

POL S 334 A - Zeynep Tufekci, Why Online Politics Get So Extreme So Fast

[00:00:00.06] - The difference between TV and the digital age is that the TV people did not have your data and had to broadcast to-- a million TVs got the same thing. Whereas, YouTube can go, aha, that's your weakness. Let me give you more of that.

[00:00:26.20] - Hello. Welcome to the Ezra Klein show on the box Media Podcast Network. I am Ezra Klein. This is my show. And I'm excited about the episode today. I know I always say that, but this is hitting right at the heart of some issues that I've come to think are pretty profound, or are more at the center of things than even we realize.

[00:00:43.92] My guest today is Zeynep Tufekci. She is at the University of North Carolina. She's at the Berkman Center for Internet & Society at Harvard University. She's a New York Times columnist, and she is an unbelievably clear thinker about the intersection of technology and society. And the reason I wanted to have her on in particular, right now, with all the problems we're seeing for Facebook and Twitter everything we're seeing in our elections. The news that there's more election manipulation being attempted on Facebook even as we speak.

[00:01:10.92] The reason I wanted to have her on right now is that she's been developing theories about how these platforms and the algorithms that run them radicalize us. About how the nature of censorship and distraction has changed in this era. About what free speech is online, and what our attention is online, whether or not we control it or someone else controls it. It's some of the most clear theorizing about what we're living through of anybody I've seen.

[00:01:36.25] So I'm very excited about this conversation. I think it came out really well. There is a lot to chew on here, so it's worth giving some real attention to. That is a word that is going to come up a lot today. As always, you can email me ezrakleinshow@box.com. I always appreciate your guest suggestions, feedback, whatever it may be. But here without further ado is our conversation.

[00:01:56.98] - Zeynep Tufekci, welcome to the podcast.

[00:01:59.37] - Thank you for inviting me.

[00:02:00.83] - So I wanted to begin with YouTube. You wrote a piece for the New York Times a couple months ago arguing that YouTube quote, "may be one of the most powerful radicalizing instruments of the 21st century." Walk me through what you found there that made you think that.

[00:02:15.11] - Sure. So if you've gone on YouTube you know that it plays on sort of the right center of the screen whatever you are wanting to watch. I'm sorry-- on the left side. And on the right side there is this recommended videos column. If you're on a mobile it's below the main video and it auto plays them. So whatever you watch, you end up very quickly being served the next thing.

[00:02:45.17] So this is a very powerful tool because a lot of people will sit and watch what's next. Then, you also get to scan the column and you can pick on something. So I started noticing. I knew that there was a lot of accusations that these columns would give you more of what you wanted. They would pull you into filter bubbles or echo chambers, which is certainly a concern. But in the run up to the 2016 election I noticed something else. They weren't just pulling you to what you already watched.

[00:03:17.66] So in my particular case, one of the most striking examples I noticed was when I started watching rallies of then candidate Donald Trump. And I was watching them because I had attended some of the rallies, and I was writing columns about it and I was trying to argue that this wasn't a joke celebrity candidacy as it was taken at the time, that he was a viable candidate. That he had struck a political chord. I was kind of making that argument. And to quote him correctly I ended up watching some rallies I had attended in person.

[00:03:50.18] And my YouTube kind of lost it at that point is how I felt. After I watched the Trump rallies, I started getting really disturbing suggestions. It was first these mild-- do you know white people are at risk and white people are in danger stuff that wasn't as bad as some of the later stuff. And it quickly descended into YouTube for commending and auto playing holocaust denial videos, straight up Nazi stuff, really, really horrific stuff. And I thought, huh. Maybe there's some subsection of Donald Trump's political base that also watches these. This is a correlation, and YouTube has figured this out. Let me try to dig down and see what's happening.

[00:04:38.01] So I started doing other videos first. I would clean up my account. I would sometimes create new accounts. I would go to new computers, and I would start watching other stuff. So I started watching stuff from the Democrats side. I watched Hillary Clinton videos or Bernie Sanders videos. And I quickly noticed I would then be served and auto played stuff that was slightly to the left of whatever I was watching.

[00:05:06.71] But then, it wouldn't stop there. Just like the other side, it would descend into the zany conspiracy left. It's like, huh, maybe political people are into liking these kinds of more extreme theories, and this is what YouTube is doing. So I started watching nonpolitical stuff. And I would start watching something about jogging, and how to have jogging as a habit, or how to run correctly.

[00:05:33.29] And YouTube would soon be like, how about an ultra marathon? I was like, how did I get here? I'm just trying to do this? I would watch a video about being vegetarian, YouTube's like you should be vegan. Here's a video about being vegan. So it was what you were watching, YouTube was that friend that always out edges you, right? Is whatever you do they're more radical than you, they're more extreme than you. You had that friend at college or high school. Now, you will listen to heavy metal, they listen to trash metal. If you're vegetarian, they're vegan. If you're vegan, they also don't eat honey. It just goes on like that.

[00:06:07.96] Yeah, so what was happening-- and here's my best guess of what was happening-- is that YouTube's recommender algorithm, which Google had turned over to this artificial intelligence system-- had figured out somehow that this kind of slightly edgier content is

interesting. It's novel, right? It's not the same old, same old. If you're watching something in you're shown more of it, you're like thanks, I've had it. I know what I watched and I'm done. Whereas, if it's like, oh, look. Peek behind the curtain. There's more here.

[00:06:43.64] That kind of edginess is quite attractive, especially to young people, right? So if you're watching something political and being told that there's even more extreme or edgy content-- and I don't mean radical in some healthy sense where there is questioning of assumptions or some sort of healthy suspicion of authority or something like that. I just mean sometimes straight up crazy. You start watching moon landing and very soon you're being shown videos about how it never happened.

[00:07:13.17] So the algorithm had figured this out. This wasn't YouTube engineers deciding, oh, let's screw up the whole world and let's just create upheavals everywhere. And this was with English language content. But if it was doing it for English language content where it's easier for the engineers to see most of them are either based here or speak English, this is also happening-- after I started writing and talk about this and publishing about it, people have sent me lots of examples from places like Indonesia, from India, from Brazil, from all over the world where if you are interested, say, you're a devout youngster and you want to watch some content about Islam.

[00:07:50.38] Well, soon you get suggested the ISIS kind of stuff, or if you're sort of a little suspicious about something-- you want to learn something more about a medical condition you have, you get suggested anti-vaccination videos. So this was very prevalent. And I know that people like you and me, right? We read, we read books. We have degrees and we think of sort of the texts as the main conduit of information. But if you look at young people today around the world, video has become a key conduit of information.

