

Dave Lee

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Welcome to Media Masters, a series of one-to-one interviews with people at the top of the media game. Today I'm here in San Francisco and joined by Dave Lee, Silicon Valley reporter for BBC News. With more than a decade's experience at the Corporation, he has covered sports and breaking news as well as co-editing the BBC Internet blog. Since 2015 he's led the BBC's coverage of technology stories from the US for TV, radio, and online. He also has a personal blog, Notes from Silicon Valley, where he discusses the media, technology and robotics.

Dave, thank you for joining me.

Thanks for having me.

Dave, you must have one of the best beats in all of the Beeb, really. Silicon Valley is a huge crucible of global power and influence. Do you really feel that?

Yes, well there's no shortage of stories, right? Obviously I talk to a lot of other correspondents at the BBC, and often their day-to-day life is battling to get on air with certain things. I feel like my day-to-day life lately has been battling to stay off air sometimes, because there's this never-ending supply of stories.

Stuff happening.

Yes, and technology is still such a wide area that we never quite define it. So that means lots of things can be considered technology stories. Whether it's something happening in the health sector, education, politics, or even in the music industry, there are so many things that are wrapped up into that, it's just absolutely fascinating. I've been here four years now on this patch, but in the last two in particular I think it's really ramped up. Because the feeling about what technology is, and what it does, and how it changes us, has really changed in the time I've been here. Before I left for the job, my editor at the time, Simon Hamer, said I had the best job at the BBC, and I think he's probably right.

We've got tons of questions, and we'll get to some of them in a minute, but I'm interested in how four years in San Francisco has changed you as a person. They're really big on sleep here, so do you go to bed at like nine o'clock at night? And do you only have like a glass and a half of red wine? And have you become sort of San Francisco-ised?

I don't think I have! And I think there's a few reasons for that. One, I feel, if anything, I've tried to become more British since being here.

Ah, overcompensating!

Yes. So I'm certainly not losing any of those things. And also, the reality is, I work for a news organisation that primarily operates at times when I'm meant to be asleep here. So the idea of an early night when you're on the Today Programme at midnight soon disappears. So, no, I don't think I've changed all that much. I think I'm slightly more outdoorsy than I was at home. You know, I spend my weekends now hiking and kayaking and attempting to surf, that kind of thing, which I certainly didn't do back home. But no, I like to think I've retained my Britishness since being here.

What's your journey, then? How did you end up here? How did you end up doing this? Did you always want to be a tech reporter?

Yes, well, my first ever paid piece as a reporter was for the Guardian and I was still at university when I got it.

Did you always want to be a journalist?

Yes. Well, I had a bit of an epiphany while I was at school. I was in sixth form, and I was studying IT. I can picture the day perfectly. I sat in one of these classrooms, all the computers are along one side of the wall and I just went, "Oh, I can't do this!" And I had this moment of like, I just didn't like the idea of learning how to use computers in order to use computers. I felt like I needed to do something with that. And writing was what I enjoyed the most. And I said, "Right, I'm going to be someone who writes, that knows about computers." And that seems to be how that all kind of ended up.

You could have ended up, if you hadn't had that epiphany, Dave in level three tech support.

It would have been exactly that! That was the journey I was on. God knows how that would've turned out for me, but I don't think I'd be half as happy as I am now. So I kind of realised that that's what I wanted to go into, and then in my first year, I think it was, at university, I did a journalism course. So I was hoping to do this, but I had a part-time job working at a Staples store, and I used to sell computers to people. And one of the things I always think of when I look back on that, I think that was the genesis of being able to explain technology to people who wanted to be interested, but perhaps felt intimidated by it or didn't know what they were talking about really. And so I was very good at kind of pulling out metaphors. Like, "Your hard drive is like a filing cabinet," and, "Memory's like a table where you put the files," and that kind of stuff. And I wrote a piece for the Guardian, and Charles Arthur was the editor at the time, who has moved on now to various other things, but I wrote a piece for him

about how people shouldn't criticise computer salespeople for being not absolute experts.

I like it. Write what you know.

Well, yes. And that was my way in. I wrote this piece with a picture of me grinning in my uniform, looking like an idiot. But from that day on I could say, "Well, guess what? I'm a journalist who's written for the Guardian." And I just dined out on that for as long as I could.

You're still dining out on it now. It's still factually true now.

It's still a high point, yes!

And was your dream at that point to be in print, or did you have visions of moving into broadcast?

Yes, well, the strange thing is, the way the course was set up at Lincoln University, you had to pick two of four areas. TV and radio were two of the areas, and at the first chance I chose not to do either of them! I went for print and online, because I thought that was something that I was more suited to. In fact, I hated broadcasting. I was embarrassed by it. I thought that old joke of not having a face for television, which I still believe to this day, but thankfully, the journalism takes precedent in that...

You're a handsome fella.

Well let's not go down that road! But I just had this idea of, "This is what a TV person looks like," or, "This is how a radio person sounds," you know? This is something I now use to my advantage, but for a while I thought it was a big hindrance, is that my upbringing is working class, my dad's from London, so I have a bit of a sort of joining of that. I grew up near Cambridge, but there's an accent in there.

You sound real.

Yes.

You don't sound like the old RP that they... but the BBC want different voices; they have done for ages.

They do.

It's great.

And that's something I've had, constant reassurance, which has been good. That's one of the good things I see about the BBC. Particularly with my type of accent, because I think it was one of the accents that they've kind of taken a bit longer to accept. I think there's certain accents, like a strong northern accent, where the BBC

has been very good at earlier saying, "We need those voices." There is a tendency, I think, of working class accents in the south for people just to assume...

Or Yorkshire. There's Parky, and then there's me.

Yes. But then I think there's...

Did I just put myself in the same category as Parky? Jeez!

Right... but again, you'll know this, right? You have a distinct accent as well.

I do.

And sometimes it comes with connotations of what the person's about.

Flat cap, whippet, the whole lot.

Absolutely, yes. So, that was in my head when I was making those choices.

Do you think Americans here just think of you as a generic Brit? They wouldn't even, like we only think of, a lot of British people only think there's two American accents, don't they? There's the north and there's the south. Is that the same here? They just think of, you're Daphne from Frasier?

Yes. I've heard specifically Daphne from Frasier as an example for an accent similar to mine, oddly. But yes, I think so. But Americans have great respect for the British accent in a way that I think is quite cute, really. Americans just naturally elevate us to higher levels of intellect on account of our accent. So that's a good thing.

