Renée DiResta: I was looking at some of the Michigan protest activity. The armed standoff that had

happened yesterday. One of the interesting things was the extent to which those protests had been co-organized by the anti-vax movements because they've been

holding protests at state houses for five years now.

Tristan Harris: That's Renée DiResta, a disinformation researcher with the Stanford Internet

Observatory. We've had Renée on the show before. She's seen all of the things that Russia did to manipulate the elections in 2016. I highly recommend you check out that episode. Today we have her on talking about coronavirus conspiracy theories and what

different state actors and non-state actors are doing to amplify.

Renée DiResta: Anytime there's a new vaccine law that pops up, they have a whole caravan system set

up and all these things are in place and a lot of their ability to kind of put on a spectacle is front and center right now and it's really remarkable how press just kind of keeps

falling for a lot of the same stuff.

Tristan Harris: I'm Tristan Harris

Aza Raskin: I'm Aza Raskin and this is Your Undivided Attention.

Tristan Harris: So Renée, a lot has changed since the world has turned upside down. You've been

tracking how the information environment has gone totally haywire and especially manipulated by foreign actors, bottom up, top down. Give us a map of how to think

about what's been happening in the Coronavirus landscape.

Renée DiResta: Sure. So I'm looking both at overt media as well as the more kind of covert troll firm

stuff that people think about when they think disinformation research. I've been looking at top down versus bottom up. So that's the difference between what comes out of state actors, how do state actors communicate? How do those with access to massive audiences kind of comport themselves? Versus the more bottom up grassroots clusters of people behaving in unison and spreading information amongst themselves. I actually got my start doing this work, looking at the anti-vaccine movement, which is of course all of a sudden highly relevant again in very, very material ways. This is the topic that the entire world is talking about. Everyone from anti-vaxxers to the government of China

lately trying to understand what's going on in the information environment.

Tristan Harris: What trends are you seeing that are most sort of concerning to you? I mean, because

we're on this podcast because we're trying to meet a real existential threat and the antivaccine movement instead of being this sort of niche issue that you're an expert on has become relevant to the entire world's attention. I've been hearing from some of the platforms that there's actually preemptive kind of conspiracy theories about a future vaccine and getting people to be avoiding taking that. What most concerns you about this and what are the trends that you're seeing and how it's different from the kind of

previous ways information's been spread?

Renée DiResta: So I would say the anti-vaccine movement is very well organized on social media for years. A lot of the large pages had been on Facebook since 2009 and then in 2015 there

was a lot of the large pages had been on racebook since 2009 and then in 2015 there was a lot of new kind of upstarts that began to call themselves medical freedom and health choice. So medical freedom and health choice are euphemisms that they've been using for quite some time. What that translates into is I have the medical freedom to

refuse vaccines, just purely by virtue of like my own freewill as a person. The way that governments have traditionally come down on that is, "Well then, there's certain affordances that you don't get, right? You can't send your child to school." That's the kind of thing, that's the social contract or the social balance. COVID-19, of course, since we are hearing from so many highly reputable voices that a vaccine is going to take quite some time. They are working as fast as they can. What the anti-vaccine movement has chosen to do in a very, very coordinated and deliberate way is begin to undermine confidence in the vaccine program in general.

Renée DiResta: So they see this as a fantastic opportunity because if you search for something about a vaccine or a treatment or something else, you're going to encounter nothing for a while, right? You're going to encounter very, very thin search results. This provides an opportunity for determined individuals to begin to try to lay claim to the information landscape so that when you search the name of say a researcher who all of a sudden inadvertently becomes a public figure just by virtue of the work that they're doing or a new drug name. How many people knew what hydroxychloroquine was two weeks ago or a month ago? And so what you see is there's an opportunity for people to create content to kind of fill those holes. That is something that the anti-vaccine movement has prioritized for quite some time.

Renée DiResta: I wrote about this in 2018 in the context of the very routine vitamin K shot, which is not a vaccine at all. It's just a vitamin that kids get a shot to prevent brain hemorrhaging after they're born. Because we're born deficient in vitamin K. Unfortunately for a long period of time, if you searched Google for vitamin K, the results that you would find were not from the Mayo Clinic or Children's Hospital Philadelphia. Instead you would get the Healthy Home Economist who is some random woman who just writes a blog post about how she's rejected the vitamin K shot as if this is a noble freedom fighting thing to do as opposed to an incredibly risky decision. But that content becomes popular. It's widely shared on Facebook. It's widely shared on Twitter by the sort of networked anti-vaccine movement. They all link to each other's stuff in a very coordinated way. And so that was dominating search results for that term.

Renée DiResta: Unfortunately what we see there, is those articles being shared in groups where children do in fact actually die of brain bleeds because there are consequences to these things. That was something where Google and the social platforms really began to pay a lot more attention to this in late 2018 early '19. That was where you started to see some of the policies that have been put in place to try to surface authoritative health information. Really came about as a result of a number of these extremely tragic situations. Then also the Brooklyn measles outbreak and then the Samoa measles outbreak in 2019, the latter of which had I think about 80, 81 children die. And so this is where again, the consequences, the stakes are pretty high. So they're trying to prevent that from happening. But you're fighting with people who are absolutely determined to create content. Whereas the pro-vaccine side, the pro-public health side, particularly the institutions are just really bad at fighting that battle.