[00:08:26.70] A lot of journalists, a lot of people like me who are academics, people who are into reading and writing books, understate how important video is. There's even a lot of sites on YouTube that are making money by just having the machine read Wikipedia pages because kids are quite used to just watching or listening. And of course, add onto that the literacy . Issues it's not always possible for everyone just to read stuff and especially in English. The video is the key conduit of information for billions of people. And YouTube is the key conduit for video, and here it is wherever you start it's trying to push you to the edge. I was like, oh, what a disaster. What a horrific disaster.

[00:09:10.47] And I wrote this, and after I wrote this I got flooded with examples. And it seems to be more prevalent that you get pushed to more Nazi and white supremacist stuff in the United States, but that's mainly a function of how much that side of the political spectrum has colonized and exploited YouTube. They have a lot of content and they push it all the time so the algorithm pushes that all the time. This works, as far as I can tell, across the political spectrum and across many countries.

[00:09:42.93] And so, yeah, here we are pushing edgier and edgier and more and more extreme content to billions of people, and just because they turned it over to an algorithm that-- and told it keep people on the site longer because that's their business model.

[00:09:59.26] - So I want to say-- I want to-- before we go further into this, I want to emphasize something you just said, which is if you're listening to this and you're saying, oh, YouTube who cares. You are wrong. I just want to say that flatly, you are wrong. YouTube is one of those platforms where the user behavior above age 30 and below age 30 are just completely different. We see it in the statistics for where people spend time consuming box content, YouTube is by far one of our biggest platforms in terms of the amount of minutes people spend with our work.

[00:10:30.24] But when I go to college campuses, when I look at surveys of how audiences are spending their time, a lot of people live in YouTube's world. I've come to wonder if it's not, actually, the most of all of the platforms. And this is even more so for the young for whom YouTube really is television. It's so much bigger, I think, than people realize because a lot of the other things like Facebook or Twitter, these are behavior scales up the age distribution. So people who edit websites and whatever, they spend a lot of time on Facebook, but often not on YouTube.

[00:11:01.69] But YouTube is really important. A lot of the future is being figured out there. And so, with that in mind, the defense you hear of these algorithms is that in the end, we're the ones clicking. I recognize there's an auto play dimension to this, but a lot of it is that recommended box, and we are the ones clicking. And we are also the ones training the algorithm. The algorithm wouldn't be coming to these views if it wasn't finding success in doing so.

[00:11:25.27] So the defense you get is it's just giving us what we want. So doesn't the fault, in the end, lie with us, dear Brutus? Not with our not with our platform managers?

[00:11:34.73] - So let's assume that it's giving us what we want. What we want when, right? What do you want in the moment? What do you want when you wake up in the morning? What do you want when you're hungry? What do you want when you're on your deathbed, right? What you want is not a simple thing. If you ask a lot of people how they wish they spent their free time, they would give you one answer. And if you ask them what they wish they wanted to eat, they would give you an answer. And their behavior very often diverges from that because we give in to temptation at times because we're human. We have vulnerabilities. What these algorithms have figured out how to exploit is those vulnerabilities.

[00:12:14.03] I think the best analogy here is the human appetite, right? The human appetite has evolved under conditions of hunger and scarcity. It's just in a few years that we will have more children who face obesity rather than more children who face hunger. This is the first time in human history where we are not as hungry. We've always been hungry. So we're evolved to crave sugary stuff. We're evolved to crave salt. We're evolved to crave fat, and that made a lot of sense in the Pleistocene. You're hanging around, there are no fridges, there are no supermarkets, and you get food once in a while. So you found it, you ate it. And if you didn't, you probably didn't leave a lot of ancestors behind. Perfectly reasonable behavior.

[00:12:57.59] So all of a sudden you put a child who's been evolved for hundreds of thousands of years under these conditions with these cravings, and you put them in a cafeteria. And you know they have this temptation because this is part of their biology. And then, you give them candy,

potato chips, candy, potato chips, candy, potato chips, one after the other. The tray just keeps giving you the next one. You finish one bag of chips, you get another one.

[00:13:23.72] And the way appetite works is quite similar to the way the information works is that you seek more and more, right? If you eat a lot of salty food, it doesn't taste as salty. And if you don't eat a lot of salt, even a little bit of salt starts tasting salty. So what we're doing, basically, is saying, OK, fine. There's a human vulnerability, which is to seek stuff that seems more novel and edgier. And then, an algorithm exploiting that to make money at the scale of billions.

[00:13:53.33] I don't think we would let that be. I mean, it's true that, in the moment, there's a person standing in front of it, but we owe it to ourselves to say how do we design our systems so that they help us be our better selves rather than constantly tempt us with things that if we were sat down and asked we probably would say that's not what we want, let alone exposing hundreds of millions of children to this, right? I think that's the biggest concern is that a lot of times, when I see something and I'm just rolling my eyes.

[00:14:29.27] But I work with young populations all the time. A 12 or a 15-year-old they may be caused by adults in some ways, but they're not really equipped to deal with the full force of this play on their vulnerabilities. They're new to the world, they don't have the full information, and we're just sort of serving them chips and candy and chips and candy and chips and candy for breakfast, lunch, and dinner. And then, saying, oh well, that's what they want. I don't think that's a good defense.

[00:14:59.64] And on the practical side, not only is that not a good defense, if the whole world burns down because we have polarized and made everything more extreme, this is not good for anybody, including Google's business. I think to push ourselves down this path just to sell a little bit more detergent and this and that because that's why we're doing it, right? It's just serving some ads. I find that quite indefensible, and it doesn't have to be that way.

[00:15:31.56] There's a lot of demand for video. There are a lot of videos. We could have a way in which we try to make things slightly healthier, the way we try to make cars safer or the way we try to-- and fail, often-- but we try to make our eating habits healthier, and we try to nudge people to exercise, right? We should not try to nudge people to become ISIS sympathizers just because YouTube is making money off that. That seems pretty straightforward to me.

[00:15:58.91] - One of the things you said that I think is so important, so I want to draw it out for a minute. We talk a lot about the ways in which we change and train the algorithms, and people understand that argument. We don't talk nearly enough, in my view, about what you were just saying, which is the ways that the algorithms change and train us. That as we get used to politics sounding a certain way, as we get embedded in conspiracy theories or extreme segments or whatever it might be, that what we want changes as well.

[00:16:27.87] That we are shaped by our environments, too. We're not static, our preferences aren't static, our reveal preferences don't stay the same. And as you bring people down this conveyor belt of radicalization, they are going down a conveyor belt. And so then, they're

pushing the algorithm in a certain direction. It's a very dynamic system in a way that I feel that we have a lot of trouble talking about. Let me ask you, are you a Neil Postman fan?