We've had the piece in the Guardian. What came next?

Well, I graduated in my first couple of jobs. I was very lucky that while I was studying, I had a blog with Press Gazette. I did an internship with them for a couple of weeks, and then they wanted me to write about student media, blogging about that, which I'd been doing just by myself for a little while anyway.

Was Dominic editor then?

Dominic Ponsford, yes.

He's been editor for years, hasn't he?

Yes, yes, absolutely. He's a nice guy.

He does a great job. In fact, he's coming on here in a couple of weeks.

Dominic was, I think... what was interesting about watching Press Gazette and seeing how they operate, was seeing how a newsroom can be small but focused and effective. I like to think that's something you can take from that.

And we all read Press Gazette, let's be honest.

Without sort of that strong focus from Dominic, it went through so much financial trouble. You know, there was a danger that it could have looked like representing an industry that's kind of left now. Because for a while it was very focused on the local press and it was focused on just the printed product. But I think he's modernised in a way that's really useful, and it's necessary, right? And it feels like it's a publication for people that are working hard in the industry as opposed to the bosses of the industry, which other places can. So I went from there, and while I was there, I met a man called Martin Stabe, who then knew a guy at the BBC. And then this guy Nick Reynolds at the BBC, who I owe so much to, he was the person who edited the BBC Internet blog, which was kind of like a blog that looked at the R&D that was happening within the BBC, and it was sort of blogging about that. So writing about technology, but for a public audience. And he was just wonderful. He put me on training that had nothing to do with what he needed me to do for him, but was all about what potentially I'd like to do in the future. The BBC isn't great at mobility sometimes for people in certain jobs, but Nick was a stand-out example of allowing someone to go to something quickly that would cause him problems. Like he then had to fill a position that wasn't an easy one to fill.

Actual selflessness.

Well, absolutely, absolutely. And Nick's just one of those people that, I'm not the only example of this, that he's done that to. And as soon as I said I fancied doing something new, he had me in meetings the very next week. So, then that all led to various things. Everyone who works at the BBC has this strange journey. They have this weird patchwork of work they've done. I mean, I've been on the sports desk, I've been on the home news desk, I've been doing overnight election statistics, all this kind of stuff. I was perhaps going to be going into Salford, but I didn't do that in the end. Ended up on the tech desk, the social media desk, all this kind of stuff. And it eventually led to here.

And was that covering social media, or were you doing social media for BBC news?

No, so I was part of the early team that began the social accounts. So the Twitter accounts mainly. So @BBCBreaking. It was set up, but it wasn't the round the clock operation it is now. And actually one of the most difficult moments I had in my early career was, that I was doing that as a freelance, because it was seen as like a side part of the newsroom very much. But when they decided to make it more permanent, they tried to hire a few people to do it. And I accepted a job as being one of their first full-time breaking news people, and it would have been a promotion, and it would have been more money than I was on. And I said, "Yes, that's fine." And I accepted the job on a Friday, but by Monday I just sank into this depression of, those jobs, to me, they're very important jobs, and it's the best way to get big stories out to an

audience quickly, but I just felt it would forever be me working hard to promote the stories that other reporters were working on. And to me it felt that it wouldn't have been satisfying enough to do that. And here's the thing: I'm shamefully one of those people that unless I'm really excited for a job, I just immediately stop bringing my best effort to it. And I felt that the role needed more than someone who was kind of half committed.

I work incredibly hard, but I'm actually genuinely quite lazy. I'm just really passionate about my job, so it gets me out of bed. But if I was doing something else, I'd go back to my natural default laziness.

Yes. Well, I think there's certain types of people that work best on an excitement for something. You get people who will work hard because it's the right thing to do, you know?

In a sense, is this work? Is what you're doing work? Because when you don't view it as work, if you do it anyway, then it's a joy, isn't it? What you're doing is incredibly exciting. You can see that as just someone who consumes your journalism.

Here's the thing: I've always thought of journalism as one of those, it's basically a human desire to share information. It's like everyone is a journalist to some degree. For some people it would mean just going home and talking to their wife about something that happened at work. But that's essentially an act of minor journalism. All that we do as professionals is just do that to a wider audience with hopefully more credibility and professionalism. But essentially that human need to get information and then be excited to share that information. I mean, that isn't a job is it? That's just something we do as naturally as breathing. So I think, yes, it's one of those jobs that's just phenomenally enjoyable and motivating. And the stress that comes with journalism is often stress that's internalised because you're so desperate to get that information out that you create stress.

Well, you've got to have the analysis as well. We had Paul Royall on the podcast recently, who you'll know as editor of the Six and the Ten.

Yes, I listened to that episode. It was fantastic to get a sense of what he wants on that show.

And I think one of the things that really struck me, which in hindsight was obvious, but he needed to spell out for me, is that everyone about to watch the Ten O'Clock News already knows the news. When Huw Edwards is about to read the headlines, let's be honest, we all know what he's about to say. Whereas I, as a media geek, I'm more interested in what's going to be the order and what's the angle. But he was saying that even as a viewer, people want the news and the explanation and the contextualisation there and then. And that's the thing. So I listen to you a lot, starting with Wake Up to Money, and I already know the key headline of what Facebook has done or not done, but I'm looking for you to explain it to me. How much of you do you put into that? Because

you'll obviously have an opinion as to whether they've overstepped the mark, where they've not done enough or done too much. How do you give the analysis without stepping into giving your personal opinion?

Yes, it's a really tight line, isn't it? And I find it much more difficult now in this job than anything previous to this back in London, because when it comes to the technology companies and how they operate, they are spinning as much, if not more, as someone on the political beat would have to endure. And so yes, when I hear a political reporter talk about what might be the real motivation behind a political move, I try and apply the same principles to technology companies, because I think you have to approach these companies with real scepticism now more than ever.

They're behemoths.

Yes. and they're so powerful, they're so incredibly skilled at shaping the debate. It's quite funny actually, sometimes we'll get these, and we're trying to stop it from happening so much as an industry, as a beat, we're trying to stop companies from giving us background information, coming along and saying, "Well, we'll tell you this on background, but this isn't an on the record statement." And it will be things like YouTube explaining why they're not taking down a video or something. Now, for me, I feel like that should be on the record, but they play each other off because if you don't agree to those terms...

You don't get the story. "Take it or leave it, son."