Renée DiResta: They're really bad at understanding how to create compelling, authoritative, interesting content that's going to perform well on YouTube algorithm or Facebook's algorithm because it doesn't inspire people to share it. There's no natural peer-to-peer virality there. Nobody's like, "Wow, this is the best meme I've ever seen from the CDC. Let me go share that." And so as silly as it sounds to think that the CDC needs to

understand how to create content made for Facebook or Instagram, unfortunately that's where people look for information. And so there is a need to get our institutions out of long-form scientific white papers perhaps and make them realize that they have to be filling this void with the other side, unfortunately. Just trying to help people understand the through line over the last five years, I find it hard to do that without pointing back to the fact that this was so obvious that this is happening unfortunately, and there was just no precipitating event that really made it a crisis level thing that needed to be fixed unfortunately until Samoa maybe Brooklyn to some extent last year. But then really, this pandemic.

Aza Raskin:

There was something you said on the Lawfare blog that I just want to quote it and that is, "This is not a narrative issue. This is a systematic manipulation issue where anyone, anywhere with any kind of message can manipulate a series of amoral but effective and dumb algorithms to create a perception of widespread popular belief and consensus." You were saying that state actors more so than individuals or even terrorist groups are using this to warp what we believe to be true, how we make sense and how we ultimately act.

Renée DiResta: A small fraction of a group, even in network activism, even in state media, create the content and then the question becomes how do you enable it to achieve mass reach? That's one of the things that the internet fundamentally transformed, right? That I think is the... Whenever anybody asks, "What's different now?" It's that participatory in nature. It's that process by which people are actively engaged in the dissemination process. So anytime you see a name that you like and you forward it, you are participating in that process.

Renée DiResta: I'll talk briefly about the China stuff, the top down piece because I feel like that's also a really interesting phenomenon in which bottom up and top down have kind of come together in some ways. So the original Chinese content about the novel coronavirus beginning in January, they were calling it Wuhan Pneumonia and this was their official state media, CGTN. We watch a universe of Chinese state media pages. They're on Facebook. Anybody can go read. They spend a lot of time producing English language content because they want-

Aza Raskin:

If I have the stat, CGTN has 96,000,000 page likes while CNN I think only has 32,000,000. So their reach is actually massive.

Renée DiResta: Yeah, with CGTN in particular. Yeah, they've got about 99,000,000 I think at this point, followers. This is Chinese state media, the same way RT is Russian state media. So there's no subversion around what they are. They are what we would call academically white propaganda. The attribution is quite clear.

Tristan Harris: The one thing just... I don't mean to interrupt you, but if you can explain for people that the country of China is not on Facebook and yet they're actually massively on Facebook for the rest of the world, this is a very important fact people don't actually know. Can you just explain that briefly too?

Renée DiResta: So Facebook is banned in China, but Chinese government has had since about 2013 to 2015 a real strong demonstrated commitment to ensuring that it is telling the story of China to the world, right? Facebook pages are a great way to reach the world, especially

since you can ad target on Facebook. What many of these pages do is they boost their posts or they create ads. I started looking at these about a year and a half ago. For a long time, the ad content was really cute, like pandas. They ran kitten ad campaigns. Explore the World with Us was the tagline of one of them and then gradually what we started to see is as Coronavirus became the thing that the world was talking about, particularly as it became clear it was not going to stay confined to China, you started to see them use that apparatus to push out boosted posts related to their handling of coronavirus.

Renée DiResta: Again, these are English language outlets. They do have regionalization, so they have various other languages that they support as well as an Arabic channel in particular. So what we see from CGTN and these other Chinese media outlets is that they run ads to boost their content about Coronavirus to English speakers and they're doing this worldwide. So we see them in Southeast Asia, we see them in Africa. A lot of it is the kind of spin that you would expect from any state media outlet, "China did an excellent job of handling this. The president showed up to ribbon cut at this new hospital. We have no new cases. China bought the world time," was one of the key narratives. "China's expert handling of the situation ensured coronavirus didn't spread." Then of course it did.

Tristan Harris: And is sending PPE gear to Italy.

Renée DiResta: Right.

Tristan Harris: With a notice that says, "We in China support you in Italy. We're with you."

Renée DiResta: Yeah. When the World Health Organization, unfortunately that's... There's been some politicization of course, as I'm sure many people have seen. As that began to happen, there was the... When the World Health Organization made favorable comments about China, China immediately took those, turned them into headlines and repurposed them. Right? "So here's the World Health Organization, here's this global body confirming in fact that China has helped the world here and has done everything right." And so they ran content and they ran ads based on that. So what you wind up having is these very, very large audiences, but their own people are not permitted on the platform. So it's an interesting dynamic where China has virtually a kind of a parallel internet. There is very heavy censorship. The stuff that we see in a democracy, committed to free expression does include these types of content.

Renée DiResta: We do see content from foreign state media and typically there's a law called FARA, Foreign Agent Registration Act where we do say things like there should be disclosures of state media so that people do know that they're receiving a communication from a foreign government or a foreign agent. The purpose of that is to help people have an informed picture of where they're getting their information from. On social media, it's really interesting because there are just certain design decisions that impact how clear that actually is. So if you go to some of the Russian pages, you can see on Facebook there's a little kind of column on the right hand side that will disclose to you where the funding is coming from. On YouTube, they actually put a banner down at the bottom that says, "This is paid for in whole or part by the Russian government." Or whatever government it is.

Renée DiResta: Interestingly, if you share that YouTube video to Twitter, that banner disappears. So the video, yeah just an interface design challenge, right? So the way that page is designed on YouTube, that flag, that visual marker indicating that, "This is a state communication." Is lost. And so if you consume the video on Twitter, you don't have that disclosure, actually.