[00:16:50.60] - Absolutely. I mean, I'm definitely-- as far as the scholarship goes, he identified a lot of the things we talk about in terms of TV. Where obviously, you started seeing a lot of these trends before his book *Amusing Ourselves to Death*. This kind of seminal work of scholarship. And his point was amusement and entertainment, if you just sort of gear your whole public sphere and your information flows towards amusing and entertaining people, it's not going to go down a healthy path. And he was absolutely correct.

[00:17:25.24] The difference between TV and the digital age is that the TV people wanted to do this. They wanted to tailor everything as narrowly as possible and capture you there. Whereas, the digital people have your data and can serve your screen by screen. Whereas, the TV people did not have your data, and had to broadcast to-- a million TVs got the same thing. Whereas, YouTube can go, aha, that's your weakness. Let me give you more of that. And go, aha, that's your weakness, to the other person and do it at the scale of billions.

[00:17:56.53] So the impulses we're talking about, like the advertisers trying to sort of push your vulnerabilities, to politicians trying to nudge you-- trying to sell you stuff. Those impulses and the vulnerabilities that they're evoking are part of modernity and our vulnerabilities are part of our human condition. The thing is that we now have technology that can effectively and cheaply exploit it at the scale of billions.

[00:18:24.13] So the claim here isn't that, oh, this is completely novel. The claim there-- we couldn't do this. They were fighting a war with sticks and stones. They could only do so much damage. And all of a sudden nuclear weapons have been designed and they're working. So we have to say, OK, how do we deal with a world where these tools are powerful and working this way and are also scaling up to billions of people?

[00:18:50.32] - If you were to guess, where would you say your brain stacks up against other people your age? Do you think your memory or your attention is above average? It is important to know this. It is important to know if your brain, your memory, is better than other people are like you. And using the Lumosity you can find out. Lumosity is the world's most popular brain training program. So it isn't just that you can test yourself, it's that you can improve yourself. You can't see the results in a mirror or on a bathroom scale, but if you want to keep your brain fit, you've got to treat it like a muscle. You've got to train it.

[00:19:21.55] You can sign up for Lumosity and take the free 10 minute fit test to get your baseline scores on three games, and see how you stack up against others of your age. And then, the actual training, the honing of your brain, the turning it into Batman begins. With Lumosity premium, they even design a personalized training program from their 60 plus cognitive games and activities to challenge key abilities like memory, speed, and problem solving. With every game, they keep track of your progress, and they show how you compare worldwide.

[00:19:47.89] And at the very least, don't you want to know how I stack up to others? Isn't that little bit of competitive spirit in you fired up? You can find out right now. You go to

lumosity.com/ezra, that is L- U- M- O- S-I-T-Y dot.com slash E-Z- R-A to sign up for the free fit test, plus a 30% discount off Lumosity premium. Again, that is Lumosity, L-U-M- O-S-I-T-Y dot com slash E-Z- R-A to get your free fit test and 30% off Lumosity premium.

Lumosity.com/ezra.

[00:20:20.43] - So I'm late to the Neil Postman party on this. I just have started going through his work in the last couple of months. But you bring up Amusing Ourselves to Death, which if you have not read it, I highly, highly recommend it. One of the big points of that book, and it's a point that you echo in your book, on Twitter, and Network Protest. Is that different communication mediums change us. An oral culture makes us better at memorization. A typographical culture makes us better logical argument. A televised and visual culture makes us expect things will be appealingly visually packaged, and in his argument, makes us expect that everything will eventually take the form of entertainment.

[00:20:57.63] One of the things I've wondered is for those of us who spend so much time on Twitter, on Facebook, on algorithmic social media, how do you think that's changing us? How do you think it's changing what our brains are good at, what identities we call forth. I mean, if Neil Postman were writing the book today, what would be the one or two line description of what living in a top social media platforms is doing to the way we see the world?

[00:21:26.29] - I'm not going to be good with the punchy one/ two line description, but let's just walk through the argument you made, I think, because it's an important one. And part of it, this oral culture, is a good example. It comes from one scholar I recommend there is Walter Ong who wrote a lot about this.

[00:21:44.76] If you have nothing to write things on, obviously, people with good memory-- and if you have no writing technology, people with good memory are going to be prized, right? So in the social media age, the quantity that's scarce that we're all competing for is attention, right? This goes back to [INAUDIBLE]-- I believe 1973-- insight in that in an age where there's too much information, the thing that is scarce is the thing that information consumes, which is attention.

[00:22:12.90] So attention grabbing, attention attraction, becomes this very well rewarded thing. And if you do it right, and especially if you do it right in a way that melds with the algorithm, you will be rewarded by the society. Hence-- I know a lot of people sort of sneer at the Kardashian enterprise, but that's a skill, right? They've been in front of camera-- that's a skill. They've been in front of cameras for a very long time, and managed to get attention and control it and direct it. And when they want to keep something secret, they do manage to keep it secret, which is this really tough management business skills and you know do whatever. They're not doing something extraordinary besides that.

[00:22:57.54] And our current president has almost an instinctual understanding for it. And I usually describe him as an ex-reality TV star because that's the profession that he most excelled at. And politics is also very much related to the ability to get attention. If you're a social movement, if you're a politician. If you can't get attention to you if you are a movement that's

trying to change, and if you can't focus public's attention on what you're concerned about you're going to get nowhere.

[00:23:26.70] So one of the things the current social media age does where there is so much content competing with algorithms is that it rewards attention gathering. And then, we sort of become better at it. I have so many times-- I mean, I ended up quirks of history and stuff, I ended up with a fairly large profile on social media. And during the past few years, I have increasingly found myself fighting the temptation to Tweet things, and sitting on my hands and not tweeting it.

[00:23:58.02] And the things I hold back are things that I know would get attention. Things that I know would be popular. And it's fun. It's tempting. I want to slam something, and get into-- I'm an opinionated person. I like arguing. And I want to do it because the system rewards it. The way social media is set up, the way Twitter is setup, the way the human psychology is set up, it really rewards that. And then I think, wait, you know what? This isn't going to work well because it's going to be misunderstood.

[00:24:31.16] And then, I close my eyes and I try to imagine the size of the audience. I sometimes check the stats and I have like 300,000 something followers, and that might mean 100,000 people at any time might see something. If something gets re-Tweets, I don't know how many are real, but it could be a million more people. Now, I'm like, would I really shout this in front of a million people? And then, I hold myself back, right?

[00:24:56.40] So the way it's set up, it's hiding the true audience. It's hiding where it could go. And even if you have like 50 followers something you tweet could just get out of hand and could be re-tweeted by somebody with a high follower number, and you would all of a sudden find yourself quoting the New York Times or CNN, right? So you don't have this control over where it goes. But when you're sitting down, you're sitting down with your phone, it seems like this tiny little thing. And it rewards the things that would get all that attention.