Yes, and the only way that's going to be solved is collectively everyone saying, "You know what, we're not going to accept this any more." And we're starting to see that. There was a story in BuzzFeed recently where they said, "Facebook covered this on background, but we didn't agree to that, so here it is." And that stuff's going to be more useful. But to get to your point about the view, like sometimes I have to realise that I'm working for people at home that want to know more and understand what's going on. And if that means winding up a couple of PR people at Facebook for a day, then I think that's probably a trade-off that most of our listeners and viewers would want me to make. In fact, not even hesitate to make. In fact, that's the whole point of that job is to explain what's going on out here. That's the beginning and end of it.

But you need access. You've got this stuff from the political beat, people have. That, you want to hold Tony Blair, Gordon Brown, David Cameron to account. But on the other hand, if they put you on the shit list, you then don't get anything any more. So you do need to have relations with all of these tech giants, even though you're holding them to account. You've clearly made the right decision, but on the other hand, that must come with consequences as well.

I think it does. I think it comes with consequences that aren't immediately apparent in every day. So, for example, when Cambridge Analytica broke, huge, huge story, the biggest story that's been around in my time here. You know, we're obviously, from the moment that drops, we're saying, "Right, Zuckerberg, Zuckerberg, Zuckerberg, when can we get him, when can we get him?" And it was just a flat out no from Facebook the entire time. But what they'll do is they'll kind of dangle

in front of you a little bit saying, "Well, maybe in a day or so," because they want you to make sure that you feel that your coverage is going to be impressing them. That's always a very particular tactic.

But you'd already questioned whether Mark Zuckerberg had got away with it. What was the fine for the privacy misuse? It was about \$5 billion, wasn't it? \$5 billion, yes.

That makes you less likely to get him then, at that point.

I think, yes. I don't think Facebook see us as a place that they would – how can I put this? – put it this way, if you're a technology company and you're offering an interview to a media outlet, you've got to think of what your strategy is to be on that media outlet. Which is why when Apple stock is down, Tim Cook goes on CNBC or Bloomberg. Or Zuckerberg, when he has to convince US politicians not to go crazy on him, he'll go on CNN. Now, the awkward thing sometimes I think for the BBC is that we don't necessarily always fit into that strategic reasoning in a way that the tech companies go, "Okay, that's the place we need to go if we want to reach that audience." Now where we do bring the audience is, you go on the BBC, you get a much more global audience than any of those places, and that's something we try and talk up as much as we can, particularly in parts of the world where the American networks don't have a presence, which is basically the rest of it, right? In some cases.

That's an odd thing that the BBC is perceived here in America because, as a Brit, it's obviously all consuming, it's the dominant state broadcaster, it's globally respected – and yet here in America it's seen as one of seven or eight global players equal to them. It's not dominant. Isn't that amazing?

Yes, I think it's seen as... there's a lot of respect for it. Huge amounts of respect. And I think it's seen on a higher level than, say, the state broadcaster from Germany or whatever. Like it's given a better reputation than that, because we do have this very strong presence in the US. I was in our DC bureau recently, and the BBC bulletin out of the DC bureau is on PBS over here. Beyond 100 Days, our show with Katty Kay and Christian Fraser, does very, very well here. It gets a lot of social media buzz, and we're starting to see this kind of slow increase in influence, because senators now approach those shows and say, "We'd quite like to be on that show." So that is changing. But there is certainly a case of how do you convince technology companies to engage with the BBC? Because they don't necessarily see the immediate benefit for them. And that's one of the biggest challenges for this job.

Plus it's your job to hold them to account... you've asked whether Facebook is fixing itself, or whether it's merely making it harder for us to see that it's broken

I think there's a view within Facebook that this is a PR problem they're having right now.

Not that their reputational challenges are a manifestation of a deeper, more fundamental problem.

Yes. I don't think they see their business as fundamentally being incompatible with the needs of society. And we're looking at these companies and saying, "Are they too big?" You know, "Is Google's algorithm too powerful? Does it make businesses rise and fall in a way that nobody guite understands? Is that a problem?" You know, I think companies like Facebook in particular, they think, "We can weather this storm, and we can improve our reputation – but while we're weathering the storm, we've got to power on. We've got to keep on doing what we want, and keeping it going." Because that's what's going to keep their stock price up as well. You know, the reason why Facebook can get fined \$5 billion, be in congressional hearings all the time, and have sort of a stagnating user bases in certain markets, the reason why they can keep on maintaining a strong stock price is because they're doing a very good job of saying, "Don't worry, because we're still investing in the future. Facebook of the future is going to be okay." And that's where we see things like Libra, the digital currency, which, if that takes off, that could make Facebook as it is today look like a tiny company compared to the power that that project could give them. So I think the view of Facebook, as I say, is if they can get through this bad reputation, then out the other end, they're going to be in good shape. I don't think it's going to be as easy to shrug it off as perhaps they think. I wrote a piece recently, which I think you were referring to, about whether the fine is really a punishment. Well, I don't think the fine really it is a punishment, because they could easily afford it – but what may be a punishment is them having to slow down some of their innovation. Whether the measures put on them to be more transparent about their tools, and how privacy works in their products, whether that's going to mean they can't innovate as quickly as they would like to. And in that vacuum, a competitor truly does emerge, and that puts them on the ropes a bit. I think that's more of a problem than perhaps Facebook realise, or at least publicly talk about.

I, for my sins, I served on the City of York council for six years, back in the day. And I remember talking with the local newspaper editor, Kevin Booth. He edited the Yorkshire Evening Press, or The Press, as it was known. And he gave us all a little pep talk the first day we got elected that said, "We're not against you, but on the other hand, 'local council does great job on something' is never going to sell newspapers. So just so you know, we're always going to go in negative because 'council messes up, yet again' is going to shift papers, and we're a business. We also want to cover the good stuff you're doing, but that'll be a page lead on page nine. The splash will be that the dog bins are still overflowing. And you're just going to have to get used to that. It's not personal." Has social media basically just exacerbated that, basically, that fundamental tenet of human nature?

Yes, I think so. I think so. Yes. Bad news always travels further and with more energy. But I think that the tech companies are actually similar to the city council in that regard, right? Where I think the tech companies have to realise now that, fine, you can do a bunch of good stuff, and Facebook likes to talk a lot about groups and how certain groups have got a bunch of mums together to do something wonderful. It's like, "Yes, good, okay, that's fine, but you've got to realise that's not going to be the stories that the press does because they're not news."

