

**Demetri Kofinas:** 00:00:00 Today's episode of Hidden Forces is made possible by listeners like you. For more information about this week's episode, or for easy access to related programming, visit our website at [HiddenForces.io](http://HiddenForces.io) and subscribe to our free email list. If you listen to the show on your Apple Podcast app, remember, you can give us a review. Each review helps more people find the show and join our amazing community. And with that, please enjoy this week's episode.

**Demetri Kofinas:** 00:00:48 What's up everybody? My guest today is Rana Foroohar. Rana is Global Business Columnist and an Associate Editor at the Financial Times. She is also seen as Global Economic Analyst and one of the more knowledgeable and intelligent guests I've had on this program. This is a phenomenal conversation. It hits right in my sweet spot and where I think this show dominates the competition, and that is at the intersection of technology, finance, and culture, including a 40 minute overtime, focused primarily on the financial side of this story, including a conversation about the overall macroeconomic picture, the revival of populism among Western countries, and the real prospects that a splinternet could emerge not only between the US and China, but also between the US and its Western European allies.

**Demetri Kofinas:** 00:01:45 We're living in one of these dramatic periods of societal change and uncertainty that most generations never get to experience. And I think it's being driven primarily by a very particular set of Internet-enabled technologies that are currently undergoing a rapid phase of consolidation, something we haven't seen since at least the late 19th century. And this was a period where people's relationships to nature and to the land were being radically reshaped by the railroads, by industrial capitalism, urbanization, their sense of time and space, their relationships to their communities and to each other were being profoundly reordered and this produced an unprecedented amount of anxiety.

**Demetri Kofinas:** 00:02:36 And like today, it coincided with a rise in populism and it calls for heavy handed regulation of what had become industrial monopolies that were able to set prices and use anti-competitive tactics to bankrupt their competitors, to the point where if you were an independent oil refiner, you had to sell to John D. Rockefeller. Because he not only got preferential rates on his oil shipments, but he was getting rebates from the railroads on every barrel shipped by his competitors. And these types of anti-competitive practices were going on across the board in steel and tobacco everywhere. And it took a long time for the public to catch up.

**Demetri Kofinas:** 00:03:16 And for journalists like Ida Tarbell to emerge who could begin to bring unnecessary level of clarity to what was happening. And I think this is where we are today, and people like Rana and Shoshana and other journalists and authors are beginning to take this on in a way that we haven't seen before. And I think it behooves all of us to pay attention because the bad lines of 21st century capitalism and liberalism are being radically redrawn. And if we want to have a say in what this world looks like and our place in it, we need to participate. And that starts with educating ourselves and others about what's going on and how we can start to fix it.

**Demetri Kofinas:** 00:04:02 And with that, please enjoy my very timely and very important conversation with Rana Foroohar. Rana, welcome to Hidden Forces.

**Rana Foroohar:** 00:04:16 Thank you so much for having me.

**Demetri Kofinas:** 00:04:17 It's great having you here. So, I read your book, loved it, we'll talk about it. But you opened the book with a quote from Mary Shelley's Frankenstein, and I couldn't tell whether you were talking about big tech or the book or-

**Rana Foroohar:** 00:04:32 My own family.

**Demetri Kofinas:** 00:04:34 See, there's that two or both. So why did you choose to open the book with a quote from an early 19th century sci-fi horror novel?

**Rana Foroohar:** 00:04:44 Well, you know I couldn't think of anything that better encapsulated what I felt I had learned at the end of doing this book, which is, the book is kind of a 20 year history in some ways of how Silicon Valley and in particular, the big tech platform firms went from utopia to dystopia. And they started with these incredible ambitions to connect the world. Don't be evil. It was a Google mantra. But by the end, and we're not even there yet, but we are where we are, 20 years in, we've got election manipulation, we've got cognitive capture, we've got attention merchandising, we've got surveillance capitalism.

**Rana Foroohar:** 00:05:22 So there are so many negative externalities here. And I know, having spoken to some of the creators of these firms, that they're very torn. They may not say so when they're sitting in Capitol Hill, but they are torn. And I think they're just beginning to realize, and we are all just beginning to realize what the cost have been. And that's essentially what Shelley was getting at, what started as this dream of life became a monster.

**Demetri Kofinas:** 00:05:46 So what got you interested in this?

**Rana Foroohar:** 00:05:49 In the topic?

**Demetri Kofinas:** 00:05:50 Yes.

**Rana Foroohar:** 00:05:50 So two reasons. About three years ago, I was starting my new gig as the global business columnist for the Financial Times. And my mandate was to write the world's biggest and most important economics and business stories in commentary form, so to do opinion pieces. And whenever I start a new position like that, I always like to follow the money and see, where am I gonna throw my energies? Where's the money? Where's the power? And as I dug into the numbers, it was really interesting.