[00:25:26.13] So I think if we had the 21st century version of what is this media training us to do. It's training us to grab attention. It's training us to make a play for attention. And it's rewarding attention with political power, it's awarding attention with money, especially if you can align that attention grabbing with the algorithms online.

[00:25:47.49] There are people-- I show this to my class every semester. To my bright college students, who are working hard and studying hard and will do great things. I show them these unwrapping videos on YouTube where a lady with painted fingernails unwraps Disney stuff. And I think she makes four or \$5 million a year from a rough calculation. You don't even see her face, she's just unwrapping toys and saying oh look, this is what's in it. That's-- and she just got there first and it's this feedback cycle. If you're there early on, you get an audience. The algorithm recommends you. You do it right, you feed it enough.

[00:26:26.43] So this is what I think we're being trained to do. So my current thing is just the way sometimes you pass on some food because it's not healthy. It's the way you exercise because your job is so sedentary otherwise. I think how do I fight to pull off attention because that's what

everything around me is pulling me towards. But that's a personal thing. If you're a social movement, or if you're a politician you have to be thinking, how do I get that attention, and how do I control it? How do I keep it from consuming me? How do I make it so that I am not a tool of the attention, that I try to direct?

[00:27:10.02] It's this nightmare, difficult, challenging thing because attention, even though it's understudied, is essential to human societies because we are group animals. We are not individual animals. What we pay attention to as a group is absolutely consequential and important.

[00:27:27.26] - I love the way you put a lot of that. They're a bunch of places I want to take this because I've really come to believe that attention is one of the truly key words of our age, and it's one that we don't know how to talk about all that well. But before we get there, I want to describe something that you were talking about maybe from a different angle within the media, which is I think something people underrate in terms of how much it has changed us and changed how we relate to one another, is how much more competitive the media and attention spaces have become.

[00:27:59.04] You go back, not that long. 20, 30 years, you're writing in a newspaper. There are a couple other newspapers in town, but probably you have a subscription. So there's some lock in among your audience already. There are way fewer channels. There's no Twitter, there's no Facebook. All these things that we now take for granted, where there's just millions of things competing for your attention and your eyeballs at any given moment, they're not like that. And one of the things that seems to me to be driving a lot of this on YouTube, on Twitter, on Facebook, wherever you want to go, is that this space has gotten so crowded.

[00:28:32.64] If you're on Twitter, there are so many people tweeting at every single second. If you're on Facebook, there is so much more content coming into your news feed in theory than your news feed is actually able to show you. That we've gotten into a real incredibly competitive attention space. And now, it seems to me, that what is happening is we're finding out well what really wins in a true competitive attention space? What really wins when dozens, hundreds, thousands of things are competing for your attention at any given moment? And the answers are, among other things, the things that outrage or excite your core identities. The things that are really funny, or really mean, or really shocking.

[00:29:16.23] Donald Trump talks in a way, Tweets in a way, previous politicians have not for the most part spoken or Tweeted. And that works because he gets coverage they didn't get. The crazy things he says gets much more coverage than the planned careful things that a Barack Obama or George W. Bush said or pumped out. And we are taught, I think, in our society to believe that competition is always and everywhere a good thing. That if you have a more competitive market you're going to have a more efficient market.

[00:29:45.51] And I don't know what to do about this because it's not like I think you should be reconstructing media monopolies. But I think something we're seeing is that a world with this much competition to be heard in it means you have to go in some directions that are not great. And the more we are training everybody who is successful in media to be trying to win this

unbelievable war for people's attention with everything else shouting at the same time, then the more algorithms are rewarding whatever does win the war.

[00:30:16.30] It becomes very easy to see why so much falls along identity levels. Why so much falls along this escalator of radicalization and extremism. Why so much is so mean, and also why so much is so funny. And just why so much is so shocking. Competition to me seems to be an underrated force in all this.

[00:30:36.30] - Again, competition that is geared towards your vulnerabilities. The way you describe what gets attention. Stuff that's outrageous, stuff that's exciting, and stuff that's kind of likable and cuddly, that's basically your Facebook news feed, right? If you got Facebook, mine is a combination of people who have some trouble and they're seeking help or they want support, so it's sort of sad stuff. Or lots of babies, engagement, marriages, cuddly stuff, or stuff that's really things that my people on Facebook find outrageous, right? So there's not a lot of the mundane because well, the mundane is boring. I mean, there's even a joke, right? Why are you Tweeting your lunch? Why because it gets boring, right? So the algorithms like, all right, let's not show each people their lunch, unless it's an exciting lunch, right?

[00:31:28.99] So the algorithms have figured out that the mundane-- we don't look again because that's the whole point of it. It just cedes into the background, and what you're describing is that all this content trying to scream at you from the background and saying, look at me, look at me, look at me, the way that the ice cream aisle is screaming at you and saying pick me, eat me, eat me, right? That's kind of the same dynamic there. It's a human vulnerability, and we have monetized competing to exploit that human vulnerability.

[00:32:00.91] And what we instead need to do-- and I'm not going to have some simple answer because every age requires new kinds of ways of dealing with it, is this combination of education, clearly. I mean, educate the people comes up a lot-- and hey, I'm an academic, right? That's my business model. So it sounds good to me, but that's not something you can just quickly educate your way out of it, right? It will take generations to adjust to what's going on.

[00:32:27.89] So education is part of it. Creating labels, like nutritional labels, like the fact checking stuff that's clearly part of it, right? I think those are valuable. But a huge part of what we, obviously, need to do is to find ways to make that supply more in line with what we want in the long term. I don't mean that we go back to a model where we patronize people and tell them this is what's good for you, eat your broccoli, right? That's just not going to work anyway. The genie is out of the bag. This is not going to work in the 21st century.

[00:33:01.46] But we can, as a society, decide this isn't what we want. You might be able to tempt me with that piece of junk food when I'm hungry, but what is a better way to do this is to set up a world in which that when you're hungry, we are first served a nutritious food because that's what we asked for when we sat down and said, what should my cafeteria give me? I should be able to say when I'm hungry, don't just push ice cream and potato chips in front of my nose. First, give me some healthy filling food that's tasty as well.

[00:33:36.26] And we have to produce that kind of stuff. And we have to teach people, especially young people-- and I find more and more discernment among young people because they're kind of growing up in this environment, and they sense that, in some ways, because they're native to it. Compared to someone who grew up with the TV environment, right? So you have to do all these things so that our choices are better structured.