Tristan Harris: That's actually an interesting example where the tech companies could make a small intervention, which is that when Twitter or Facebook tried to grab the thumbnail of the video that you're sharing, YouTube could specifically change the thumbnail to add in a little red notice or something like that in the thumb. That's the one tiny thing that they could practically do to help clarify that state media. Correct?

Renée DiResta: Yeah, I think, and that's something that I've personally kind of complained about that one before, but it's because it makes it hard for people to know what they're consuming. We saw China begin to do this, so state media interacts in interesting ways. RT will pick up stories of unrest in various parts of the world. The yellow vests in France, the Hong Kong protests, US, of course I'm sure they're going to be covering what happened in Michigan yesterday. There's a lot of these opportunities that they have to kind of amplify the appearance of chaos. It's interesting seeing kind of which side they come down on. So during the Hong Kong protest they were creating video about the unruly protesters who were clashing with police.

Tristan Harris: This is China, you mean?

Renée DiResta: No, RT was creating this content about China on it's sort of millennial video making, more of these millennial video making pages. I think in the now was the one that did this. Then they were being tweeted out and so if you were just looking at Twitter, you would see this thing that was sort of like, it was like a nested doll of bull ... This account that was run by someone in Russia, not run by a Russian registered agent, not declared in any way. Was a video that's on YouTube, you can tell it's Russian on YouTube, but not on Twitter going viral on Twitter. People are sending it to me like, "Hey, I was just in Hong Kong, this is totally false. Where is this coming from?" I'm replying back, "Well, that's literally Russian propaganda."

Renée DiResta: Someone was like, "I bet it's Russian trolls." I'm like, "No, it is. It's exactly what it is, in fact." So how do you... Not trolls, in the surreptitious internet research agency sense of the word? But there's a real question of how do you enable people to understand that the online manipulation, only part of that is coming from the fake accounts and the bots and the trolls. Because, there is this whole other side to it. Which is overt in the nominal sense but isn't necessarily as widely understood as it perhaps could be.

Aza Raskin: Twitter is taking some action here. Right? I think Chinese state media was running ads against the Hong Kong protesters, sort of disrupting and Twitter actually banned those ads, but I don't think Facebook or YouTube still has, even though they're financially benefiting from them.

Renée DiResta: Right. Facebook and YouTube do still accept money from state media to run ads.

Twitter decided not to. I personally think not to is the right call. I feel like there's a difference between enabling, allowing someone to operate on your platform where again, the audience is proactively going and looking for it as opposed to it's being pushed

at the audience that has indicated no interest in opting in, by doing anything other than clicking in a certain way or living in a certain place. With the specific stuff that's going on, I realize I haven't even explained the narratives.

Renée DiResta: The battle going on right now is around the origination of the Coronavirus, which as I mentioned in January, they were calling Wuhan Pneumonia. That was because it was a new novel type of pneumonia emerging in Wuhan. So before they sequenced and understood what it was and before it had its name and everything, if you were looking at the posts that these media outlets were creating, they were trying to... They weren't covering it up. The extent perhaps was covered up, but it was really being spun in a very positive way, "There's this new emergent form of pneumonia in Wuhan, but here's how we are protecting our people. Here is how we are treating this." As it became a bit of a disaster, they began to build hospitals. Again even the spin on the hospitals was that, this was Chinese ingenuity and engineering and-

Tristan Harris: Everyone remembers these videos, it's like you have a hospital going up in what? Days.

Renée DiResta: Yeah.

Tristan Harris: And it's like, "Look at the miracle of Chinese engineering and capacity that they can make this happen. Look at our governance model. Don't you wish you lived in an authoritarian country like ours where we can actually build stuff like this without any hurdles, building codes, sign-offs, et cetera. No red tape. We just get it done." Everyone looks at that and says, "Gosh, in the West our democracy is just not producing anything. That pothole has been there for five years and no one's done anything about it. Meanwhile, China's building something in just a day."

Aza Raskin: "Can your country do this?"

Renée DiResta: So there was a lot of that kind of again, that positive spin. But then what became really interesting is the... Some people are saying phenomenon of propaganda, which is around the same time in January, of course there are conspiracy theorists in China as well. There are these message boards and various online communities where people share theories. Shortly before the virus emerged, there had been the World Military Games, which were held in Wuhan and there was an American delegation, including a handful of people, one of whom I think a cyclist worked at Fort Detrick. Fort Detrick has a... I'm not going to overreach on my knowledge here, but a sufficient bio research program or a medical containment level four type environment.

Renée DiResta: And so the theory in the fever swamps of China's internet was that the US soldiers had in fact brought it over. This was in fact assisted by a Western conspiracy theorist whose name I'm not remembering before my coffee, but who was also saying, "I bet this is a bio weapon." Anytime there is any emergent disease anywhere, the bio weapon conspiracy comes out. That's something people have to understand. This is not new. It happened with Zika and Ebola. I mean, you name it, SARS. There has been a bio weapons story about it.

Tristan Harris: Most people don't I think, know that the origin story of AIDS as a US bio weapon came from which country?

Renée DiResta: That was Russia. Yeah, that was Russia. The CIA created AIDS in a laboratory and it escaped. They ran that story in just regular routine newspapers, right? That was narrative laundering through newspapers because this was during the 1960s, through 1980s they kept that one going for a while. Anytime the US... When AIDS emerged in India and Pakistan, the same papers that had alleged that it had been created by US government lab then turned that into and then it was released in. Right? It became the gift that really kind of kept on giving for them for a while as they just inflicted the narrative each time for each new country to serve their purposes.