Yes, because there's people that have murdered people and live streamed it on Facebook Live.

Precisely. I know. And there's a phrase that, and I wish I could remember who said this to me, because I think it was really, really interesting and I've kept doing it, but they said, "The secret to tech journalism right now is scepticism, but not cynicism." And I think that's really, really important. Because it's so easy when you cover tech – and I think I've not necessarily got this balance right, I should say, because it's very easy to get drawn into this – but you can be at a tech launch, particularly an Apple launch, and you go, "Oh, this is ridiculous." Everyone is cheering, and it's just a new phone, and that stuff.

It's the new phone that I'll buy. Let's be honest. I already know I'll buy it before it's even come out.

Indeed. That's always a justification I think for covering these things, is that so many people rely on them doing things that they haven't yet. But my point with that is, to be cynical about technology is to miss the potential of it as well. And I think technology coverage has to do both right now, which is really hard. It has to be up on the innovation and say, "Wow, isn't it amazing that Google are making self-driving cars?" Yes, it is, let's cover that. "But is it also troubling that Google was working on a search engine for China?" Yes, it is. And we can cover both of those things. And I think what's tricky for technology reporters is that we're doing both of those areas, and it's very hard to bounce between the two, particularly when so much of that is maintaining relationships with those companies. Because you can write a story slating Google for doing something on Monday, and then wonder why you're not invited to their event for the new smartphone on Wednesday. And balancing those two sides of covering the industry I think is difficult – but it's just part of it, I suppose.

How do you cover editorially someone like Elon Musk, where as a proto bond villain...

Ha-ha! I love Elon Musk. I tell you my job's infinitely more interesting because of that man. Whether it's for good or bad, it's more interesting, that's what I'm saying.

Because you could say, because he's so powerful and got all that money, that it's quite refreshing, because he can say what he wants to say. And I don't think he means any harm, but on the other hand, you could look at it the other way and say he is so powerful that he can basically get away with saying anything. Saying that one of those diving, rescuing people was a paedophile. And he's still fighting it. It's clear he isn't a paedophile.

I mean... yes. I had a coffee recently with one of Tesla's PR team.

I've got a Tesla. I love Elon Musk, but I think he's a character. And I'm glad he does this, but he's overstepping the mark sometimes.

Yes. Obviously, yes, massively oversteps the mark when it comes to particularly those accusations, and also just breaking financial law, or at least being accused.

But the thing is he can never have any comeuppance. He's already got so much money that there's literally no consequences to whatever he does.

I think there are consequences.

Oh, is there?

He's no longer the chairman of Tesla, he was booted off there, and he's had these big fines, and he's clearly had to curtail some of the stuff he's been saying, but I don't know. It's tough, isn't it? Because there's part of me that thinks, "Isn't it wonderful that we do have this guy that is so outspoken, so obviously passionate about what he's doing?" He isn't a CEO that just turns up and looks at a balance sheet. If anything, I'm sure Tesla shareholders wish he did look more at the balance sheet, because he just goes crazy.

There are a lot of generic chief executives in business, "Well, let's talk generic business language."

Yes, totally.

And the fact he's a character clearly must be good for you as a journalist.

It's good for us as journalists. I feel for his PR teams, just because they...

Because they can't tell him to shut up.

Or they just don't... sometimes they just don't know what's coming. They really don't. it's just off it comes, and then they've got to react.

"What Elon meant was..."

Well, I said to this PR person, and I won't say who it was just because they won't know I was talking about this, but I said they should adopt the Sarah Sanders' President Trump response of, "The tweets speak for themselves." It's easy to say that to all of those tweets. "Oh, the tweets speak for themselves. You'll have to for another tweet before you get your answer." Okay, fine. But no, I like Elon. It's good to have characters. Any beat you're covering, you hone in on the characters, whether it's someone who's angry about parking, you find the most animated person about it. And yes, and then, I like covering Tesla as an innovation story as well. Autopilot is one of the most interesting debate-worthy features of any car out there right now. I've used Autopilot.

I love it.

It blew my mind.

My wife hates it. She uses the adaptive cruise control, but the driving itself, She thinks it's witchcraft.

Yes. I mean, I found it as one of those things where it's better in traffic, heavy traffic, than it is just driving along. I'm more weirded out by driving along, but if we're in heavy traffic, it just keeps you in the traffic and you don't have to think about it.

We live in the country, and when we drive around the country lanes, my party trick is to literally put it on and then turn to the people in the back for like 30 seconds and then let it drive itself. And I even do it where there's a corner of our driveway, if there's a curve.

And does it work okay in England? Because that's another thing.

Yes.

Self-driving is designed on the streets of Mountain View where every street is three lanes wide and nicely marked out.

Yes, because the algorithm's brilliant. There's like eight radars. It works a treat. But what interests you most then about the tech beat? Because if you look at, say, a new iPhone coming out, there's one story which is the, "It's now got more memory," and all of that, and I'm interested in it. But then there's also the business of it, the commercial challenges that Apple's facing. I find it fascinating. I've always wondered, for quite some time now, where, when I'm on the Amazon app, why it never offers the Audible version of it. And then it's because obviously Apple are in control of the platform. It's a walled garden, and they won't let them. And I find that an overstep, because yes, I know they own the platform, but they clearly... it's their commercial business, and yet they also have a wider duty. And then they are only stopping Amazon offering the Audible version because it affects their commercial interests. And Amazon isn't even allowed to say that on the app either. It says, "This is not available on this..." I can't remember the form of language, but it's fascinating. Then you look at the wider societal impact. Does all of it interest you? Are you a tech geek at heart?

I don't think I'm a tech geek at heart actually. I'm sure my editor will listen to this – and this is not a view that has been a secret of mine, I can tell you that for sure – but I find the gadget show at the start of the year, CES one of the more... how should I put this?

Tiresome?

Tiresome, yes. Tedious, I'd say, because that's very gadget-focused. Now, here's the thing. I do still think it's very important to cover it, because it's like the equivalent of sticking your finger in the air and seeing which way the wind's blowing for the tech industry in that year. What are the trends going to be? What are people hoping for?

Is there any true innovation now? I don't want the foldable phone.