[00:33:59.20] The thing with the competition thing is I think that every IT company, every digital platform, every technology company, absolutely knows the power of the default. If you set the default to one thing, like 90, 95%, of the people will never touch it. If you set it to the opposite, 90 95% of the people will never touch it, right? So the answer to the question what do people want isn't one or the other based on the fact that they won't touch the default because they won't touch it either way most of the time.

[00:34:31.50] And this might be a little humbling for people to admit, but I think it's an important thing to admit. Both at the personal level and at the social level is that we go with the structure. We go with the options in front of us. The way we set up our lives, the way we set up our kitchens, the way we set up our cities, the way we set those things up really have a lot of influence on the choices we make. That's not saying we're automatons and somebody is just looking into our eyes and hypnotizing us. It's just admitting that there is this tension between our own agency in the world and the choices and options we're offered.

[00:35:11.15] So to step back and say, we're now going to use our agency at a meta level and say, we're going to structure things better. And if you look at-- to give another example, if you look at cities or architecture, if you make a walkable city people will walk more and they'll be healthier. If you make a city where you have to drive everywhere, people will drive everywhere and they're not going to spend as much time in the gym. You need to make walking and biking this natural thing people do and set things up for it, and then people will do more.

[00:35:39.46] So I think that's what we need. We need to take the choice discussion away from just discussing at choice. In the moment, you're vulnerable and facing an asymmetric situation where the company knows everything about you and is trying to exploit you, and saying, no, let's put the choice to the societal level and say, what do we as a society want to do?

[00:36:00.72] And this is why a lot of this comes back to politics. These are not decisions for Mark Zuckerberg to make alone. These are not decisions for Sergey Brin or Larry Page to make alone. I mean, they could be the nicest people on the planet. They could make all the decisions I personally agree with or not, it still wouldn't be right for a few companies or a few individuals to say this is what we as a society should see. And we need to have this tough political discussion on what are the rules and what are the structures under which we have a healthier society.

[00:36:34.80] - Hiring is hard. It takes time and it is, at its core, an information problem. You've got a job. You've got a job listing. You've got a resume and application process. But you don't know who it would be the perfect fit, and the perfect fit may not know you have a job. And that's where ZipRecruiter comes in. What's ZipRecruiter is trying to do is solve that information problem on both sides.

[00:36:56.36] The way they do it is a recruiter sends your job to over a hundred of the web's leading job boards. But they don't stop there. They have this powerful matching technology where they scan thousands of resumes to find people with the right experience, and actually invite them to apply to your job. So they're not just going out and waiting for someone to find it, they're going out and finding the people and telling them about it. As applications come in, the ZipRecruiter analyzes each one and spotlights top candidates so you never miss a great match. They are so effective that 80% of employers who post on ZipRecruiter get a quality candidate through the site within the first day. If you have done much hiring, you know how rare that is.

[00:37:33.26] With results like that, it's no wonder that ZipRecruiter is the highest rated hiring site in America. And right now, my listeners can try ZipRecruiter for free at this exclusive web address. It's ziprecruiter.com slash E-Z- R-A. Again, ziprecruiter.com slash E-Z- R-A. ziprecruiter.com slash, wait for it, E-Z- R-A. ZipRecruiter, the smartest way to hire.

[00:37:56.81] - It's always been strange to me that given how much capability the different companies here give us to train the algorithms that we rely on, they never give us abilities to set or shape them. It would not be that difficult to set up some kind of slider on the back end where it's like you can bring up the amount of news you want to see, or you can bring it down. You can bring up how much you want to see that is on your side of the aisle, or you can bring it down.

[00:38:25.49] I mean, you could give people quite a bit of choice, and it wouldn't, by any means, be an incredibly difficult technological problem to increase the volatility of what they're seeing. And yet, they don't do that. The degree to which the algorithm is not only proprietary, but we are told to keep our grubby hands off of it. I mean, a lot of people wanted this from Twitter. I remember when Twitter went algorithmic, which has really been a good thing for the company from a company perspective.

[00:38:50.87] But it would not have been that difficult to give people the choice to not go that algorithmic, or to give it the choice to go only half as algorithm as they wanted to go and show more stuff out of the just normal timeline. And when these things are there, they're made very hard to get to. And in general, they're just not there. It's a fascinating thing to me because we talk so much about how these technologies can give us so much control, and we talk so much about how they're learning from us. And yet, we're given no control over them, and we're given so little power over them.

[00:39:22.16] I think even about my own Spotify Discover, and I love Spotify Discover. But Spotify Discover is 100% sure, and always is, that the only thing I like is pretty sad ambient electronica. And I'm not saying I don't like pretty sad ambient electronica. I'm an emo kid all grown up. It's all fair enough. But I would like to tell it that some weeks I would like to be discovering in this other space. And whatever, they have other products and I could find playlists. I'm not here to shit on Spotify. But it's just odd they're using us to train the algorithms, but they don't trust us-- to use your great term here-- to meta shape the algorithms. There's no ability to step above what my preferences are in the moment, and give the thing some forward guidance.

[00:40:08.09] - Right, so you want the forward guidance, and you also could have a world in which the defaults, right? You could have a world in which defaults are news from actual news sources rather than fake stuff, right? And then if somebody really wants to go see the fake stuff, I am pretty wary of banning stuff short of certain things. And we can talk about this. If somebody really, really wants to go and type the name in and is going to seek it out and just read it, I'm kind of like it's not our place to tell them they cannot read it.

[00:40:44.78] But you can make it so that they have to actually go seek it rather than pushing it and pushing and pushing it because it's exciting and it gets you clicks and it just feeds onto itself. So you don't get that choice. The other things that you don't get is that-- when you go on, say Spotify, which I use to and I use this Discover. And I have the same problem is that it just-- I listen to some stuff and it sticks me in that corner. The same problem with Facebook. If I comment on a few friends, it just sticks me on that corner and then shows me their stuff again and again and again.

[00:41:21.71] So the problem there is if I told Spotify surprise me, it almost certainly would create moments where I would feel uncomfortable and turn it off because it would surprise me with stuff I do not like. But the nature of Discovery is that you sit through some stuff you don't like if you are going to find stuff that you surprisingly like, right? There's no other way to just read your mind and find exactly what would surprise you, and you would like rather than going through that. And there's that space of being uncomfortable with where you are.

[00:41:57.63] Now, I'm going to sort of make this grand social pronouncement, which I don't really like doing. But I think we have built our society to try to minimize that. Our business models, our personal things, like that sitting with discomfort is not something that we're taught to appreciate as a path to future good stuff. We see it sometimes like in some exercise cultures have that, but they kind of exaggerated feel the burn kind of stuff. But that discomfort very often is a prelude to discovery.