Renée DiResta: So what we saw with this particular situation, the early emergence of the bio weapon theory is coming out of Chinese fever swamps and then you start to see Chinese diplomats on Twitter. Blue checked, Ministry of Foreign Affairs guys saying things like, "People are wondering if it's true that the US released this virus in Wuhan." Right? Meanwhile, contemporaneously, you have Senator Tom Cotton asking the same questions about the bio level, the Wuhan laboratory that now that same narrative is percolating here too. And so, we're inclined to think like, "Oh, the Fort Detrick thing is just garbage. Right? We live in the US and that's just not a thing that would have happened or that we would have done." But to take very seriously the idea that it was in fact a bio weapon that escaped from a Chinese laboratory and that that kind of inclination is flipped, of course in China, where they are-

Tristan Harris: They're being inclined to think that it's a US bio weapon.

Renée DiResta: Yeah. That it's a US bio weapon.

Tristan Harris: Of course, it wouldn't be our... We couldn't have possibly made something.

Renée DiResta: And so that phenomenon of just asking questions absent any evidence, it's really hard to challenge that. Because when Tom Cotton was challenged as you saw play out in the US the response is, "Well, why shouldn't we be asking these questions? I mean, these are reasonable questions we all have a right to know and we should want to know." How much should elected officials with strong, influential voices be speculating about these things absent any evidence? What wound up happening when the China bio-weapon story, the one where we created the bio weapon is that besides the kind of blue check Twitterati, and this is again a very controlled environment for that guy to just kind of go off the rails. That was interesting to see because then Chinese state media picks it up also and begins to... Again, as they're pushing out their content now has the story of the origin of the virus is a matter of debate.

Renée DiResta: So no longer is it the Wuhan Pneumonia from January, now it is, "Did it come to Wuhan from outside?" Early on, the question was more like, "This is a zoonotic disease. What animal did it leap from?" There are a couple of articles about that debating whether it was a pangolin or a bat. Then gradually now it's, "Did the US bring it here." And so there's this complete shift in tone. If you look at the headlines from January versus the headlines from late March and mid April, real demonstrable difference in the acceptance of the emergence of the virus as being from China. That's a sort of remarkable shift in which they gradually socialize it through subtle changes in headlines and framing over time until it gets to the point where the past is being rewritten. They're sort of rewriting the present in real time. There's just this constant steady

stream of content that you can push out that just nudges people a little bit each time in a different direction.

Renée DiResta: That's one of the interesting dynamics that we've been seeing, is the state media outlets have phenomenal reach. The random guy on the message board and God knows where doesn't, but the process by which these things are sort of picked up and legitimized through what we've been calling blue check disinformation, right? Or state media, again, propaganda. What are the ways in which platforms... How do platforms respond to that? Right? What does Twitter do with the Minister of Foreign Affairs from China, when he begins to speculate wildly? Speculating wildly is not saying, "This came from the US." It's saying, "People are saying, people are asking, did this come from the US?" That's a different thing in terms of certainty. And so it does tend to kind of bump up against enforcement loopholes and I think that's been a real interesting challenge for the platforms.

Tristan Harris: Just a question? I mean, how harmful can a question be? It reminds me of in hypnosis, part of working with people is, you embed suggestions and questions. To even get people's minds to go in the direction of a question is setting up a bias accumulation machine that says, "Maybe I should be looking out for that, anywhere in my sort of attentional field. Anything that looks close to that, there's sort of a snap to grid oh, yeah. That kind of confirms something that was in that question area. I think what's hard about this is that this is an incredibly complicated topic. There may be reasons why something was leaked from a Chinese lab, not a bio-weapon, but that there was research going on there. Maybe Tom Cotton did have intelligence briefings on that, maybe he didn't.

Tristan Harris: However, the kind of throwing up our hands, I mean, I think what's so confusing about this moment is that all of the cues that we would use to know what has legitimacy and what doesn't, all of our normal mechanisms are so confused and I think, amplified by the fact that we're actually all socially isolated and at home. So now as Aza says, when we're looking out at the world, no one's actually on the streets walking around in the hospitals. We're all kind of looking through this tiny telescope people that's our screen or our phone, while stuck at home. We don't know what's actually going on in the world. Even journalists who are sort of out there in the world, most of them are actually at home making phone calls. So we're all disintermediated from the direct raw evidence of what is happening. So we're even more easy to manipulate because we're all stuck in our pajamas.

Renée DiResta: Yeah. I think that's absolutely true. I think there's also a... Western media is not immune. Even the non-state media, right? Even just our regular media where you see the headline framed as a strategic question, "Did so and so do this? Did so and so say that?" Somebody told me once, I'm trying to remember who it was, I think it was a journalism professor that, "If the headline is phrased in that way, the answer is almost always no."

Tristan Harris: Yeah.

Renée DiResta: Did so and so do this? No. Because if he did it, we would know and we would have

written the headline as, "So and so did such and such."

Tristan Harris: Yeah.

Renée DiResta: Right? And so it was an interesting-

Tristan Harris: But the question is much more successful at getting people to click on it.

Renée DiResta: Exactly.

Tristan Harris: You're producing a curiosity gap, which is to literally make someone aware of a gap in their knowledge that they don't actually have filled. Once you make them aware of it, increase the motivational spike in the nervous system to want to close that gap. Because, I don't want to know that I don't know something. I want to know that I do know something. And so it's sort of a one two punch of curiosity gaps, as the pressure against platforms goes up because there's so much costly misinformation where you have people in Iran drinking, I think it's methanol and dying because they were told false information that, I mean, literally hundreds of people died and thousands got sick and went to hospitals because of fake information that was spreading as the pressure on platforms increases because these conspiracy theories are killing people.

