

2016 Conference Transcription

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Moderator	Carlo Buontempo
Speakers	Charlie Winter, Ruth Garcia-Gavilanes, Lydia Nicholas
Notes	Charlie's contribution for the Q&A session may be difficult.

Introduction

Moderator	Hello and welcome to Future Everything 2016 Festival Podcast Series. Over two days, in Manchester's iconic Town Hall, we tasked designers, artists, scientists, and many more, to rethink our resources from life, earth and intelligence to community and uncertainty. Our speakers asked what we might need less, and more of, in our near future. In this panel discussion, we hear from Charlie Winter, Ruth Garcia-Gavilanes, and Lydia Nicholas.
Richard Stanton	Who would like to start? Who's got a burning question to begin?
Question 1	<p>Thank you. That was an incredibly interesting range of perspectives and accounts of quite different fields, and it's also interesting how they connect.</p> <p>I've a question for Charlie about the... if I understand it correctly, your account of the ISIS discourse around the creation of uncertainty and the creation of media discourse and so on. When you follow this discourse, it might seem like there is this singular voice, which we might now call IS. However, when you then also speak to observers, or even people who do research around IS and the networks of protagonists, you will then also see that of course there are layers of organisation, and networks that are connected to other networks and maybe a core. A lot of the discourse that is most visible to us, as outsiders, and as westerners, are actually interactions by an online supporter network, which speaks and publishes in English, many of whom don't actually have operational function, many of whom might never have met an operative.</p> <p>So I'm curious about your perspective. On one hand, there's this sense that there is a singular voice, but on the other hand, it's like any other organisation,</p>

	it's actually an incredibly complex mess. I'm sure there's lots of internal discourse as well.
Charlie Winter	<p>That's a really good question. I love discussing this, because I think it's one of those fascinating things about how the Islamic State's outreach strategy works. As you rightly say, it does operate with a core of propagandists, a core of public diplomats, if you like, individuals who have been appointed officially as propaganda makers, people producing content. Then another group of individuals who are appointed as disseminators of the content. That happens both online and offline. So in Iraq and Syria, for example, there is a very large media effort, there are twenty five media kiosks in the city of Mosul alone. All of which employ three to four media employees who go round disseminating by hand, newspapers or [inaudible 03:10] so [inaudible 03:12] materials, and of course things are played on television screens at these kiosks as well.</p> <p>Specifically in the online world, the role of official appointed media employees of Islamic State is a lot more nebulous, a lot more difficult to discern. I think that it's literally as small as about maybe ten or fifteen individuals, who are operating on a number of platforms. So WordPress, Tumblr, Telegram and Twitter, those are the four key ones, as I see it, that operate in tandem with each other, and basically coordinate the dissemination of material.</p> <p>The actual dissemination itself is given up to these individuals who are supporters of Islamic State, but as you say, aren't actually necessarily operationally connected to the organisation. They are engaging in its propaganda operation because they support it, and they view dissemination of propaganda as a way to partake in its Jihad. This is something that has been written about extensively in Islamic State documents, but also in the literature on totalitarian communication strategies, for example. So Jacques Ellul wrote a fantastic book back in the fifty's that looked specifically of the issue of how the observer is brought into the propaganda operation itself. How, through a constant unrelenting total stream of propaganda, they become instruments of propaganda themselves, the consumer, the propagandee, also plays the role of the propagandist. That is a strategy that Islamic State has managed to execute very effectively in the last few years. It's managed to make sure that it can brand itself, it can get it's photo reports, it's video's, it's audio statements out there, very, very easily by giving much of the actual legwork to a secondary tier of individuals, who support the organisation and want to engage with it, but aren't necessarily being paid by it, or officially appointed as disseminators.</p>
Richard Stanton	Thanks, Charlie. Has anybody else got a question immediately following that because I've got something I'd really like to ask Charlie, if that's okay? There will be lots more questions, but is there anyone else immediately to follow?
Question 2	Just to follow up from that, what's your perceptive on that is there actually internally a singular narrative within IS?
Charlie Winter	Yes, there is a document, and if you're interested in this, then I urge you to read it. It was published by the Guardian in December, called, Principals in the Administration of the Islamic State, which outlines a great many things about the Caliphars administration, from economics to indoctrination and education and so