No, but CES for me... I think we always... sometimes we have a tendency to give it the wrong billing. Because I think sometimes we say, "Okay, what's new and exciting at CES? What haven't we seen before?" And that isn't what the show's for. The show is literally to say to a bunch of buyers from Best Buy, and whatever other, PC World, and all these places, you're basically saying, "Please put this into your stores this year." And so many of the products aren't new. And I think there was a time when CES was the first chance to see a lot, but that was at a time when technology magazines came out once a month, and there wasn't all these blogs, and they weren't the TV shows, and this that and the other. So times have changed quite considerably. And CES to me is one of the less important shows of the year in terms of *real* impact on people's lives. It's a consumer show. It is a gadget show. It's not what gets me out of the bed personally.

You're reporting on robots and the rise of Al. Do you see human contact increasingly becoming a luxury?

Well, we did a podcast about this recently on Beyond Today, the BBC podcast. I think it is, in ways that are quite troubling, and quite frustrating. So we've always had this sense that if you ring up... ever since the 'press one for this, press two for that' automated system that is replacing human contact with automation, and that's been around for...

It's even worse now, isn't it? "In a few words, could you just say?" No. And you can ask things like "bill payments" or whatever. I hate all that.

The best thing is, if you start swearing and just say, "Put me through to a *** person," there's a few systems that will just go, "Connecting you to the operators."

Or if you remain silent, it will ask you three times, and then give up and say, "Connecting you."

So that's the trick. So I recommend that.

"Calls are answered in rotation. There is a 35-minute wait."

Yes, so we're used to it, right? We're used to the human contact being the upper end of the customer service scale. But one trend that we're seeing is areas where you wouldn't expect human contact to be disappearing quite so fast. There was a story last year which really stuck in my mind, of a family that was told that their grandfather was dying, but that was delivered through a telepresence robot. The physician, or the surgeon, I can't remember exactly what they were in the hospital, but rather than coming in in person to deliver that news, it was done via telepresence.

Why?

Well, the hospital just said, "This is a procedure we've had. This is how we've done it for a while. People haven't had a problem." But I think there's this thing of people are

happy to talk to a telepresence doctor for any number of things, but then there is a point when the lack of human content feels really insensitive. And so I think we're seeing some patterns there. There's also, and I don't know how much of this is happening back home compared to here, but since Amazon took over Whole Foods, I think we're seeing the groundwork of some changes there. And I think we're going to get to this point where there's going to be the Prime members and the non-Prime members. There's going to be almost two segments of shoppers.

Is anyone not Prime?

Well, this is the thing, but there's a lot of people who aren't Prime, because it's an expensive thing to add. And you're going to have the Primes and the Prime-nots.

Amazing.

And that to me, I think, it's worth seeing the reach of that, because you have places like Amazon Go. I don't know if you've tried the Amazon Go store, Paul. There's one not far from here. It's the Amazon store where you just go in and you pick stuff off the shelf and you walk out.

So rather like shoplifters used to do back in the day?

Precisely like shoplifters, yes. You don't interact with a human. You just go out the door. You don't pay.

How's it work then?

So you scan yourself in. It's an app on your phone. And you pop on the thing on the way, like you would get on the tube or something. And then there's various cameras in the air that detect what you're picking up, and if you put something back. And I've tried to trick this thing, I've been like putting things all over the place, and shifting them around, and throwing them in the air. And it gets it right every time. At least in my experience it gets it right every time.

This is witchcraft.

It seems like it, but here's the thing: for someone like me that can just go in there and do that, it's great. It's a great convenience. But Amazon quite quickly said, "Well, if you're on food stamps you can't use this shop, because there's no one to take the stamps."

It's discriminatory straight away.

Yes, you just see where people could be excluded from this stuff, because the desire to remove human contact is such a great business opportunity that these businesses are saying, "Well, we don't have to worry about these people down at the other end."

How do you get off food stamps then, if you can't even engage with society?

Well, that's... I think that's tied into a much bigger question about income inequality that the tech companies are perhaps partly responsible for as well.

Not bothered about fixing.

Well...

Because they could have been part of the solution. They could say, "We're going to use our innovation, our tech drive, to help solve this problem to society." But presumably there's no money in it. Poor people don't have much money by virtue of the fact that they're poor.

Yes, I think... see, this one is one of those arguments where I never know with the tech companies, to sort of agree with their defence to a degree, it's not necessarily Amazon's fault that people are on food stamps. And so the solution to that problem isn't to tell Amazon to stop innovating in its stores, it's to solve a bigger problem.

Well, and there's also a Marks & Spencer, Tesco. Then there's Lidl. And I'm using UK references here, but the market...

Yes. I miss all those places!

But the market provides for people where cost is more of an issue. And if you're selling Cartier watches on Bond Street, yes, poor people can't afford them. So I can also see it from their point of view, but it does seem pretty terrible, because what happens when ultimately the human-manned supermarkets are going to go down? Like for example, when the bank started to pull out of having village branches, and saying, "Well there's an ATM." And then suddenly there's one ATM, and then they charge five pounds, or three pounds to use it.

Yes. Yes. All of these things are tied to that same point, where the efficiencies of not hiring human beings are outweighing the social responsibility to support people in certain areas. And again, that's why I almost slightly defend Amazon and others because that's not something they... people were striving to achieve that for a long time. Amazon is just doing it particularly effectively. It's the same as the robotics debate, isn't it? Robotics are going to remove tons of jobs, already are removing tons of jobs. And companies like Amazon, they say, "Well they're creating jobs as well, but those jobs are different." It's going from someone who was perhaps moving stock around the warehouse, their job's going. The job that's being created is a robotics engineer, or some logistics expert, whatever. Is it Amazon's job to make sure that people are educated sufficiently to take up that other job, or isn't it? And I can see where they're coming from. They don't put it quite like that, but that's essentially what they're getting at. They'll say, "Look, you shouldn't slow down innovation to try and protect jobs, because where does that stop?" I read a book recently called Rise of the Robots by a guy called Martin Ford. And in his introduction to that job, he told this story about an American investor who went to China to see a new factory being built. And when he got there, there were Chinese laborers, and they were digging up the foundations with spades, right? And the American said, "Why aren't you using

machinery to dig up the foundations?" And the Chinese man said, "Because we're trying to protect the jobs of the people who dig it with spades." And then he said, "Well okay. Well why don't you give them spoons? Because that would mean it would take longer, and you'd need even more people." And I think it's an important point, like slowing down innovation is a really ineffective way to solve the problem, particularly in this country. This is the country that often talks about how losing manufacturing has been one of the most damaging things that happened to society. And the same applies to some degree in the UK. And so the proof there is not if you stop doing things you're going to slow down innovation, it's just going to go somewhere else for a lot of this stuff. So I always think the solution is never to slow down the progress. It's about *managing* the progress. And the difficulty is that it's happening a lot quicker than it has in the past. You can't change the curriculum quickly enough for the people to filter through to get the benefit. And that's going to be the interesting moment there, I think.