Tristan Harris: Another example is 5G. The conspiracy theories that coronavirus was linked to 5G isn't just this kind of fun cookie thing. It actually caused real people to blow up cell towers in the UK. And so once physical violence is actually triggered in the real world as a result of it, you have this dynamic where tech platforms are actually forced to respond, so they actually have to start taking down things like 5G conspiracy theories and cell towers, which is what YouTube did. But when that happens, you have this kind of blow back effect where now the conspiracy theorists say, "See there is this kind of distributed suppression idea, suppression complex. It's taking down these real things. That even proves our point of how right we are."

Tristan Harris: Then you have platforms who not wanting to be the moral arbiters of authority or truth say, "Okay, well we're just going to follow whatever the WHO says." But then you have this dynamic where the who actually flips it's advice. So one week they're telling everybody, "Yes, definitely wear masks. Everybody should wear masks." The next week they're saying, "No, no, don't wear masks." Secretly it's because we need to make sure those masks are going through to hospitals. This is more the CDC than WHO. And so the weird dynamic is kind of platforms are forced to defer authority say, "Don't look at us, look at whatever the CDC says." But then the CDC is also vulnerable to political things and then no one knows what to trust and people are rightly skeptical of kind of everyone looking around. So it produces this mess and you see those kinds of dynamics. What do you think of that?

Renée DiResta: Yeah. I mean, that's really the... The challenge for the platforms, I think is curation. What I mean by that is we've talked about content creation, filling the void, dissemination, people become part of the sharing process. I think in the early design for deciding how we see what of the information, there's a such an information glut. What of even our friends posts do we see in the feed? There was the idea that if you could derive signal from engagement, right? What did most people like? What did most people engage with? You were doing this bubbling up of stuff that people should pay attention to, right? That there was some value in that signal. The thing that was never incorporated into that signal was any kind of sense of authoritativeness and indeed that was sort of like anathema, right?

Renée DiResta: If you remember back in 2015 there was a Google debated very briefly, they wrote a paper, it was an academic paper. It was never worked into search, but it was the idea that you should incorporate some sort of authoritativeness into certain sources. Google did eventually develop a framework for search through human review called, Your Money or Your Life in which it began to say, "For health and financial related queries, we have an obligation to return something with a higher standard of care than just what's most popular." Right? Interestingly, that applied to Google search, but it wasn't applied to YouTube for some time after. That's because YouTube was seen as an entertainment platform. So there's a difference between where do you... In the olden days, 15 years ago or even 10 years ago, the idea that you would go to Facebook to get your news would have been crazy, right? You would still get your newspaper to get your news or you would go to a news.com type site to get your news.

Renée DiResta: When the platforms became the sort of all encompassing, when it moved from like entertainment and friends post and weddings and babies to also, "Here's how you get your health information." Right? That's a pretty profound shift. Ranking which of your photographs I see based on how many people have liked it, probably is still a reasonably good heuristic for what half of your photographs I should see. Ranking a news article in that way, it's not as clear that... Really, I would say it's quite clear in the opposite direction at this point as that sort of the curation problem became, how do you decide what to surface for people? That's the problem that the platforms have today. And so some of the things that we developed around the measles outbreaks in 2019, was the idea that you could point to the World Health Organization and the CDC. Right? And there are a lot of kind of nuances to that decision.

Renée DiResta: I thought at the time that pointing to more local pediatric hospitals, they produce better content. They're more trusted in the local community. You have to surface information that people trust. The problem is through the accumulation of erosion of trust in media in general and problems that are bigger than tech platforms, erosion of Preston authorities, exposure. Really, a lot of this is rooted in the exposure of the fact that the authorities didn't behave well in the past. Vietnam war is kind of the canonical example of this, right? That what you hear in a government press conference and what you see with your eyes on your television are two different things. And so the question became, how do platforms decide what to curate? How do you do that in a time when institutional authority and emergent authority are not necessarily the same thing?

Renée DiResta: So you have the CDC and the World Health Organization, which as you noted, the latter unfortunately really got quite political in this particular situation versus the kind of blue check scientists and frontline doctors who are hanging out on Twitter, writing tweet storms, explaining the news to people every night. How do you surface those people, right? How do you find those people? How do you validate and vet which of them are worthwhile to surface? Which of them are offering authoritative content? How do you amplify those voices in such a way that you are making affordances for emergent authority or timely authority rather than just pointing to institutions that just circling back to the very beginning of the conversation, aren't communicating in the way that people have become accustomed to communication.

Renée DiResta: So when the whole mass gate thing was going on, I'm not in any way an expert on any of the epidemiological topics at work here today. So I thought, "Oh well, okay, let me go."

At the same time, I'm very suspicious when people are saying, "They don't want you to

know. They're keeping this from us because they want to save the masks for workers." That also is overly simplistic and too conspiratorial. I believe in the never attribute to malice what can be adequately explained by incompetence kind of view of institutions. Right? And so I went in and I Googled around for a while and I found on cdc.gov the guidance for SARS, which was also no masks. And so in 2012 they have this guidance and they've very meticulously, it's an extremely long writeup of transmission modalities. Why they think masks are not the most effective thing. Why they are still going with hand washing and a variety of other prescriptions.