	<p>on and so forth. The last section of it looks specifically at the issue of media, and when I read it back in December, my mouth literally dropped open, because it is very difficult to map out exactly how the operations are working, but I had a fairly strong idea of what I thought was happening. I was very gratified to see that the speculation that I had was confirmed by this document.</p> <p>It talks about there being a base foundation. The base foundation is connected directly to the office of the Caliph, so the office of Abul Bacalu Baghdady, directly connected also to the head of military affairs for Islamic State. Then that base foundation, as well as producing things like the execution videos involving Jihadi John, the really high profile things, that base foundation dictates the line to the rest of the provincial mediocrities. If you imagine the base foundation at the centre, and then encircling that are a great many provincial mediocrities, so there are thirty eight in total at the moment. They all produce their own content, be it photo reports, videos, audio statements and so on. They have their line dictated by the base foundation. So while they have a lot of flexibility in how they portray that, in what kind of photos they take, what kind of videos they make, it is requested and delineated from a central media apparatus. Then, outside of that secondary tier, there is a third tier, which is the auxiliary media foundations, as they are called in this document. These are things like the Amaq news agency, which you may have heard about, which is essentially a twenty four hour news wire service for Islamic State. That's the best way I can think to describe it. It doesn't have any overt connection to the group itself, it doesn't identify itself as an official mouthpiece, but it is the one which is responsible for the initial claims. As I said earlier, it was the one that claimed responsibility for the Brussels attacks, also the first ones to talk about Jakarta. Also John Candy appeared in a recent Amaq news agency video. All of these things are very intriguing, because on the face of it, the group identifies as something which is unofficial. This is why it's an auxiliary foundation rather than one which is part of the base foundation.</p> <p>To cut a long story short, while there is a great deal of flexibility in how the operation actually takes place, there are very carefully defined structures that underpin all of it. I think it's identifying the interplay between those structures, that is a part of how we can best challenge it, I think.</p>
Richard Stanton	Thanks. Does it follow on from this, your question? Right, okay thanks. Obviously, I'd like to bring in the other speakers.
Question 2	I'm struck by the parallel between yourself and the last speaker. There seems to me that there's an overlap, and the overlap is that in a sense IS is represented as a plague, and in that sense is like E.coli, in that it has the ability to reproduce and replicate, and we are attempting to minimise the adverse effect. I don't know whether you can work with that in terms of the parallel that it's an organism, and you can determine layers of it, but actually, we don't have control over what happens with that organism. There are random events that may change things hugely.
Richard Stanton	Could I just suggest we bring Lydia in first to comment on that parallel, and then Charlie, you might want to also respond?

Lydia Nicholas	<p>I'm not an expert in foreign affairs or IS at all but my assumption would be that they want to be perceived as a plague that's unstoppable and uncontrollable, but in fact, that isn't how they work. They actually have a structure internally, and they might be much more vulnerable than they are trying to appear. I very much hope that they're not like E.coli, because a lot of the very useful means of fighting those kind of infections is to bring in other kinds of organisms, and try and find a balance. If you look at kind of micro-biomes, it's another area that the project I was working on, was in was how to find a balance between engineered organisms that could live with and possibly suppress pathogens. I don't want us to live in a world where the only way for us to fight IS is to produce something that's a sort of equal and opposite reaction. So I hope not.</p>
Richard Stanton	<p>Thanks Lydia. Charlie do you want, briefly, to comment?</p>
Charlie Winter	<p>I think that's exactly right. It does want to be perceived as this plague which will spread and spread and spread, but it is much more vulnerable. Also, it's important to recognise that even on the flipside of things, we are constantly in this situation of uncertainty about what random events might happen. Whether there will be an attack on a police station, or whether soldiers will be killed, or anything like that in a western country, something which is unpredictable, something that happens on the back of a self-starter, an individual wanting to do something on behalf of Islamic State.</p> <p>It happens on the other side of things as well. The individuals who are running the organisation, they don't know when all this stuff is happening. So there is a great deal of uncertainty on their side as well, which I think is really, really interesting. Essentially, there must be a kind of think tank kind of operation within Islamic State, which is constantly going through the media, constantly looking through social media, through things like Twitter, to see if there are any ongoing attacks, to try and ascertain whether there could be a potential propaganda coup in there somewhere, if there's something happening which could be claimed, if there's something happening that has any connection in any way to Jihadism. They are looking to really create this sense of plague, when it isn't actually there. But both us and them are underpinned by this sense of uncertainty, and they're using it to their advantage at the moment, and we aren't.</p>
Richard Stanton	<p>Could I just frame a different angle on this? Both Islamic State [inaudible 13:00] on one hand, and in a very different way, and ethically of course, on quite a different plane, the system that the organisation that Lydia was looking at, where she was explaining commercial pressures, or professional frameworks, constrain the way that knowledge is created. Both of those are within quite a powerful structure. Whereas Ruth was talking to us about Wikipedia, which in principal at least is completely decentralised with no controlling structure.</p> <p>IS would be a different case, because they are not claiming to produce scientific knowledge, but I wonder whether the nature of the information that's produced, or claimed to be produced and generated reflects that, and in particular, whether Ruth feels that the, as it were, this was certainly I remember the original image of Wikipedia, the democratic nature of it, is in some way a guarantee of more</p>