[00:42:32.23] And if the business model is set on in the moment kind of thing, they don't want you to do that. So I mean, I can imagine games in which the algorithm says, all right, I'm going to surprise you. And we're going to do the surprise thing, but you're going to listen to five songs. And you commit to it. I mean, it's like nobody's making you, right? You could, obviously, turn it off. But it's just a way of recognizing that surprise me comes with discomfort. And it could say, this is not all going to be stuff you like, are you sure? And you could be like, I realize that. And it'll be like, here's five songs, and you're going to like them, and we're not going to let you skip until you're halfway through the song or something like that.

[00:43:12.09] And again, this is all voluntary. I mean, nobody's holding a gun to your head. So there are ways in which we could structure this. And if somebody structured it like that and said, I'm not going to let you skip until half of the song, but I'm going to surprise you. I would try that at least once or twice a week because it would sometimes work. But if somebody said, you can skip immediately, I would skip immediately, right?

[00:43:33.51] So this is this recognition that you are a person. My university gym when I was a grad student had this thing where if you stop pedaling or running, the sound in the TV you are

watching would go off, right? If you stop pedaling it would just go off. And I didn't have a TV at home, and if I want to watch a movie or the political debates or something like that, I have to go to the gym. I mean, I remember--

[00:44:00.87] - This is the healthiest thing I have ever heard.

[00:44:02.30] - I remember being on an elliptical or treadmill for two hours. I would just watched the movie because the sound would go off. Now, of course I could set up a world in which you know I would buy the TV. I could have it at home, all of that. But it really worked for me. I was doing two hour things. And it was just great, and you could still see it. There were still the captions. I was like, oh, wait, I'm not running.

[00:44:25.98] So we need to have this way in which we have these social discussions on how do we sit with discomfort, and then we structure our lives and say, how do we do this? And you can apply this to lots of things, right? I live within biking distance to my work, but it's clearly quicker to drive, right? I can drive in five minutes what I can bike in 20 minutes. And the way I've handled it with myself is I have not purchased the parking pass for my university. So I don't have the choice to drive to work. I have to bike to work. Otherwise, it's a hassle.

[00:45:02.08] Now, I made this myself, right? And in a pinch, I could grab a cab or something I could take the bus. But I made a conscious meta decision to try to make myself bike more rather than drive more. But if I hadn't made that decision, if I had a parking pass in front of me, I am telling you at 7 AM I am going to drive a lot of times. So the recognition that we're human, that we have vulnerabilities, that we respond to things in front of us, that if we're hungry we reach for junk food, that if we're kind of bored we just go for mindless entertainment. All of those things are recognizing human vulnerabilities, I think is important in realizing that it's not OK to exploit them for whatever profit you make, and that we want to do better.

[00:45:49.21] And that's the conversation that-- it's not just technical, it's not just political, it's just this general thing. Let's set up the world so that we can be our better selves as we define it when we are thinking deliberately and at length about it, rather than something constantly blinking at us and saying, look at me, look at me, look at me, eat me, do this, do that. It's this big shift we need now that we have digital technology.

[00:46:16.22] - With all the news about the Supreme Court right now, it is incredibly helpful to know the history behind this institution that is wielding such extraordinary influence over our daily lives and shaping so much of our politics. At The Great Course Plus, they've got an excellent course on this. It is named, quite aptly, History of the Supreme Court. And the way it works, it's a deep dive not only into the cases that shape the country over the past few years, but the quite personal nature of these key decisions and the justices behind them.

[00:46:44.26] I mean, when we're watching these nomination processes, it's easy to forget that these are human beings being nominated. And which human being gets nominated, well, a lot in American life is turned on that. And so understanding how that played out in the past it's at least helpful for contextualizing what's going to happen in our future. But if that's not your speed, you can listen to anything from The Great Course Plus.

[00:47:03.97] They've got thousands of lectures, and with The Great Courses Plus you get unlimited access to all of it. You can stream their entire library, learning really about anything from top experts in history, politics, economics, human behavior science, new languages, cooking, photography. I've heard from you. I've seen the photographs of some of you who have taken the photography course. They are beautiful photographs. It's a great space to just learn about whatever is interesting you at the moment. You can watch or listen anytime with The Great Course Plus app.

[00:47:31.04] And for a limited time only, my listeners can enjoy The Great Courses Plus free for an entire month. But to get this special offer, you need to sign up right now through the special URL, which is thegreatcoursesplus.com slash E-Z- R-A. Again, thegreatcoursesplus.com slash E-Z- R-A.

[00:47:48.79] - So let's talk about the recognition that we're human. Because even if we are not always recognizing this all that well, others are. I've always thought it's really telling when USA Today did a big analysis of what Russia's social media pages were doing in 2016. It's that they were spreading discord about race in America. The Russians looked at us, and they said, aha, I know how to get them really upset. I know how to suppress the vote. I know how to get people at each other's throats. That's to dig into the American cleavages on race.

[00:48:20.29] And then, just a couple of days ago, there was a New York Times report that Facebook has discovered more coordinated activity on the platform. They're not sure who it's by yet, it's not clear if it's Russia or not. But it's around the Unite the Right White Supremacist rally, and whether or not there's going to be a sequel to it. It's around the abolish ICE hashtag, which has become bigger on the left and is about changing the way immigration enforcement works within the country.

[00:48:44.47] I'm curious what you hear or what you see when you see outside actors focusing on these issues. What are they understanding about us? That maybe we or the platforms are less willing to admit?

[00:48:58.81] - Right, so couple of things here. I just want to be clear, I think the Russian meddling as it's come to be called was pretty visible and obvious before the election. Since I was following the stuff it was staring you in the face. So we've since had a lot of explanations and disclosure from Facebook. We had an indictment. So we have a lot more information. But there has been enough open in front of your face visible stuff that, I mean, I think at this point it's kind of hard to deny that there was a concerted effort and it reached some amount of the population.

[00:49:38.13] So that's one thing. But the other thing is the Russian meddling to the degree it worked. And I was following all this before the election. So it piggybacked on existing trends, existing polarizations, existing efforts. Some of them ideologically driven, some of them just for profit because it's a great way to make money, right? If you just create stuff that gets hate clicks, even, that just works. It's a very, very lucrative business.

[00:50:10.99] So what they did, as far as I can tell, was actually not the super sophisticated thing. It was a clumsy thing. They realized that race is a cleavage in this country because-- I mean, it's

so obvious, right? If you know one thing about the United States that's probably on your top three. But they didn't understand a lot of things. They were just playing around. They tried to push Texas secessionism and California secessionism. And if you think about it, that's because they're Russian. And in that part of the world, like Crimea or Ukraine, that's a real thing. Whereas, in the United States, that's not a big thing. But they didn't understand, they were just pushing it.