Where is social media going? If I was Facebook I would worry. They've already seemed to have reached market saturation in a sense. I've got five or six friends now that have sworn off Facebook and genuinely kept it. And it seems to be quite cool these days to not be on LinkedIn, and Twitter, and Instagram chasing the likes. Do you think we're going to see more of that? Or do you think it's just going to become an accepted part of society and won't be the huge buzz that it is now?

Well, I think Mark Zuckerberg is right when he says we're going to shift more towards a privacy-centric world online. I think there was this boom of public expression on social media, and it's almost like when Facebook and Myspace became a thing, it was like, "Oh, guess what? You couldn't build a website, but now you can! You have your own website." And everyone went, "Wow, this is great. I can put my pictures on there, I can do that." So we've had that boom, and then we moved... the rise of Snapchat was interesting in the whole ephemeral message thing, messages disappear guickly. That was interesting. Now we're shifting to... you mentioned having close friend lists on Instagram. That's very popular with people to have a much more tight hold on who is seeing what they're doing. So I think we're going to see more of that. I think we're going to see social media head down a more private route. I also think that there won't be the same desire for a centralized network that does everything. Facebook's user base, as you were saying, it's levelled out in certain markets. It fluctuates by small amounts, up or down in Europe, and the same thing in the US. But if you were to just look at the main Facebook app, "the blue app", as they call it, at Facebook, you would see that usage of that is declining. The growth of Facebook is almost essentially all Instagram, particularly in the US. And I think what that speaks to is people wanting to silo their personalities in different ways. So I'm going to have curated pictures on Instagram. I'm not going to just have this... I'm not going to... remember early on with Facebook, people would come home from a night out, and they'd put 50 pictures on Facebook and they'd tag all their friends. Nobody does that any more. That's a pattern that we've just completely abandoned as an idea. And instead what we do is just say, "Well you know what, let's not have 50. Let's have one or two where I look particularly attractive, or that we are having a good time on."

And put another 10 on Instagram stories, which will expire in a day.

Yes, exactly. And in some ways it's bad, isn't it? Because it's filtering reality in a way. But in other ways it's good, because maybe the best way to experience a night out is to be on the night out, not to look at it on Facebook! So I think there's this move away from this catch-all, do everything, put your pictures on there, share your news on there, put your status updates, whatever. And I think that use of social media is dwindling in favour of more specialized purposes. I also think looking at companies like TikTok... now TikTok was the most downloaded social networking app in the US last year by guite some margin, and that raises both positive things and negative things. One, the ownership of TikTok is something that might become an issue down the line; it's owned by a big Chinese company. If Congress is concerned about regulation of Facebook and Twitter, and the others, wait until they have to deal with a company that's based outside of the US - that's going to be a different matter altogether. But the positive thing from TikTok I think is that it puts emphasis on doing things. The most popular people on TikTok are dancers. They're artists. They're athletes. They're singers. They're comedians. They're people that are out and about, doing things, being funny, being creative. And so I think that trend is quite nice. actually. I'm a fan of seeing... and we've talked about algorithms promoting negativity, TikTok has an algorithm that promotes creativity, and I think that's a good direction of travel for social media. That's one of the few positives, I guess you could say, that's emerging at the moment.

How are you managed? How do you go about your job? Is there someone, some faceless manager in the BBC, in NBH back in London that's approving everything? How does it actually work? Because in a sense, you've got the time zone difference. And so then you must clearly be on some kind of detached duty, exploring, like any journalist, with contacts on your beat. How does it work?

Well, it's a mixed bag. I have several editors, which is the first hurdle I guess, because you have different people that want a different part of you in various ways. And because I'm on television and radio and online, the BBC has done quite a good job of merging these worlds, but there are still needs and desires of each set that are difficult. What I try and do is sort of start from the base of, "Okay, well let's make a TV story and then we can use the audio and then I can write a piece." The frustrating part of that is, I think, is that it's compromise. If a TV piece also has to be other things, it's not guite as good as it could've been if you were just focusing on that. And radio. If you're doing something just for radio, you gather different material, you gather footsteps along a path. I was like on the radio and you hear the beginnings of an interview where you just hear someone say, "Oh hello, how are you doing?" You don't do that on television, because when that exchange is happening, your crew is lugging the gear up the front path, right? So there are, there are trade-offs but that's just the reality of what the BBC needs. And I think the job, there's a lot of reliance on being able to say why my focus is going to be on this particular story, and make sure coverage is complete, but not overwhelming. Because of the time zone, the morning, so Wake up to Money, which I like to do as often as I can...

My favourite show.

It's a great show, very accessible, it's at nine o'clock in the evening here.

So does Justin ring you – Justin Bones, the editor of Wake up to Money – does he ring you or one of the producers, at like eight o'clock an hour before, and say, "Can you come on, Dave?"

Justin is the politest person I deal with.

He's the nicest human being that ever walked the planet.

He's very nice when it comes to approaches like that. Normally it comes... there's a centralised foreign desk which handles requests for all correspondents outside of the UK.

But if I was an ambitious editor on any BBC programme, I would quietly put my own call into you direct because if Amazon does something, you must get 10 inbound calls for shows that want you on, and presumably you can do them all.

Yes, well that happens. You get this flurry, and it's always just like me and my colleague here, Cody, we joke about it because I'll send out an update into our system and I'll say, "What do you reckon, 15 minutes?" and then all of a sudden, inbox, bang, "Can you come and do this? Can you come and do that?" Because at any given time, the BBC has the BBC World Service on air, Radio 4 will be on air, 5 Live will be on air, BBC World, the rolling channel, will be on. The BBC News channel, the domestic channel, will be on, and then you have these sort of breakout programmes, the Six or the Ten or whatever. So there's a lot of mouths to feed.

There must be a hierarchy though? the Six and the Ten must come first?

Yes, there is an official hierarchy, which I'm probably going to get wrong, so I'm not going to start...

I was going to say, I'd hate to be at the bottom of that official hierarchy. What is that, morning reports on 5 Live?