	risky terms, tricky terms, but more objectivity, more chance to criticise and validate what's happening?
Ruth Garcia-Gavilanes	In Wikipedia, editors, is somebody an editor from Wikipedia here? No. So editors, especially the older ones, they try to be as strict in what they add as possible. The most experienced ones generally are the ones modifying and making most of the revisions. In some cases, they even developed bots, like automatic scripts that will check if you are putting something strange in the content. In my perception, that is a new structure that is working. There are many critics, probably they don't cover the whole narrative of events, but they will try to explain the facts in a very objective way. I think it will just get better with time, in the case of Wikipedia.
Richard Stanton	Lydia or Charlie, do you want to add anything more about the way, the dominant structure itself is responsible for some of the distortion?
Lydia Nicholas	<p>I think what came out of the long term interaction with the scientists was that while there might be a dominant system, really it's the cultural force that pressures us towards valuing information that comes to us in one form, and not that comes in another, is made up of the little decisions that every one of us makes every day. I can see that being quite similar to some of the things that happen in Wikipedia. The decision to make a bot that doesn't allow for certain kinds of spelling, that doesn't allow for certain kinds of sentence structure, that was something that some of the people that we've been working for on a Nesta project, who look at bias in Wikipedia, were saying that the bots strictness, and the fact that you can very rarely push back against them, are something that disproportionately affects groups that are already underrepresented on Wikipedia. So people of lower educational levels, and women, who might come to editing an encyclopaedia, they are less likely to have been socialised into confidence in their opinions, let's say. They don't assume that they are right, in the same way that men are more often socialised into doing so, and so they will just stop as soon as a bot tells them to do something. That kind of pressure that gets built up by all sorts of little decisions at different stages, is something that enforces a hierarchy, and that's how these kind of systems developed.</p> <p>No one is really deciding we are not going to allow you to work with bacteria in this particular way, and think about letting it grow in a chaotic way, and exploring questions as they're uncovered. It's about resource limitations, and people deciding this is the priority right now, and somehow that then stays the priority. So you never get to work with it in a different way and you never get to say 'actually this is true eighty percent of the time, but twenty percent of the time it does this very different thing.'</p>
Ruth Garcia-Gavilanes	I would just like to add something that you mentioned. There are many, many papers that talk about bias in Wikipedia, and there is bias. Most of the editors in Wikipedia actually are males. It has been detected, for example, that the way that biographies are written in Wikipedia contain a lot of gender bias. Every woman that has a biography in Wikipedia are referred to as the wife of, or the daughter, of a prominent man. So because Wikipedia is made of humans, there are faults that still need to be improved, but that's why it's important to detect

	those by measuring and making all these studies with data which people in my field are doing.
Richard Stanton	Thanks. Another question here?
Question 3	I've got a question to Ruth. I found her presentation very interesting, because it resonates with an experience I had recently in February. I wanted to book through Airbnb. I've always used Airbnb but this was the first time that I was required to submit my government I.D., which is a security service provided by Jumio, which is like an online security service. So I looked up what Jumio is online on Wikipedia and the Wikipedia entry was very short about this company.
Ruth	Jumio?
Questioner 3	Jumio. It's a kind of online securitisation provider that's now linked to Airbnb and then also links to your government I.D to Facebook, LinkedIn, or google plus. Being a bit sceptical, I didn't want to use this service, so in the end I didn't do this booking. And the Wikipedia entry about Jumio was very short. The last references were done in 2013 or 2014 and the last edit was done in 2016. So I found this also quite strange in a way. Whilst you were holding the presentation, I was looking up the Wikipedia entry again and now I see that the majority of their shares were sold out to Facebook's co-founder, and I don't know about the politics around this company, but I find it just very interesting that some information is very reduced on Wikipedia. What do you think, what is the role of the private sector, possibly also to influence how a certain Wikipedia entry maintains on the page, and also how can you avoid a bias that can be created due to a kind of more powerful editors. In this case I had to do more online research to find out more about what's happening with my data when I submit to such a service.
Ruth Garcia-Gavilanes	If I understood correctly, you were trying to find more information about this security, and you just found a small article and you were surprised? You expected more...?
Questioner 3	It wouldn't provide the human knowledge or the kind of collective knowledge that I would expect on Wikipedia, so it seemed to be reduced.
Ruth Garcia-Gavilanes	In my PhD, I studied a lot of Twitter. I'm starting to study Wikipedia, around a year now. What I can tell you is that it's a long tale. There are editors that are so passionate and engaged about certain topics, because knowledge can be infinite, there are actually articles in Wikipedia that are not built by people, they are built by machines, they are just concepts and they put [inaudible 21:16] and this is for many reasons. One is that that piece of information probably is new, and there are new editors coming. The other explanation is that the editors in Wikipedia are still growing. There are many of them. I think there are thousands and thousands, but just a few are the most engaged ones. Another reason, I don't know if you saw it in French or in English, but the difference in revisions between languages is huge. There is English, the dominant one, and then there are other languages all of them have less articles and less content as well. So how I would avoid it, is how about if we all contribute? Wikipedia is open for everybody. I have contributed a bit in the content of things that I thought they