[00:50:54.02] But what happens when you're on social media is that you do not have to be great at it. You just need to look at the digital analytics, right? So what they seem to have done, as far as I can tell, is push a bunch of things. And it's kind of clumsy across the board effort, at things they thought were cleavages. Secessionism, race, Bernie Sanders versus Hillary, they just pushed and pushed and pushed. And then, just looked at their dashboard. And it was pretty clear what worked.

[00:51:23.44] So before the election, we had-- I talked to this guy after the election. One of the big pages the-- was that [INAUDIBLE] regarding as a fake newspaper was pumping out really vicious anti-Hillary Clinton stuff. It was just horrible, vicious stuff. And was getting just viral on Facebook. And I talked to the creator of that page. And he's a liberal guy from California. I'm like, why did you do this and not the other? He's like, this is what got clicks. And it made him good money. He worked couple hours from his couch and made hundreds of thousands of dollars.

[00:51:58.12] So some of the things that we have seen are a product of the feedback cycle between being able to try lots of things and immediately see what works. So you don't have to be a genius at understanding the US society, you just have to try a bunch of things and then look at your Facebook analytics and it will work. And if you look-- forget the Russia part and look at how the campaigns did on Facebook, Donald Trump's campaign spent a lot more money on Facebook.

[00:52:29.80] And as far as I can tell, compared to Hillary Clinton's campaign, they also turned a lot of things over to Facebook. And Facebook offered this to both campaigns, and Donald Trump's campaign took them up with what's called embeds, right? There are people, Facebook employees, that went and said, here's how you use our platform best and they did. And they tested tons of things, and they were very good at responding to the analytics. They were like, OK, this works. Let's push this more.

[00:52:59.07] When I went to Donald Trump's rallies, one of the things I really noticed was that some of the things that appear rambling-- like he's talking, and sometimes people will take that talk speech and transcribe it, and then laugh at it because it's really rambling. And you see this a lot on Twitter, journalists laughing at these rambling paragraphs of him. What's actually happening is that he uses the rally as a form of analytics. He just starts somewhere, and the audience energy isn't there, he just switches mid-sentence. And if the audience energy isn't there, he switches again and then finds something.

[00:53:35.75] So it's this really interesting combination of using the rallies to test your messages. Using digital analytics to test your message. You already know what kind of works. And then,

you have all these other actors, not legitimate actors like foreign powers, who are using the same methods just to digitally test your message. And you have people doing it for money. The famous Macedonian teenagers testing your message. So I think that's what's happening is that since social media rewards the ability to gather audiences and sense outrage, or just stuff that gets you angry, was really good at it.

[00:54:14.75] And since you can test lots of things and find out what works, people find what works. And that's how the cleavages get used rather than a bunch of Russians who've studied US for their whole life and they're just experts at it. I don't think that's what happened at all.

[00:54:31.60] - I take your point on that. One of the things I wanted to ask you about that, though, is you've written something it's been in my head for a little while. It was a couple of months ago, but you wrote that the most effective forms of censorship today involve meddling with trust in attention, not muzzling speech itself. As a result, they don't look much like the old forms of censorship at all. They look like viral coordinated harassment campaigns, and they look like epidemics of disinformation meant to undercut the credibility of valid information sources.

[00:54:57.86] I've been thinking a lot about this. Because on the one hand, for the thing that we're describing and talking about, this information overload, this denial of service attack on our ability to pay attention to things. Is censorship really the right word? And then, on the other, something I do notice is that what people are really asking for as a remedy is for Facebook or YouTube or Twitter to practice genuine censorship. To kick people off of the platform. To suspend their accounts.

[00:55:24.05] How do you deal with this world where the thing that we've been taught to be afraid of are Orwellian-like structures of censorship, of silencing, of fascism. And what we're dealing with are attention overload structures. And then, the remedies people go to then allow folks to wrap themselves, to some degree with validity, in the garments of free speech and the garments of free exchange of open debate. I mean, you're in a very weird place where Alex Jones is able to cry out that he's being censored, and there is some validity to that. And on the other hand, nobody has set up a structure under which there is a clear answer about what to do with him, or even what to call him.

[00:56:06.83] It feels to me like our language is almost outdated for the reality of the world we're living in.

[00:56:12.08] - Yep. The language is absolutely outdated, and if I could-- I love George Orwell's work, but if I could ban 1984 from entering this discussion I would try. I would be my big sister and just ban it. Because I think it just really is misleading because it has this totalitarian--

[00:56:26.83] - Exactly what he predicted.

[00:56:29.17] - There you go. I have emerged as the big censor. So I don't have a better word than censorship to describe what happened, say, with the Wiki leaks hacks in October of 2016. And it was a combination of mass media complacency, and inability to understand what was happening. An illegitimate political sabotage that somehow got presented at whistle blowing.

And whistle blowing is a time honored and honorable tradition on curated dumps of one side's political conversations and personal conversations. A month before the election, clearly is something else.

[00:57:08.15] And mass media was so into the sort of drip, drip part. They didn't do their job. There was a lot of things that needed to be reported on for both campaigns that weren't reported on. So I don't really have a way-- I mean, it's kind of like that thing where you yell squirrel when something else is happening. We need that. Maybe let's just call it the squirrel, right? It's squirreling. You're just distracting and overwhelming what--

[00:57:33.09] - That's a great-- did you just make that up on the spot? That's very good.

[00:57:36.50] - I just made it up, yeah. So it needs a word. This is what was happening. So on the other side, the Facebook and Google, especially through YouTube and search algorithm, have become the key gatekeepers through their algorithm and what they allow and what they don't. And I don't like this world, I really do not like this world that we have so few and it's just not great. But we are here, and what they are allocating isn't necessarily speech, right? If Facebook kicked off Infowars, Infowars would still have its website. So its speech isn't necessarily denied. What it would be denied is attention and access to large networks.

[00:58:22.78] There's a joke, three degrees of Alex Jones. You can start anywhere on YouTube and you'll quickly get recommended Alex Jones. So what you're seeing from Facebook and Google isn't just allowing Alex Jones to be on the site, they've been helping amplify his message. So that's that one part of it is that they would be denying him attention. Should one company or two companies be allowed to deny so much attention?

[00:58:49.60] There's a problem there. There's no denying that this kind of bottleneck thing is a problem. That's why we're all leaning on-- we're all playing to the two referees, right? Facebook and YouTube, which isn't great to begin with. In his particular case with Infowars, the stuff they're doing is they're basically targeting people for potential incitement violence, incitement against them.