Renée DiResta: None of this has anything to do with a shortage of PPE. This was their guidance and they didn't update their guidance. They gave the same guidance as back in 2012. I thought, "I wonder if this is more a function of the COVID transmission mechanisms are still so new." Right? There are unknowns here. How do you expect an institution that is usually... In a scientific body, they're waiting for months to find new, validated, kind of peer reviewed or information that meets a certain standard of scientific rigor. That's the timeline that the CDC is operating on. The timeline that Twitter is operating on is, "Well, 30 seconds have gone by. Where's my new information?" I'm sitting here hitting refresh. I'm not finding anything new. Again, you have that interesting challenge of the data void, which is somebody somewhere will step in and tell you what you should think about masks because some percentage of them will have actual knowledge about masks or will have digested the research and can articulate the mask policy. Then some percentage of them will just be random people chasing clout, looking to collect their likes and retweets and new followers.

Renée DiResta: This is where you start to see the kind of popping up of things that go viral because they just appeal to people's prior biases. They decide that for some reason, "This was retweeted by someone I trust, ergo I should trust it, ergo I should retweet it." That's how you would see these nonsense medium posts written by people with no more knowledge or authority than me talking about these scientific topics based on, "Well, I'm a growth hacker and..." Right.

Tristan Harris: Well, it's been very interesting to go into this topic because there's a famous article, The Hammer and the Dance and also the original flatten the curve articles written by Tomás Pueyo, who is a French Silicon Valley tech engineer who I think had worked at Zynga and marketing and saw exponential curves. He saw, he knew what exponential curves looked like and he knew that most people don't have a good intuition for exponential curves. And so he wrote this article that then became canonical, then became the canonical way we think about it, followed by this other article, The Hammer and the Dance. The idea that you have with this hammer is the way you sort of do the lockdown and then after that you have this sort of dance. You're going to have little brush fires of infections coming up and you have to kind of dance with it.

Tristan Harris: Very viral, very powerful communication. There are many people in the tech industry who were saying this virus is going to be a bigger deal. When all the institutions were saying, "It's not a big deal." When Cuomo and people in New York and governors were saying, "Keep going out, keep going out to bars and restaurants." And so there's this weird thing where, "Well, who is the authority? Why do we have these tech people chiming in assuming they know the answer." They don't know anything about epidemiology. Meanwhile, they were some of the few people that were actually calling

this correctly. And so that's where this kind of crisis of trust, I think just really comes in. Is who do you know to trust when it's so confusing.

Aza Raskin:

In fact, Jeremy Howard, who's another tech person from fast.ai and started Kaggle was also the one of the founders of the mass for all movement. He went through and he did the sense-making and really got deep into the literature. Yeah. So exactly where do we find the seat of authority?

Renée DiResta: Yeah. Then on the flip side, you had the ones that were woefully wrong, right? Either this bleach cure thing that popped up recently because of the president's comments. There were groups dedicated to consuming this form of bleach called MMS Miracle Mineral Solution as a treatment for autism for guite some time.

Tristan Harris: Really?

Renée DiResta: It took a really long time. Yeah. MMS is... I don't even want to go into the... It's gruesome, it was actually bleach enemas, but it was the theory that autism is caused by gut parasites and you could use this bleach to solve your child's autism. It was kind of tantamount to child abuse actually, really terrible situation. For a long time, the platforms didn't know what to do about it. One of the guys who is one of the grifters who sells the stuff reorganized himself as a church. Right? So now, it's a religious treatment on par with using any other sort of altering substance for religious experience. Is how they tried to reframe it now. That of course then if you take it down, you're violating somebody's religious beliefs and there's all sorts of loopholes for this kind of-

Tristan Harris: That a great example of trust hacking.

Renée DiResta: Yeah.

Tristan Harris: ...it's all sanctioned and it's kind of the same frame control. Is it the CDC? Is it official

institution? Is it a religion? Then these are all ways of reframing what is not trustworthy.

Renée DiResta: Well, and in that particular situation we thought, Brandy, I think Zadrozny is how she

pronounces her last name over at NBC had done some really great exposes on the MMS groups on Facebook and they did eventually begin to come down. Amazon used to

sell you not only the book on what the stuff was, but you'd get the referral to-

Tristan Harris: Recommended products?

Renée DiResta: Yeah, recommended products.

Tristan Harris: Here is the bleach, buy it with one click.

Renée DiResta: Basically that used to pop up on Amazon and British health authorities I think went after

that. But there were a lot of these sorts of things where again, it became like, what do you do about people exploring this? Of course, after the president says it, you start to see a rise in searches for that topic and searches for what is bleach cure? And there's just this immediate spike in interest. Then the MMS people pop back up to say, "See we

had the cure all along. We were being censored by big tech. We were being disparaged in the media, but the president of the United States realizes that there's some benefit to ingesting disinfectants." And that's where we are today.

Aza Raskin: Looking ahead, where is your attention going to go? Where are you going to be looking?

What are you watching for? What worries you?

Tristan Harris: And what solutions should we be adopting? Because I think also, we're here because we want to change this for the better, we're not just trying to complain about the present. What else have you been recommending to tech platforms as you think about going

forward in the future, including with election 2020?

Renée DiResta: Yeah. So with the platforms, Alex and Vanessa and I wrote this op-ed on how to think about state media and not forgetting that particular vector for the transmission of a disinformation. With that, it was really advocating for better disclosure. Honestly, just everything from getting that interstitial to show up on Twitter to maybe saying, "Hey, state media doesn't run ads. Maybe we apply Twitter's policy to the rest of the social ecosystem. I think it's a good policy." With the bottom up stuff. I mean, the thing I keep telling them is as the vaccine development progresses, as the treatment progress, it's not just vaccines, it's anything remotely related to a pharmaceutical product. Remdesivir, I don't know how to pronounce that one properly, but the one that Gilead produced is

in trials right now.