	<p>were wrong about, specifically in my case about some typical food of my country. So we can all contribute to that. Specifically when you find all this gender bias, I will edit and then I will comment. Do that and then you are helping in getting an open system to get better. So that's the way I would tell you.</p> <p>Wikipedia is huge. It's not only about encyclopaedia. They have other projects. I know there's a project called Wikidata. It is funded or received a lot of help from Google. It's because a lot of the search that Google does now, sometimes you type a concept and it doesn't really only tell you about the result, but they give you the content, the explanation of what you were looking for and they take that from Wikipedia. So they do participate. I don't know how much they enter into the content that they enter, but they have some sort of relation there.</p>
Lydia Nicholas	<p>Of course, the possibility is that that was deliberate censorship. It's interesting. There's a great Twitter blog that lists the number of edits on Wikipedia from the IP address of the house of commons, and a lot of them are directly about MPs websites and their Wikipedia entries. So the fact is that people can and there's nothing stopping them. It's not technically illegal. They can change the way that they are perceived and if something has been sold to a Facebook CEO, they are going to be savvy enough that their PR department is going to check that the Wikipedia article doesn't have anything that would put you off. So that's the other thing about it being open, is that the less attended articles are more likely to be vulnerable to that kind of corruption, because they are not going to fight and put the stuff back up because it's quite an obscure thing. So your suspicion that it could be censorship is something that you might only be able to work out if you look at the talk and edit pages in a lot of detail and even then it might be hard to find.</p>
Richard Stanton	<p>So we have some interesting hints here, some clues as to how what might seem like an open organically created democratically created memory may actually be open to manipulation, which may connect with some of what our other speakers have also been saying.</p> <p>I will come back to you. Maybe let's see if there's anyone else that's got a question they'd like to raise at this point? If we want, we've got about another half an hour folks, but we'll see how it goes.</p>
Question 4	<p>Hello everyone. I'm a graphic designer and I'm very interested in uncertainty as how we can present uncertainty. In a way, how we advertise things, we need to push people to buy things through confidence that the advertised product does whatever we say it does. We don't usually present uncertainty at all. For instance, if you advertise medicine, you wouldn't be putting numbers like 'it won't work in twenty percent...' You would push it in disclaimers.</p> <p>So basically, what we do as graphic designers, is we get this idea, whatever it is we're advertising, and put certainty in a place where everyone will see it, and hide uncertainty, as far as we can.</p> <p>I'm just wondering what do you think about it and how do you think it is possible to present uncertainty in a nice way for people. Is it possible at all?</p>

<p>Lydia Nicholas</p>	<p>I worked at the same as doing the synthetic biology project. The company that owns that then was working on visualising genetic sequences and how you...there is a particular word for it, and it's completely slipped my mind. But how you see the proportion of certainty that a particular genetic sequence of DNA will have the same pattern. So if you have lots of related organisms, usually a particular strand of DNA that's doing the same thing will work the same way, but in a certain proportion of cases they won't do that. It's a really interesting design problem and it's something that we interviewed a lot of computational biologists about. The solution that we came up with was actually very similar to the one that project [Uga? 27:12] has had about the brightness of a line in a particular place. The brightness of the letters would be a sign of whether something is fading into reality. If it's completely bold and filled in, then it's definitely there and it can fade back. So there's all sorts of design things that you can do in relatively simple cases. The problem is that choice exhaustion is a real thing, and we don't necessarily want a million different thing to consider every time that we're deciding about which medication to take, what thing to buy, what kind of cleaning product to use. So it's all about trying to work out where you put it.</p> <p>It would be interesting... you get the one to five food hygiene things now stuck on the front of restaurants. If you had to have that in front of every claim. This is a certainty from a grade of naught to ten. Have that in every policy decision, every bit of information that is put in front of a cabinet office minister that's making a decision. Every claim that is on a shampoo bottle, 'we'll make your hair shine forever', one out of ten... it's not going to happen. Is shampoo eight out of ten? That would be really interesting to try and I'd really like to see that kind of design experiment, but the problem is you have to counter it with exhaustion.</p>
<p>Ruth Garcia-Gavilanes</p>	<p>I want to comment on something about it with Wikipedia. The good thing about Wikipedia as well, we can construct the date and we can make all sorts of things. Structurally, there is a project called [contrapedia? 28:45]. Many researchers in Europe got together to make a type of Wikipedia that shows the article, but it shows you the words that receive more modifications. So you will see parts of the articles, this part is red, so here people really discuss about these parts and some others that have like light and most people didn't care about these parts. So I think as readers that would tell you something about how memories and history is written.</p>
<p>Richard Stanton?</p>	<p>Charlie, could we ask if you've got any comments? Could I add another note to this, which is you've told us in very graphic and powerful ways about how the Islamic State regime tries to create uncertainty for its targets, for us, the people it wants to overcome and intimidate. What about creating certainty for the people within what they would call their caliphate? Is that part of what they do as well? Presumably they also have propaganda systems directed at their own residents, their own population, and that would be another system for creating fake certainty because those sorts of regimes obviously build on giving people the belief that there is a long term future with them. Have you seen evidence of that?</p>

