things like bias and justice and fairness and equality: we suck at those right now. In 20 years we can definitely suck a little less.

That's a great motto and you bring up something really important there which is that we look at the dividend from AI, that the technology can produce productivity gains that pump up the economy and produce a lot more wealth and a lot of people who are boosters for technology development will point to that and say how wonderful this world is going to be and yet we don't have the mechanisms for distributing that new wealth evenly. It all seem to go to the people who already have enough of it but they have used that to buy up the companies that are producing that technology and so they own the thing that is going to make them richer. We have to figure out how to get that money, some of it, into the hands of people who need it. We don't have an acceptable means of doing that. We have means of doing it that are acceptable to some people, but others see it as taking money which belong to them - or could belong to them if they were to make more money - and oppose it. We have that phenomenon in the United States; I'm sure that it shows up in Britain as well; it's a big unsolved question.

Yes you're absolutely right Peter, what do we want to be, and if left to its own devices I think the invisible hand of the market will continue to drive more power, more money into the hands of the few and that's a road to nowhere.

Yes, Adam Smith has a lot to answer for. I too have that vision of being the guardians of the galaxy going out there with small furry creatures and making lifeless rocks into homes and beautiful places again but as it stands right now I would not want to unleash the human race on the universe that might have other intelligent species in it. We have to change to be safe to them not merely safe from them. Wow we are definitely as you say kindred spirits. We have got the same thing going on here and yet the more I talk with you the more ideas I get.

Yeah Peter you're absolutely right and people ask about The Fermi paradox, Enrico Fermi when he sat down for lunch and said; 'Where are they? Where are the aliens?' and given the distance and time that we've had they could be and they should be here and they're not. Where are they? Peter - probably staying the hell away. Wouldn't you?

That is one of the theories. Well you know we could go on obviously all night - that might be too long a show for some people to download - as it is we might end up splitting this one into two parts. How can people find out more about you, engage with your ventures, get in touch with you and what do you want them to know about what you're doing?

Well Peter thank you. We're just trying to create something bigger than all of this. My life's work like yours is dedicated to putting this group of people the AI technology on the right side of history. I'd love people to come and check out my podcast they should start with episode #1 because that's you, Peter Scott, and it was a wonderful episode. You can find it on boundless podcast.co.uk or just come and check me out on LinkedIn everything I do is showcased there. But most importantly just come and join the journey. We're doing all sorts of things, we're collaborating, we're genuinely, passionately, love collaboration for the bigger pie. Come and join this journey towards something than can be bigger and brighter for all of us.

Wow that is the perfect place to end this on. I thank you so much for joining me on this show. Can you come back again another time? I think we're not done.

I'd absolutely love to Peter thank you so much for allowing me to spend some more time with you.

Terrific, Richard Foster Fletcher everyone.

There you have it. I think you got a sense of how aligned Richard and I are there in our visions; he's further along in his execution and I'm very much taking notes. He's good at promotion and I've got to say at this point – if you like what you're hearing, on this show, if you think other people should be hearing it as well, if you know someone who would benefit or be educated or entertained or driven to think and ask interesting questions through listening to this, then please share the show any way you

can, because it doesn't happen by itself. Anything that you, the listener, do in that department is worth a hundred times what I can do; that's just how the game of getting attention works. Give us a review, click on the 5 stars, say something nice, and that helps too because now the AIs behind social media will hike this show up the visibility ladder. That's assuming that they aren't all listening to the show themselves and actively plotting how to suppress us so we don't foil their plan of world domination.

That was a joke, by the way.

What we were getting into there reminded me of my TEDx talk in Surrey, British Columbia, last February. I'll put a link in the show notes, or you can google for Peter Scott TEDx Bear Creek Park. The title was, "How to Save Us From Being Left Behind By AI," and it focused on the question of how the pace of life is now being dictated by our technology and how we need to reclaim that, because AI can easily evolve to the point where it outstrips our ability to adapt to it. We need to – as Richard and I have been saying – grow up, mature as a people, a species, to take charge of the rules we've allowed to become cemented in place about our use of technology.

I know – that may sound impossible. But we love challenges on this show. And I have to tell you, so do kids. I've spoken on this topic to kids from middle school to university, and they get it. They know they have to fix this, and they're ready to do that, and – they're not scared. They want to get on with it. We need to stop holding them back, because they've got what it takes.

More about my TEDx talk in another episode. I think I'll do one or more episodes that just unpack what was going on in there, because it was pretty condensed.

Here's a quick grab-bag of items about AI from the news. For the last 70 years or so we've been on the verge of developing commercial fusion power. "Just 20 years away, really close now, honest," and it's still not here. I can't tell you when it's going to happen but AI just brought it a bit closer, by being able to predict where plasma disruptions are going to happen so we can prevent them. Fusion reactors work by enclosing a plasma in a magnetic field. Plasma is ridiculously hot – that's what the fusion reaction is doing, that heat supplies the energy from the reactor – and it's too hot to let it touch anything, so we use a magnetic field to keep it away from the reactor walls. But it's like trying to mud wrestle a python – the plasma wants to squirm around and the problem has been that it squirms too much and touches the reactor wall and game over. But now AI is able to look at the squirming and predict where it's going to get out of hand far enough in advance that we can adjust the magnetic field to keep it contained. Yay.

https://news.harvard.edu/gazette/story/2019/04/harvard-princeton-scientists-make-ai-breakthrough-for-fusion-energy/

And in other news, AI is able to track the body motions of different animals and interpret what they mean as communication. I mean in a very primitive sense, we're not going full Dr. Doolittle here yet, but they tracked flies and mice and, using a neural network, were able to interpret some of their behavior in groups as instructions to each member to scrunch up, or run forward, or get out, for instance. One of the researchers, Princeton neuroscientist Mala Murthy, said, "We are getting to a point where the

methods are keeping up with our questions. That roadblock has just been lifted. So I think that the sky's the limit. People can do what they want."

https://www.quantamagazine.org/to-decode-the-brain-scientists-automate-the-study-of-behavior-20191210/

There are links to those articles in the show transcript.

We have interviews with more amazing guests lined up ready to be aired. In three weeks, we'll talk with Paolo Pirjanian, whose company makes a robot that helps children with developmental issues; after him we'll be talking with Karina Vold, a philosopher who's just spent a stint with the Center for the Future of Intelligence and has papers on AI risks.

But next week, we'll be talking with Kristóf Kovács, the supervisory psychologist of International Mensa. Mensa is a worldwide society whose membership requires a score in the upper two percent of the population on an IQ test, and Kristof speaks for them on the definition of intelligence. His job is to ensure that they're measuring the right thing in the right way, and he's an active researcher in cognitive psychology and psychometrics. We've spent all this time talking about artificial intelligence and we know what 'artificial' means, but what is 'intelligence'? Tune in next week and find out!

Until then, remember: No matter how much computers learn how to do, it's how we come together as *humans* that matters.

http://aiandyou.net