



Jack Stilgoe 05:08

So, for me, I tend to sort of whenever hype builds around a particular area, I tend to get extremely interested. And I think that we should start asking some big questions about that area. At the moment, all the hype is about AI. So I've been asking some questions about artificial intelligence. But I've been particularly interested in looking at cases of artificial intelligence in the real world. So not just as sort of abstract software thing, but looking at a real world example. So I got interested in self driving cars as a sort of case study, in machine learning, a case study of how a technology and AI technology can learn in the wild. So in the real world, there are things driving around in, in various places around the world that are, there are computers that are learning to drive. And that seems to me an extremely interesting set of questions for somebody interested in in the governance of emerging technologies. I got involved in this actually, when it's often the case with social scientists like me, we get involved when stuff goes wrong, because when stuff goes wrong, you start to see the reality of a technology that is hidden behind the sort of behind the hype behind the veneer behind all the promises. So I first got interested when a Tesla electric car crashed in Florida, and its occupant driver passenger, we don't know quite what the status of the person was, he died instantly at the time. And then there was a crash investigation entered into what went on. So I wrote a paper about that crash, what it told us about the reality of machine learning. And just as that paper was coming out, an Uber in Phoenix, Arizona ran over a woman killed her when she was crossing the road with with her bicycle. So these were sort of test cases, to my mind of technology, experiments with technology that are happening in the real world with some really important questions about should we allow that sort of experimentation? What are the ethics of that form of experimentation? Do people have a say, in the experiments that are taking place? And that forces you to confront a set of questions about well, given that these things are never going to be completely safe, because no technology is ever completely safe? We have to ask questions about well, how safe is safe enough? And that forces us to say, safe enough? For what? Right? So we have to think about well, what is what might the purpose of this technology be? Might there be huge benefits in being able to alleviate? Might there be huge benefits in being able to cut the number of road deaths? Might there be benefits in terms of congestion and the way that we organize traffic in our cities? Might there be benefits in terms of being able to free up parking spaces, right? If in a world of self driving cars, you can imagine all sorts of possible benefits with against which to evaluate any any possible risks? And then we have a set of questions about well, how do we know the risks that we that we face? Are there likely to be new risks created from computer controlled vehicles, you know, the potential for a system failure rather than an everyday well known failure of an incompetent, drunk human being crashing their car into a wall? Right? These are? So we change the set of calculations that we make, at the moment it's happening, this technology is developing in a rather sort of haphazard way, as different cities around the world are doing their experiments. And the question

that I and some colleagues in the UCL transport Institute are asking is whether we can do things better, whether we can get more of the good stuff from technology, avoid the bad stuff, and help create desirable futures rather than do a former sort of technological sleepwalking, which is what we do so often with technology, we just sort of let it happen. And we go, Oh, that was good. That was bad. Let's try and clean up some of the bad stuff. Maybe we'll try and fix that. And, you know, the sense that there might be a better way to govern technologies, what's driving us?

Laura Hewison 09:42

Well, I happen to read that there's been some recent tests going on in

Laura Hewison



Jack Stilgoe 14:29

Exactly. Exactly. So you know, taking away mo car through Dickensian Soho would be quite a complicated, quite a complicated task. So there is an opportunity, I think, to reimagine. So, Ilan musk would would claim in his view, where he's saying if you're writing negative articles, you're killing people because I have the vision, the only vision and if you're standing in the way of that vision, then you are the problem, right? he is he is suggesting that there is only One way forward. And actually what we see with transport is there's always lots of possible ways forward. I think in Britain, we have a real opportunity to work out how self driving technology can fit within our public transport system, to, for example, help questions of inequality and mobility, how can we make sure that people who don't have access to transport do have access with new technologies? How can we make sure that transport improves public space? Rather than makes it worse? How can we make sure that transport improves on our currently congested streets? Right? At the moment, there's a real danger that if everybody were to buy into Elon Musk's vision of where this was going, you would have a future in which people are rather than walking, they're taking a self driving car from one place to another just because they can, that self driving car is then maybe driving itself somewhere to find a parking space. That sounds like a nightmare for congestion, right? The idea that just because the computers in charge we solve traffic is, is fanciful. And it's also you know, a lot of these these visions of the future, even though the people behind them are expressing them with real certainty. A lot of them are themselves really old responses to the problems that are facing us. So America, you mentioned has 40,000 Road deaths a year or thereabouts. Which is about three times per mile, what the road deaths are in Britain or Sweden or a really safe country. And the difference between those two countries is not whether or not they have self driving cars. Right, it's actually some fairly boring things to do with the condition of our roads to do with whether we enforce drunk driving laws, what age people learn to drive at, you know, how, how well maintained our cars are things like that. Those are quite boring things. So you know, one response for Ilan Musk, if he really, really cared about the 40,000 road deaths a year, he probably wouldn't be doing self driving cars as the inevitable response to it. Right? He'd be doing some of those easier things, or rather, some of those things that require political intervention, rather than just the invention of artificial intelligence.



Laura Hewison 17:20

I personally, I live in central London, I don't tend to take cars, unless, you know, I'm really really far away from my bed, I catch a taxi or an Uber or something like that. But when I do go in cars, I get terrible car sickness. How will we look at problems like this, that might not necessarily be you know, the, the thing that you the safety thing or the environmental thing, or it might be a problem that comes up out of nowhere out of, you know, everyday

ous vehicle

y that in the
ple of what r
ts of things,
s well. And in
g deal. beca
eading or, or
at you don't
ss. How you v
tion for for pe
ended conse
, that's going
n that we can
ooth, or ways
rizon or, or w
s going to be
e by surprise.
the uptake o
peculiar thin
hat it change
ou'd asked He
able to the m
ve blamed h
nt city. And th
ompletely by c
e are now loc

cars? Yeah, so the Industrial Revolution radically changed what business looked like, or rather, business changed during the Industrial Revolution, because you know, the cause and effect thing isn't, isn't obvious. But perhaps more importantly, in policy terms, it radically changed what families looked like what work looked like, it created opportunities, it allowed women to enter the workforce in large numbers. And so these sorts of big social changes are bound up with big technological changes. And it's really, it's really hard to think Well, how do you get those right, given how unpredictable those sorts of changes might be? But as we're going along, the crucial thing is that we need to think about this stuff, right? We need to think about who is likely to benefit from this? Is it really going to be the people worst off in n ff in, , ? outt this s

normally, they don't have much to say about new technologies until those technologies are presented to them, by which point it's a sort of yes or no. And our sense on this project is that it's worth having that discussion upstream, that it's worth having that discussion,