The bottom of the hierarchy is any sleep for the correspondent, I think is right at the bottom of that list. But it's a hierarchy that makes sense. There has to be, because some of these things happen at the same time, right? You can't be live on the Six and be on World TV at the same time, right? It's not going to work. But then there are often situations where in a big story, for example, you might be on BBC 1 at five past six, and then you'd be on World TV at 10 past six, and then you'll be on Radio 4 at 12 past six. I think that's both a strength and a hindrance, because we put so much emphasis on being *live* on our shows, which I don't think it's necessarily necessary, if that makes sense?

"We're now crossing other live to San Francisco."

Yes.

"Where the BBC's North America technology correspondent is standing by..."

Yes, standing at the road, he's been there all day.

"He's stood outside Facebook for no reason other than to just make it look like he's near Facebook. He could say exactly all of this in the warmth of his office, but because there's some TV visuals, he has to freeze to death."

Well, there's a benefit to both in a way, because here's the thing, I think it's important to show – this is going to sound like I'm justifying my presence here, which partly I am – but it's good to show viewers that we are here, right? And if I'm outside Facebook, they go, "Oh well they've got to reporter there." Now, the downside is that is many people on Twitter think I get flown over each time to do it, which I find quite amusing, as if I'd fly back for a couple of hits, then I'd fly back to London again. But I think there's a balance. I'm sure I'm not alone among the correspondents that would rather spend the two hours it takes to get into that position to get it sorted out. I sometimes think we could perhaps be more useful doing reporting in that time. You know, journalism in that time. Having said that that, I do think there's a great deal of value in being the person – and we spoke about this I think, before we recorded this today – of when I hear that cue in my ear and the presenters will always say, "Here to make sense of that is Dave Lee, our North America technology reporter." That simple goal of "here to make sense of it", is probably the most important thing I do.

So, if the way that's more effective is to do it live and to have a conversation with an anchor, then fine, that's probably the best way to do it. I just wish there wasn't so much, I'll be honest.

How do you differentiate between what might be a piece for the BBC News website and for your own blog? For example, if Nick Robinson wrote something, I'd automatically assume that it would go on the BBC, and if he had a blog that had his own personal thoughts, I would say that might compromise his political impartiality.

Yes.

With your beat it's different, but how do you do that? Because, if I was your editor and I saw you'd written a really good blog post on your personal blog, I'd think, "Well, we pay them good money. Why don't you stick that on the BBC?" How does that work? Do you get told off for every good blog post you do?

Do you know what? I haven't, which maybe suggests I don't do enough good blog posts! But it's interesting. Now, I've thought about this quite deeply because yes, that is that risk, isn't it? If there's a day when I don't file a story for our own site but I've written two blog posts, people are thinking, "Well, what are you doing? Why are you doing that and not your job?" Now my defence of that, and it's an important one and one that I've thought a lot about, is that the way I use that blog, to me...

It's a great blog.

It's a halfway point between the tweets and a bit of work. And so, there'll be sort of stories bubbling around that I think will be a bit, the phrase is here, "inside baseball", right? If there's a story that's so in the weeds of something that it isn't perhaps of interest to a mainstream audience, at least not yet, but it's something that's kind of interesting and worth the discussion, that to me is what I put onto that blog, because it's me basically saying, "Here's something I'm thinking about," but isn't yet a fully formulated thought that becomes a real piece of journalism. When it comes to how those blog posts are put together, they are literally, "Here's something interesting, and here's a paragraph of what I'm thinking about." And if something requires anything more than that, approaching someone for an interview or whatever, then it doesn't happen, because then that is work, isn't it? My energies of doing that should be spent on doing the stuff I'm paid for. I think it's a tricky one because when you have a personal outlet in the same way, and Twitter's the same issue. How do you justify spending time doing that and not on the product itself? And I think the way Twitter's defended in that sense is that it's an outlet that shows deeper analysis and interaction than is possible through the main outlet. But then I also think with a blog there's more risk, isn't there, of me having a view on that blog, which can get you into tricky territory. Because the idea is, of course, we're impartial. Now, I think particularly when you become a reporter that's in control of a beat, the analysis has to contain some kind of view, because it's a qualified view. It's me saying, "Look, I've been reporting on this issue for x amount of time."

"And they're all wrong 'uns."

Something like that! "And here's my take on this. Coming from a place of someone who's covered all this stuff," not coming from a place of, "Oh, this is my political thoughts or this is whatever issue I support." It's always going to come from a place of my judgment. And I think the blog has sort of served me well on that. And there's been several occasions where I've had the germ of an idea, and put it on that blog, and people outside would go, "Oh, since you've been covering that, are you interested in this?" And it'll be a story that comes further down the way. So it's very useful to me, put it that way.

What's the next rung on the career ladder for you? Because – and I say this genuinely to flatter you, but I also mean it – is you've got the best beat there is. And the sky's the limit really, because you're at the cutting edge of almost everything. The way society's going tech, do you get kicked upstairs to become this faceless BBC manager that the next Dave will be ringing into?

Do you want to do that? You see a lot of this in society, where people are great or they do and then they're promoted to the next rung of the ladder and they actually not happy.

Yes.

Are you going to be here for the next 30 years?

No, I don't think I will. You know, it's strange. So I recently passed, so July, it was four years in San Francisco. And in that time the BBC Silicon Valley operation was, when I arrived it was me with a laptop, and then eventually it became me with a laptop and a good camera, and it became me with a laptop, camera and a bit of freelance budget to branch things out slightly. Then it became, "Oh, we can go live now, in quality. We've got the equipment to do that." The BBC then had this partnership with CBS News in the US, and now we share space with CBS and we have a bureau, and we have an employee now as well. Cody Godwin, who I work with, so we we're a team of two now.

Are you her boss?

No. We work very closely together, and the fact that I've been here longer, that's how the relationship works.

So BBC, that response, isn't it?