Renée DiResta: Any research organization, any drug name is going to be immediately seized upon and tried. They will absolutely try to ensure that the top-rated content for that is whatever kind of popular conspiratorial crackpot stuff they can get to the top of search results. So they are working as hard as they can to kind of own the narrative space. The bottom up conspiracy groups and the platforms have to be cognizant of what those developments look like. There's also going to be a real risk of harassment to the people who are working on that particular... Working on the vaccines or working on the implementation. Those people are going to be docs, they're going to have their faces blasted all over the internet. It's going to be the same truth or kind of, so-and-so is connected to such and such by six degrees of separation and then George Soros is behind it all, right? That kind of... Gates is behind it all.

Renée DiResta: That dynamic is actually going to happen also. There's these things that we have seen happen in enough other information crises that we should be able to preempt at this point. As far as other work that we're doing at Stanford Internet Observatory, we are looking at how does state media communicate about these things and that includes not only China but Russia and Iran and Brazil and a range of big prominent global players for whom this has become a geopolitical battle, right? About all that they have to fight for their status and respect, maybe is the word in the outside world but also within their own people. Within kind of shoring up their reputation as leaders domestically does require them to communicate in certain ways internationally as well. And so looking at the dynamics that are taking shape internationally as state media begins to talk about reopening and things that are going to begin to pop up.

Renée DiResta: I think with 2020 elections, it is going to be impossible to divorce that election from the reopening process. And so I think that the groups that have laid the groundwork for being more highly visible and proactive and kind of in-person protests around reopening

are going to be used and are going to kind of rally their audience to behave in certain ways during the political campaign. We're going to have to see what specific precipitating events, things that have yet to develop are going to play out, to see how that becomes part of the campaign. But I think that we should absolutely expect it to be part of the campaign. Then again, there's just the basic feature level manipulation, the kind of run of the mill stuff that we were seeing during the democratic party primary. Just ways that weird things still trend and stuff that the platforms have to get a handle on. So I think there's a kind of range of problems to end on that highly optimistic note.

Aza Raskin: The image in my head that I have is, did you see in Planet Earth II, there's this very iconic

scene where the iguana babies are-

Renée DiResta: Oh, yes.

Aza Raskin: Racing past all the racer snakes and they're coming from every angle.

Renée DiResta: I love that one. Yeah.

Aza Raskin: I feel like the baby iguana is truth and it's getting attacked on all sides and in every way

by these snakes and it's like we're in this mad dash to see, can we make it?

Renée DiResta: Well and the baby iguana does make it right, which is where my mind went when you

said that was actually the other scene where the walruses go careening off the cliff. Right? Let's hope that we wind up with the successful baby of iguana, the intrepid baby iguana that does in fact make it to the top of those rocks as opposed to the horrific

walrus scene.

Tristan Harris: Thank you so much for coming on. We can talk to you for hours longer. There's so

many more aspects to this, but I think the fact that there are no quick, easy answers that you can say, "Well look, it's obvious the platform should just do blah. That would just fix all of it. I think everyone has this kind of desire to simplify the solution, and it's very complex and nuanced, and I think it reveals just how much care we have to put into our epistemology of how do we know what we know? How can we strengthen each of our sense-making instruments? How can we all not be just eager to contribute with certainty about what we know to be true because we retreated that guy and we

actually don't know anything about science or epidemiology or how viruses spread?

Tristan Harris: I think if we calmed down our information environment so that only those who are

sharing when they actually have the expertise and creating incentives for that. I think how do we have a stronger bottom up sense making environment for a complex problem, which there is no... I think the unfortunate reality is there is no easy top-down authority that can get broad information inputs and then like World War II hierarchical command and control push truth right back down the stack. Because it's very hard to

know when you're making sense across such a vast terrain of information inputs.

Renée DiResta: Yeah, I absolutely agree. I think that the top down control model is over, right? That's

just not the information environment we have anymore. And so it's thinking about, in the age of decentralized media, personal participation in the process, thinking about the kind of creation, dissemination and then curation pathway, thinking about how we... At

each different point, what is the optimal state for that particular process? I think that's where we need to be right now.

Tristan Harris: Renée, thank you so much for being here.

Renée DiResta: Thank you.

Tristan Harris: It's good to see you-

Renée DiResta: I know. We have to get breakfast when this is all... When we actually were apartments

again.

Tristan Harris: Yeah, for sure.

Aza Raskin: Thank you so much Renée.

Renée DiResta: Thank you. Have a great rest of the day, guys.

Tristan Harris: All right. You too. One other area in considering the intersection between viral

information environment and in our viral biological environment is that we're creating the conceptual frameworks inside of people's brains to think about a virus. So, how many people before Coronavirus had heard of the phrase R-naught or R0? Which is the number of people that are infected for every person that's infected. If you think about our information environment in this epidemiological way, then information has an R-naught, a meme has a certain viral load, has a certain viral rate and for every person who's infected with that idea, who believes it, they will infect a certain number of other people. You can go into the kind of wash your informational hands metaphor by saying, hey, instead of just spreading everything, being a high spreader, being a super spreader or being a high information, what do they call it? Shedder. You're shedding a virus. You're shedding biases. As you click on things, as you like things, you're shedding biases for other people and you're screwing up the information environment for everybody

else, the more you contribute when you actually don't know what's true.

Aza Raskin: I want to push this even a little further because you're implicitly, once again, putting the

onus back onto the individual, but how do you actually flatten the curve? We flatten the curve by staying home. Do we control whether we stay home on online platforms? No, we don't really. We can control how much we say, but it's Facebook, it's Twitter that controls how many people we're in contact with, how much it gets spread. What would

a mask look like for this world?