<p>Charlie Winter</p>	<p>Yes, that's actually something that I'm doing a lot of work on at the moment. So applying past theories of totalitarianism or past implementations of totalitarianism. So looking at how communications were used by the Nazi's or in communist Russia to subdue, subordinate, and bring the population under the fold of the organisation itself being a recognised government or in this case a terrorist insurgency.</p> <p>The way that propaganda is used both online and offline has a great many different things to it. So one thing which is certain is that they are very good at audience segmentation, and yes, there is this constant striving to create uncertainty for adversaries, but certainty for potential members and sympathisers. One of the things which is so important about the unrelenting stream of Islamic State propaganda online is that the comprehensive brand that is formed is delivered as a way of reducing the perception of risk for individuals who want to go to join the group in Syria and Iraq. It provides them with a full picture of what their life would be like, even though it's very easy to see it's not going to be lots of flowers and wildlife and a pleasant time in the Mosque. It's much more like a war than Islamic State propaganda actually conveys. Nevertheless, the unrelenting nature of the propaganda and the way that it's composed, so the focus on civilian life, the focus on utopianism, really is meant to close the gap between uncertainty and taking that risk to actually make Hydra and join the group.</p> <p>A similar thing is happening offline as well in Syria and Iraq, where there's been a systematic monopolisation of other channels of information. So internet is no longer accessible in the heartlands of Islamic State. Satellite television has been banned, radio waves have been banned, and radio stations have been banned unless it's Islamic State's own Al-Bayan radio. All of these things are part of an overall strategy which is trying to really crush the organic formation of public opinion and replace it with a constant narrative, a constant barrage of, 'yes, this is utopia, even if you're experiencing hardship in Raqqah, your brothers and sisters in Tripoli and Libya are having a great time, look at this market which is full of foreign produce and fresh goods'. There is a constant juxtaposition of reality and this utopian life that Islamic State wants to convey and they do it very effectively.</p>
<p>Richard Stanton</p>	<p>How many more people would like to ask questions? So we've got three people. We'll probably have time for one or two more, but let's see how we go. Then shall we come to you? I know you wanted to ask a question as well.</p>
<p>Question 5</p>	<p>You've partly stolen my question, thank you. I'm struck by again parallels between a dandruff shampoo which gives an impression that we can have some sort of cleanly utopia and mass marketing. I remember when IS first began to feature, there was this shock horror they were able to use social media. Well, of course they are. But back to us, there's a sort of psychological climate that business is sort of like an IS in suits, and is out to influence us, which of course it is. As near as I can get to a question, is beyond the parallels, it's like we're playing a game at them, they're playing a game at us, and we as consumers are petitioning for something which we don't quite understand.</p>