[00:59:16.16] I mean, the most obvious example is claiming that parents who lost children at the Sandy Hook's school mass murder are just actors. It is inciting violence against them. Because you're saying these people-- their children aren't real. I mean, besides the harassment and the horrific cruelty of it, it is effectively inciting violence against them because you're playing to, let's say, very fond of their guns audience. A small portion of this country owns most of the guns. And you're playing to that audience and you're telling them there are these people who are pretending to have lost children in order to have your guns taken away.

[00:59:54.70] This is just-- one of the families, they wrote an open letter recently. They've been living in hiding because of this. To me, this crosses pretty much any line that I can decide. If I were operating a platform, this is not the kind of stuff that is hard to decide on for me. I mean, there's a lot of stuff that's really gray, and that's difficult. And Facebook does a lot-- like if you have a Beyonce track that's unauthorized, Facebook on YouTube will take it down in a snap.

[01:00:23.65] So to me, that case is an example where they're bending to political pressure. They're so afraid of being called bias. They're so--

[01:00:31.51] - I want to ask you something about that political pressure, though, before we move on from it because I think it's super interesting. The point you're making that they're not governments, they're gatekeepers.

[01:00:41.38] - That's right

[01:00:42.04] - They've become so powerful that I think we don't even know how to look at them. So Ted Cruz had this very strange set of Tweets where he was saying, well, on the one hand I don't like Alex Jones because Alex Jones keeps suggesting my father helped kill John f Kennedy Jr, which is true. That is what Alex Jones suggests, and so does Donald Trump. And the fact that Ted Cruz has decided to ally himself with all these people is a real interesting fact about where he sees his political incentives to be.

[01:01:09.65] But he would hashtag this stuff you know one day. He would say things like, who made these platforms the deciders of speech. And in any other context, Ted Cruz, defender of the free market, does not believe that private companies should be coerced to sell or permit whatever anybody wants on them. But he is acting now as if they're almost governments. And this to me this seems to be the problem. They're too powerful for us to have a way of talking about them. We keep wanting to look them as companies, but we also want to give them almost responsibilities of governments.

[01:01:44.74] And then, we also don't know what to do with how we regulate them. We just seem to be in a real pile up in what we expect of them.

[01:01:50.30] - This is absolutely true because they have moved beyond companies for sure. They have become part of the public infrastructure of attention in the 21st century. There's no denying, for me, that Facebook is part of public infrastructure. There are so many civic things I do. Absolutely civic regular things that I have no access to besides Facebook groups. And I have lots of people that I have no access to besides Facebook products. And I really don't, and this is not for lack of trying at times.

[01:02:23.53] So that's just the reality. If you're cut off from Facebook, if you're mistakenly or accidentally or unfairly cut off from Facebook, you are denied a part of the public sphere. And so when we say that they should stop helping Alex Jones, there's two parts of it. One is does he get to exist on the platform? That's one set of questions. Does the recommender algorithm on Facebook and YouTube recommend this stuff? That's another set of questions, right? If somebody shares, this does Facebook highlight it or demoted? That's another thing that's playing with the attention side.

[01:02:59.66] The third part is they've just taken down a bunch of, as you said, things that they identified with potentially as-- there's some sort of coordinated campaign, and they look very much like the previous Russian campaigns. But there's a rally that was supposed to happen in New York, and its page has been taken down. And they're crying and saying, we're real, we're

real, right? They just got swept up. So the question is what happens if there's a false positive, right? Even if we do want certain things to be taken down.

[01:03:26.66] As a whole society, we agree that if a foreign government is pretending to be a Black Lives activist we're going to cut it off. But what if there's a false positive? What's the process? This just can't happen like this. We definitely need forms of due process, forms of understanding and regulating, and their market power is just too big to treat them either as corporations. But yes, you're right, they're not governments, either.

[01:03:55.75] - I know we've got to let you get to your next thing, but obviously, we can talk about this stuff all day. But so I guess I'll end with the question we always ask on the show to close it out, which is we've been talking about social media platforms and digital publishers the whole time. What are three books you would recommend, that you've read, that influenced you, that you think the audience should read as well?

[01:04:14.58] - That's a tough question. OK, so let me say that there is an enormous number of great new books. There's just a lot. So I couldn't pick three from the most recent crop. But I'm going to recommend three books that precede the current moment.

[01:04:32.51] One of them is something called *The Control Revolution* by James Beniger, Technological and Economic Origins of the Information Society, where he makes the argument that we developed information technology not as a means of efficiency or even information, but as a means of control. And there is talk about production control. And I think there's a case to be made that, increasingly, our digital infrastructure is a form of social control. And you see in China how that could go, and you see how it could go here. So I find this sort of thinking of control and power rather than just information to be a good way of understanding some of the ways this thing happens. So that's one book.

[01:05:17.92] Another book that got out in the early days of the internet is called *Ruling the Waves*. It's cycles of discovery from the compass of the internet. And it talks about how the early days of any new technology like this is first the upheaval, and the rebels and the pirates. And then, you look around and the pirates are employed by the British Navy to patrol the high seas. And all of a sudden, they're part of the empire, right? So that's a very instructive book to anyone who thinks that technology will not be, eventually, taken up by power.

[01:05:55.01] And the final book I'm going to say is because we touched upon this. Walter Ong is a scholar who's written a lot about pre-literate cultures, like cultures where there's no writing. And I think it's really important because we are so steeped in a writing and literate culture, we don't really understand how big a shift it is to go from an oral culture to a literate culture. And then, we went through parts of the literate culture. We went to a printing press, and on to the rest of it.

[01:06:25.25] And now, we're in something else. And I don't really know what to call this something else. And I think it's a good grounded work in trying to think how does our media shape us, right? How does the media we have and the tools we have to think with and to communicate with also shape us and [INAUDIBLE].

[01:06:42.90] So those would be three, all from 80s and 90s, and so pre this digital explosion, but good ways of thinking about the current moment.

[01:06:54.85] - Zeynup Tufekci. Thank you so much. This was incredibly, incredibly helpful.

[01:06:58.82] - Thank you for inviting me.

[01:07:01.72] - Thank you so much to Zeynup, thank you to my producer Joan Lineberger, my engineer [? Pattaner, ?] [INAUDIBLE] Vox Media Podcast production and we'll be back next week.

[01:07:12.07] - Hi I'm Kara Swisher. I want to tell you about another podcast you should check out, it's called Recode Decode. Every week I talk to tech and media's key players about how they're changing the world. I interview tech execs like Apple CEO Tim Cook, political figures like Anthony Scaramucci, and media personalities like sex therapist Esther Perel. Once again, the name of the show is Recode Decode hosted by me Kara Swisher. You can find it on Apple podcast, or wherever you listen to this show. See you there.