But here's the thing, my point being is that a lot has really changed since I've been here. More has been achieved in that time that I thought was ever possible. And so, the natural thing is now to think, "Okay, what happens here?" Now that could be changing even more as I'm doing right now, and in the same job. It could be doing something different. It could be different parts of the world, I genuinely don't know. And that's what it was. That's one of the most confusing parts about this is, because I had a leaving party when I first came out here, and a colleague said to me, "Oh, the difficult thing isn't doing this job. It's figuring out what the hell you're going to do next." And it's really true. I didn't realise at the time it was really, really true, because this is a wonderful, wonderful job. There's no other job like it in the BBC. I live in one of the most interesting cities in the world, which I have grown to love a lot. So it's difficult. Yes, it's difficult to know what's next. But the BBC, I think, has this tendency to not quite know what to do with reporters at a certain point. I mean, the BBC's got the best training programme for journalism in the world, probably. The BBC Academy is wonderful, teaches you so much, not just about the "technicals" of stuff, but that the ethics of reporting and the need to be impartial, and the realities of being impartial as well, which is often more interesting than just that suggestion of being impartial. And then it's very good that your Laura Kuenssbergs of the world, your top tier reporters, I think there's a bit of a problem in the middle where it doesn't guite know how to develop people who aren't new, but aren't experienced. And that's where I feel like I fit. I'm sort of in this middle part where I think, "You know what, I need to grow, I need to become a better reporter, a more experienced one." This is probably something that's down to my indecision on this, but I think it's one of the things the BBC needs to work on.

Would you ever go to the dark side?

I don't think so.

For listeners, I mean consider a career in public relations?

Oh, yes, we should make that clear.

Yes. Because if I was running the PR comms for, well, Amazon, Facebook, whoever, I'd snap you up.

I mean, you do run a PR company, for god's sake!

I do. But I run it very badly.

Well...

We're terrible at what we do! Don't hire us.

I mean, look, like every reporter, my LinkedIn is just half story pitches and half, "Oh, have you considered working in comms?" And what always happens is you kind of go, "What? They'd pay what to do that?" And it's no exaggeration to say it would more than double my income immediately, but I live in fear of ever making that move and waking up one morning and seeing something or hearing something, or just thinking something, "Oh, that'd be a good story," and just have not having the avenue to pursue that. And I can't think of anything more frightening than that. I feel like it'd be like if a singer woke up and they'd lost their voice completely. The very idea that I couldn't do this job. And like I say, it's not a job, is it? It's a human instinct. At least it is for me and other reporters.

And you can't go back to Staples now flogging computers, because they're all out of business, they don't exist do they?

Exactly.

There's no hard drives any more. It's all in the cloud.

No. Well, quite, yes. I wouldn't have quite so much to sell.

Last question though, there will be another Dave Lee at some point. What advice would you give him? We have a lot of aspiring journalists listening to this, so someone will be listening to this thinking, "Well, five years from now when he eventually does bugger off, I want to be the new him." So, how does that new person hit the ground running?

If they're anything like me, they'd be listening to me saying, "I could do better than that."

Yes.

I did a talk once at Lincoln University. I went back and gave a talk, and I had this sudden fear when I was about to start talking. Because I remember thinking, "I used

to be in the audience," and whenever people would come to speak, I'd always look at them and say, "Oh, I'm going to do better than you."

"Your problem is you're a twat, whereas I am not. I've got one over on you already."

Ha-ha! So I kind of always think that it might...

I refuse to learn from people as well. I know that was funny, but I genuinely mean it most of the time.

Yes.

"Who's this guy telling me? I don't want the benefit of his experience."

Yes, experience contains a lot of bad things as well, right? It has to. But I think if someone was to come into this job, I think my advice would be to focus, I think. And, because the nature of the job for me here changed, because the nature of what technology was changed, I think. The sentiment around the big tech companies is almost unrecognisable compared to four years ago when I first arrived. There's certain themes that companies were given so much more leeway to do things than they do now because of this whole privacy argument, and because of the competition argument, and the misinformation and all this kind of stuff. And so what it meant was, when that shift was happening, I don't think I was necessarily quick enough to go, "Okay, well that was the old stuff. And now we're on to the new stuff." I kind of kept doing both for a while. And what I should've done is been much more straight on the new stuff. And so my advice would be, for someone in the job, would be to look at the state of play and say, "Right, what are the most effective three story strands that I can really put everything into?" Because you can never cover anything. The BBC has one tech reporter in San Francisco.

That's literally you.

One tech reporter in the entire *country*.

Also literally you.

Yes. And so how could we possibly compete with say, Bloomberg, which just down the road from where we are...

Who have a squillion.

They have two reporters covering Google, let alone the rest of the technology industry. And that's why they do very well. So I think you've got to look at your strengths, and the strengths are, you're connecting with real people, not people with money like they do at Bloomberg. You can travel, you can go to places, you can meet people, real people, in the course of that reporting.

You're hampered by the fact that you're one person. I had coffee before this podcast with Elaine Moore of the FT, and she's out here in San Francisco. She's a friend of mine. I've known her for a while. She writes the Lex column, but the FT have someone who writes exclusively on Google, and one on Facebook and so on.

Yes.

They've got a team five times bigger than you guys.

Yes. Although the FT, we obviously we've got a tech team in London that's plenty more people, but I think the FT probably have faced the same dilemma. They've said, "Rather than trying to cover everything happening in technology, let's just have a reporter looking at Facebook, because we think Facebook is one of those stories that's all-encapsulating, and we should put our efforts into that. That's going to be the best way to serve our readership." And there's a lot of value to looking at the tech press, TechCrunch and The Verge and whoever, and saying, "You know what, if that's the coverage you are after, then there are places for that." And to sort of end on a sort of bigger thought about the BBC, this is an organisation that's looking very closely at itself and saying, "How do we appeal to as many people as possible? How do we change ourselves to capture audiences that we don't currently get?" I think the BBC over its history has faced various existential worries, and the strategy that is always one out is to double-down on what it's really good at. And so I think we should, rather than the debate being, "What are we not doing?" I think the debate has to be about, "What do we not need to do?" And when it comes to technology coverage, I think that's particularly important because we can leave a lot of that stuff to the others. And we can say, "Well, what are we doing as a public service broadcaster that is really, really necessary?" And part of that is explaining technology, but part is also being this watchdog on issues that only a public service broadcaster could give the time and effort to. And that's where the focus comes in. And that's where I think we're slowly, and this is definitely something that we are trying hard to do, is changing our direction. Not completely, but to have a bit more of a sense of that. Like, what are the really big issues here that mean we don't necessarily do as many stories on tech, but we do stronger ones. We do ones that are really with the public service remit in mind, because they are such a dire need to cover those kinds of issues.

Dave, we could carry on talking for ages, but unfortunately we're out of metaphorical tape, so I think we're going to have to leave it there. I would say it, this has been an absolutely fascinating conversation. Thank you ever so much.

Thanks for having me. Like I say, I've been a fan for some time, so I'm pleased to be among the ranks of people you've spoken to.