Richard Stanton	Were either of the other two colleagues who were wanting to ask a question going to ask it on this kind of theme, of the controls which are being exercised under the manipulation of information? Would you like to come in now?
Question 6	My question is directed to Lydia, especially her comment on how we measure scientific research and what is the true... and especially when you said about the institution, maybe the institution should change this. I wonder whether that's your personal political agenda or that's mostly this critique of towards science, because what we are facing now is not just this [inaudible 35:31] controlled environment. England now is a risk aversive government. I wonder how that plays into how we build our research around that, because in the grand scheme of things, they are influencing what we do. Especially they are the ones issuing money for any academic research to be done. Then to do research, we're under these unspoken rules. So I wonder how those things all play together and where do we go from now on? If we are to change this, are we only changing the institution, or are we actually changing society as a whole?
Lydia Nicholas	<p>I think you're absolutely right. It connects up directly to the cutting of the budget for studying arts. It's the idea that anything that isn't directly applicable science, that we can see the application and the route to application right now, that has to be cut as useless. That is something that of, course, means you actually massively narrow down the amount of things that might potentially find, you're following one route, whereas in fact, just off track, there was something extraordinary to discover that could have been incredibly useful, and potentially incredibly valuable, but you're never going to see it, because you can't afford to take risks.</p> <p>Some of the people that I was speaking to were PhD students and hadn't yet succumbed to what they said was the churn of having to produce the right kind of findings to get the right thing happening in their career. One said that none of this is real, nothing that I am studying is real. I just have to produce what looks like the right answer, because no one can afford to take any risks. Also different university departments were being played off against each other. Different universities themselves were fighting for the funding to get particular kinds of equipment so that they could get to the next stage. Obviously, it's a massive problem, and the thing about a risk averse society, there's a bit of me that sees it as connected up to a lean and perfect capitalist society. If you have a perfectly efficient system and there's no redundancy, and there's no capacity to try out new things, to adapt when something goes wrong. So we don't have space to try out new things, because that's not effective. You can't put a value figure on having the space to play and to create and to follow interesting questions.</p> <p>So is this my personal political agenda? I think, yes, I want there to be space to experiment. I think that it also is valuable and worthy in a society, even one that doesn't have a lot resources spare. I was beginning to write a paper on that topic just as the nature report came out. I can't remember exactly what the title of it was, but I've got the link in the presentation I can give to you. It's a whole thing on that we're producing results that aren't useable, things that are distortions of reality. So this isn't just about a lovely creative happy let's have more funding for creative enterprises. This is about getting drugs that work, that</p>

	<p>don't kill people. I think it's an urgent question. I don't have that much in the way of answers, apart from hopefully the kinds of things that Nature were suggesting around trying to produce more collaborative systems where you can try out different means of getting to an answer, and people can critique each other, and getting away from the frantic battle that we've turned academia into by cutting so many resources, by letting people's support each other and experiment.</p>
Richard Stanton	<p>We've got two other people who wanted to raise questions. I've the feeling that they both relate to this line of discussion, is that right? Did you want to come in Ruth?</p>
Ruth Garcia-Gavilanes	<p>I just wanted to say that in my area we look for data. We deal with data from people, and the big challenge here is to see what kind of data actually comes from people and what is junk. So when you claim something, when you make an experiment with social media data, it's hard sometimes to detect that, to say 'okay, this is spam and this is actually people'. I have also come across many students. They have certain hypotheses, and when they test that with the data that they collected, it just doesn't work, and they work so hard on it, and they have to change and try to maybe pressure a bit the data, so that they can find what they wanted to find. I was thinking it would be nice if we could publish what failed, what we couldn't do. So it could actually help other people as well.</p>
Richard Stanton	<p>Charlie, did you want to come in on this issue, and if you do, could I ask, because I know in your little bio it mentioned that you've got a current project for the US department of defence, you work obviously with government. Turning to now, not so much about IS, but your field of work, are you aware of these kinds of pressures? Is this a concern at all, or is it such that developing an important area that really you're given freedom to approach it the way you want?</p>
Charlie Winter	<p>I feel that I've been given freedom to approach it as I want, and it's the kind of thing, I have had this question a couple of times, what's it like being a researcher on a DOD grant? The way that it operates is we're given total autonomy in how we form the conclusions that we come up with, and total autonomy in how we research as well. I think that's because there is an awareness that integrity is everything in this kind of research. If it's seen to be skewed in any way based on the motivations of the person funding it, then I think that is a really big problem, and it makes the research go from something being useful to being something redundant very quickly. It is certainly something which in my time researching this kind of stuff, there are other circumstances where there are desired conclusions, and it's just a case of rejecting those desired conclusions and making sure that research is based on empirical stuff rather than conjecture. I think specifically with what we're facing from Islamic State right now, that it is such a political issue now. It's in so many different politicians, it's become a bit of a baseball bat with which politicians hit each other. A lot of that is based on nothing but conjecture and speculation. The reason I enjoy working in this area so much is because there is a great deal of evidence out there that you can draw upon and it really does make a difference if it's fact based, and if it is worked holistically rather than being something which is just conjecture which is weaved into agenda.</p>