Tristan Harris: An informational mask.

Aza Raskin: An informational mask looks like there is no one click sharing. You have to click and

then wait and then, if you haven't actually clicked through and read the article, you have to wait longer. That's the equivalent of an informational mask. In fact, it would lower R

naught, it would flatten the curve.

Tristan Harris: Yeah. It's funny and I think about, the virus infects you more if your immune system is

down, right? So if I think about fear and paranoia, the kind of things that conspiracy

theories amplify in you. When I'm operating with fear and paranoia, my information immune system is down. Because I'm more likely to have bad stuff come into me because I'm operating with this kind of bad biases and more fear means I'm more looking out for anything that could be, "Oh my God, it is a bio-weapon. Oh my God, China is doing the worst possible thing. Oh my God, this was all deliberate." That sets up... My informational immune system for my own brain is down. Then you think about, okay well what's the equivalent of like loading my brain with vitamin C and with zinc lozenges which increase my immune system resilience. How can tech platforms distribute the vitamin C for information? All to be more thoughtful.

Aza Raskin:

Here's one very specific example. When a piece of news or information later gets retracted instead of just issuing that retraction Facebook or Twitter, they know when you have seen that piece of news and they could sandwich that with the retractions, the better information. Every time there's a conspiracy, every time there is a debunked myth, every time they get shown both above and below it to take advantage of the fact that the more we see something, the more we believe that it's true. You see the better information. You give it context. That's one example of an informational antibody.

Tristan Harris: Yeah, I love that. We were talking earlier Aza, about Facebook and Twitter are for better or worse, kind of the governments of the attention economy because they set the incentives for what gets boosted through the feed. One of the things they could do is actually kind of give a subsidy, an attentional subsidy, a boost, a signal boost to any publisher who participates in a corrections program. Meaning if you actually issue corrections and updates to things that you were wrong about and you're the kind of publisher that does that, you're participating by, let's say you add a tag to your pages. So every single time there is an update, there's an automated system where you're notifying Twitter and Facebook of everybody who saw that.

Tristan Harris: Now Twitter and Facebook can go back and say, "Hey, we know everybody who clicked, liked, shared or even saw that initial piece of information. We'll make sure that their brain sees the correction more often than they saw the original information." So they have account. They say, "Hey, you saw this conspiracy theory about 5G and cell towers and Coronavirus, which we know in some official way to not be true. You saw this many times, two times, so we're going to actually make sure that four times you see the correction." They could actually implement that through their system.

Aza Raskin:

Another interesting idea, and this is borrowing from an idea we talked about a couple podcasts ago for what platforms could do to combat deep fakes? And the idea was a kind of attention quarantine or an attention jail. The idea is that if you retweet or share a deep fake and you do not label it appropriately, that the platforms de-platform you. You can't share things for 24 hours, you can do it again. The 48 hours we do it again, it doubles, it doubles. The same thing could be used for misinformation or for conspiracy, if you are found to be sharing something that later gets retracted, well by re-tweeting you are tacitly, maybe not even tacitly, you're endorsing that piece of information. And so if you then get put into a little bit of an attentional jail, you can't tweet now for one hour, but if you do it again two hours, if you do it again four hours. It makes a really interesting kind of incentive that makes you stop and think more about what you're going to do.

Tristan Harris: It reminds me of just the way that countries are dealing with, if you come into the country with the virus, "You know you can be here. We're going to put you in a hotel for two weeks so we can make sure that you're quarantined." It's like, "You can be part of these platforms, but if you're contributing things that spread information, virus, we're going to quarantine you." Obviously this is more nuanced. I want to make sure that our audience recognizes that we recognize that it's not as if there is just this true thing and we know what the truth is and here's the thing that was false. But when we do know that something was incorrect, we know that let's say a study was flawed and it was importantly flawed in a way that was knowable.

Tristan Harris: That's a correction. It's a concrete piece of information that could be updated to everyone else. And just to sort of name that we're not trying to create some arbiter of truth, a brother-like infrastructure. It's about creating the decentralized ways that important updates and corrections to how we make sense of the world, make sure that they reach the people who they need to be reached. This conversation is incredibly complex and nuanced because for any good you can imagine for the right approach. Let's say we should limit the spread of information, then you wouldn't get the kind of viral growth of a MeToo or a Black Lives Matter.

Tristan Harris: There's always these sort of gray, I think this problem reveals the gray zones and the complexity of these issues, that there isn't some clear answer. There's a stat from social movement theory that you only need three to three and a half percent of a population for a movement to get off the ground. This is the foundation for climate movements, extinction rebellion, for civil rights, but the negative side is you only need three to three and a half percent to get a really bad movement off the ground. Let's say you want to get armed protesters to shoot up state capitals around the world because they're led to believe that they're about to get on lock down permanently by US Military National Guard, conspiracy theories or something like that.

Tristan Harris: The fact that it only takes three to three and a half percent before you get this tipping point into kind of mass movements can be both for good and for bad. Then on the game theory side, it's often the case that the bad actors out-compete the good actors, that fear out-competes the positive in an attention economy. Because the positive isn't viral, it's not sensational. It doesn't arouse your whole nervous system, but negative emotions spread faster and activate more intensely people's own emotions. So how do we deal with this? This is really, the kind of challenge of looking at the kind of curvature and geometry of human emotions and say, "How do we actually try to have our better angels of our nature win?" And that takes a real conscious design process.

Aza Raskin:

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