<p>Question 7</p>	<p>I guess this is a question for all three of you, but one of the interesting things around uncertainty and social media as data is that you don't see, and that you can't see, and where the things leak out and all of the extra fringe groups or where [inaudible 44:13]. I imagine what happened during the Turkey uprising, the internet basically had a second mesh network, or people who were communicating outside the internet which was being stopped at one point. I'm not entirely sure why. So we suddenly had this extra network of people who were operating and that you couldn't see what was happening.</p> <p>I wanted to ask the panellists where in their work they've seen people operate off the mainstream. I hesitate to use the word legitimate internet in some ways, especially with you, Charlie, where you're seeing how messages are being broadcast in Arabic from ISIS when they claim terrorist attacks. The thing's with your data, and the work that you do Ruth, and how you see people, particularly when working in humanitarian work as well, looking at humanitarian things in social media data, Lydia with you with genetic and rare diseases where people are having to almost go off grid in some ways to find the things that they want. So where are you seeing these trends happening in your work?</p>
<p>Richard Stanton</p>	<p>Which of you would like to take that first jaunt?</p>
<p>Lydia Nicholas</p>	<p>I think in a lot of the things that I study, it's about people trying to make themselves visible. There's a really good example in that if you want a thing about people talking about when something has failed, this is probably interesting way when things failed.</p> <p>I tried to have quite a large project in looking at how patient organisations, so patients with chronic health problems, manage health data. We did quite a lot of that work with quite large charities and that went very well. That was all about how you set up peer support networks for people who are exchanging information, not just about the latest medical things, but how to be a better patient. What are the best ways to turn up at your appointment? What kinds of things should you be tracking and taking, like what sort of symptom is something that is a flare up. Useful tricks; if you've got arthritis, how do you open a jar? All sorts of things about that. That was pretty useful.</p> <p>Then we tried specifically to work with quite disadvantaged groups and one of the things that immediately became obvious was that it was going to be very hard to talk to them, because once you talk about health information, you often become liable for the risks. So a lot of the people that we spoke to had lived with chronic health problems for a very long time. So if you have lupus for twenty years, even if you left school at fourteen and had a child at sixteen and never went back into education. So your official qualifications and your official employment status are pretty low and socially disadvantaged, you can become an extraordinary expert in your condition. We were talking about people that went into libraries to get access to medical journals and could read and discuss the chemical interactions of different drugs, but they didn't necessarily want that to become visible because as soon as you do, you are scared, not just about the</p>

	<p>liability, legal and financial liability for hurting someone but also the fact that you might be responsible for someone really getting hurt, the ethical thing. The worry that you give someone advice that goes wrong, but also the fact that you could get sued if you do something as an official channel that then gets accepted.</p> <p>You then have the complicated thing that doctors want to get involved a lot of the time with these groups and want to support them, but they're really terrified about being liable for answering a question when someone isn't their patient, and it doesn't come through the official channels of legitimate medical use, I suppose. So that turned out to be a project that couldn't at that point really go anywhere, because we did not have the resources to support people in managing those complicated questions. So I couldn't just interview someone about what they were doing there.</p> <p>That became really interesting because there's an interesting point that in America, because they don't have the NHS, they actually have a much more active patient organisation scene in some ways, because they have to take over the research functionality that is not there. So there isn't a public biobank in America. Every biobank, every tissue bank is owned either by a corporation or a university. The universities are often much more precious about holding onto their information than the corporations are, because they want the discoveries. So in order to share things, you have to set up a cooperatively owned biobank and you can push forward the research in your field by doing that kind of thing. They were actually a lot more active in a lot of these ways of sharing information because there wasn't the same system that is very supportive and useful, but also quite total and operating outside of the NHS can be really dangerous. You can go to prison if you give advice to a child and they take it and things go wrong, or even if you give advice to a child, they accept it and try and have treatment and they take that and it works but it wasn't recommended by a doctor like that, you can go to prison. Parents have gone to prison for that.</p> <p>So people have tried to do work outside the legitimate system, and in health that is very, very difficult to work with, and very difficult to find out about because people are deliberately obscure for very real reasons.</p>
<p>Ruth Garcia-Gavilanes</p>	<p>In my case, there are many things going invisible that we are not aware in social media and in Wikipedia as well. Probably Wikipedia would say it's the most transparent one, because everything that you do there is recorded, but there are editors, the most expert ones build bots. I'm also in a project that we try to investigate the behaviour of bots. We are finding out that there are certain bots that have the role of fighting, always reverting someone's revisions. It seems like an editor didn't want to reveal who he is and he just built a bot. So we are finding these kinds of things.</p> <p>In social media though, researchers don't have access to the whole data, but in Twitter there also many things like, for example, in the political campaigns there are bots also being created there that will try to influence people, or that will post messages pretending that they are a candidate, or pretending they belong to a group, and even answer just to gain more followers.</p>

	The data in Facebook is almost impossible. If you don't work there it's almost impossible to have. So I wouldn't go into that.
Lydia Nicholas	Just one thing about that is that you see a lot of the time... we've done at Nesta some research into how networking happens at events and coordinating it with meet up data. The thing is though, you really can only track the elite techie community that are still on Twitter, or at least those groups, because everyone else is either on another platform or they're supplementing Twitter with other platforms and so their interactions on Twitter are very hard to completely work out, because they're also linking in continually into Instagram or having other conversations of things. So you end up biasing towards the platforms that are open, which is very annoying if you want to have a complete picture.
Richard Stanton	Charlie, did you want to add anything? I don't know if it really arises in the same way with ISIS, with the Jihadists, but does this arise in your work as well?
Charlie Winter	<p>I think it does. The idea of operating out of the mainstream news media when covering IS, is something which is a constant. Twitter has become the place where many journalists will go to find a quick story on what's happening in Syria and Iraq. It means that it's viewed as a resource to basically go and lookout for something interesting that's happening. This means that individuals who have no connection to the mainstream media, if they say something which is interesting, or talk about a massacre, or talk about a propaganda video, which may have media value, then it enables them to have their voices projected very far and wide.</p> <p>Of course there are positive things to that, but the negative things that arise because of this lack of due diligence in attempting to get a quick fix, a quick story, have caused some real problems in the whole narrative surrounding IS. I will name names. The Daily Mail has been particularly bad at this. It's projected the views of individuals who are abhorrent, whether they're supporters of Islamic State or supporters of other violent extremist groups, because they are masquerading as a legitimate source of information, outside of the mainstream, but they come up with something which is intriguing, something that will grab headlines, that you can make a nice headline about. That means that there is this uneasy meeting point between the mainstream and non-mainstream. That means views which shouldn't necessarily be projected to an audience of tens of thousands of people, perhaps more, can often find themselves on a front page of a mainstream internet news media outlet. I think that that's very damaging. I could go on with a long, long list of incidents of this, but I won't.</p>
Richard Stanton	Two questions here.
Question 8	I'll keep it very brief and I think the answers might be very brief as well. I love where we ended up because we're now asking maybe the questions about the greatest kind of uncertainty, which is how is your perception of the world, your model of the world, how is that shaped? Which information do you take at face value, and to what extent do you need to understand the process behind that information to then be able to interpret it?

	So my question for the three of you would be, now that you've engaged in your respective work for a number of years, compared to where you started, what other things in your model of the world, where you're either more or less certain than when you started out?
Richard Stanton	One other question. We are going to have to finish in three or four minutes.
Question 9	I recently came across the concept of surveillance capitalism which really monetises on our anxieties and also uses big data for predictive crime analysis, and I guess there's a whole other economy thriving on global terrorism. I wonder, because this takes up a lot of capacity in media attention, what would be your take if all this capacity was freed to address other social issues, what would this be, and do you see there might be a potential lock in since then, [inaudible 56:15] created that thrive on these uncertainties, how to get out of these kinds of economies?
Richard Stanton	I think really just a minute or two from each of you on your immediate thoughts and then we'll need to close.
Lydia Nicholas	<p>I think the one thing that I am more aware of now is the data points that surround the ones that you see; the things that were not looked at, the things that were considered to unimportant, the ones that the person who was doing the scientific experiment didn't even think about that [inaudible 56:51] so that didn't get picked up. So that, the fact that something can be true and yet still also a warped or a partial view of the world.</p> <p>In fact, that's the thing that maybe I can tie into surveillance capitalism, that by making it easier for certain forms of action or some kind of different things to be captured and then used and made valuable, that means by ignoring certain kinds of data points, or making them hard to fit into the system, you can negate those things. This way of living is not valid, you don't get your benefits, you don't get your job, and you can't select your gender in a drop down box so you can't have a passport that reflects who you really are. So you are denied your opportunity to participate in the system. Whilst we might not want to participate in capitalism, that's the only way to get food really right now. So if you're denied an opportunity to live, because the surveillance is only open to certain ways of seeing and certain ways of being. So I guess that's how I would connect things up.</p>
Ruth Garcia-Gavilanes	As I said, I've worked a lot with Twitter and now with Wikipedia. When I started my PhD, I was so thrilled and happy that I was going to have access, because I work directly with all the possible data of Twitter, we had access through the fire hole. It's called fire hole where you can extract all the Tweets of the world. I was thrilled, because I would have this amount of data and I will know what the world is thinking. But after working with it, I realised that there's a lot of junk, it's amazing, and that actually we could really study society if we filter and group, if you just select part of this data instead of considering the whole chunk, and so have more conclusive and clear patterns and signals from data. That's regarding your question. With your question, I lost it. What was the question?

Question 9 Repeated	[Inaudible 59:08 – no microphone to given to the questioner].
Mod	I fear that this may be a bit too big to cover in our last two minutes.
Ruth Garcia-Gavilanes	I would like to say something about it, I don't know if it's related.
Richard Stanton	In order to move onto the next session, we are apparently going to have to stop now. Apologies, Charlie, for not bringing you in on that last point. Many thanks to our speakers and to you for a really interesting session.
	We hope you enjoyed this panel discussion and thanks for listening. You can hear the rest of the talks from 2016 at: futureeverything.org/2016podcasts .

[Transcription ends]