**Rana Foroohar:** 00:06:16 I began to see that a lot of wealth and a lot of political power had moved in the last decade from Wall Street to Silicon Valley, and that turn was already happening. But if you think about the timing, 2007 the smartphone, 2008 financial crisis, a lot of regulation on the street. What industry was rising? Tech. It actually took the market's back up over that time and now maybe leading them down.

**Rana Foroohar:** 00:06:38 But the other thing that happened, and this was really the thing that kind of drove me to do this book, a few weeks into that job I come home one day and I open up my credit card bill and I look at it and there's all these odd charges like \$1.99, \$3, \$5. And then I look at them and I start adding them up and it's over \$900 in charges, and I think, "Oh my God, I've been hacked." And then I started to look more closely and I see they're all from the App Store. And then I think, I don't buy that many things from the App Store. Who else has my password? My then 10-year-old son, Alex.

**Rana Foroohar:** 00:07:13 So I go downstairs and Alex is parked in his usual afterschool position, which is on the couch with his phone. And it takes me a minute to get his attention away from the phone. He's playing something. And I start to quiz him about what's happened. And as I dug in, it was really interesting. I realized that something had overtaken him. He had gotten into a game, as it turned out, a soccer game, one of those games where it's offered for "free", and I put that in quotation marks. You can download the game for free, but then as you're playing, you want to buy a better player, you want to get Ronaldo a pair of cool new shoes, whatever it is, you start buying things in the course of the game.

**Rana Foroohar:** 00:07:54 But you don't necessarily realize it, especially if you're a 10 year old, that you're buying things. And so little by little, as a measure of just how addicted he was to this game he had spent in the course of a month over \$900.

**Demetri Kofinas:** 00:08:07 Wow.

**Rana Foroohar:** 00:08:07 I mean, he was pretty high in the rankings, but come on. But the thing that was really, really interesting to me is that. He's a pretty good kid. He's pretty good about asking for permission, but he had not really realized this rabbit hole that he was going down. He was kind of in a fog. And so, I became horrified as a mother. And needless to say, that his phone was confiscated and rules were set down, but I was fascinated as a journalist, and I thought, I got to understand this business model.

**Demetri Kofinas:** 00:08:36 So you touched on a few things there with your comment on your son, you're really touching on the behavioral levers. We had Shoshana Zuboff on the show. We talked about this at length, but let's actually roll back a little earlier and talk a bit about this comparison to Wall Street in 2007 with where we are today. We also had your managing editor, Gillian Tett, on the program, and we talked about this and how for years Gillian has been saying this, that she has felt like Silicon Valley resembles or has started to resemble or it feels a lot like Wall Street pre-crisis. Can you flesh out that comparison a little bit? How did we get here? Because Silicon Valley, they were the darlings. These guys, you worked in the dot-com bubble in '98-

**Rana Foroohar:** 00:09:25 Yeah, I'm old enough.

**Demetri Kofinas:** 00:09:26 Right. And in London. So, I'd love to hear about that. But these were back in the late '90s I mean, this was like the place to be. And even in the early 2000s and then even after the crisis, there was a kind of sense that these are the real entrepreneurs. This is where real business is happening. These guys are going to save us. And now everyone hates them.

**Rana Foroohar:** 00:09:44 Yeah.

**Demetri Kofinas:** 00:09:45 So how did we get here?

**Rana Foroohar:** 00:09:46 Well, there's a lot to unpack there. Let me take that in kind of three parts. So, at the very most micro level, Gillian's actually right. If you look at transactions, there's a lot of asymmetry in financial transactions. And she wrote about that famously before the crash, her book about Fool's Gold, about the CDO

crisis and the amount of asymmetry in information on either side of a transaction. You can argue there's even more asymmetry in this new data capitalism that we're all a part of.

**Rana Foroohar:** 00:10:16 Because if you think about it, let's go back to Adam Smith, father of modern capitalism. He would have said that we need three things to have a properly functioning market, equal access to data, transparency in terms of what is actually being traded and a shared moral framework. Now, you could argue that none of those things are in operation really in any kind of data transaction that you're making right now. And that's because data doesn't have a set value, at least that we know about it does to the big tech firms, and they'll layer it in ways that create exponentially more value.

**Rana Foroohar:** 00:10:51 You have no idea what one transaction that is surveilled by a big tech firm is worth, what 10 that are piled together, what your search patterns plus your GPS data plus what smart devices may be tracking you or what sensors are watching you cross the street, what that's worth to Google. It's worth a lot. We're actually starting to see some numbers on that and we can talk about that later, but that's point number one. So, a lot of asymmetry, totally unregulated. I mean, if you think that derivatives were unregulated before the crisis, big tech is completely unregulated.

**Rana Foroohar:** 00:11:23 Point number two is these institutions have become, in some ways, I think, the new too-big-to-fail institutions, and I'll explain why. I have a whole chapter in my book about this. As I said, early in my time with the financial crisis, I started looking at how wealth and power had shifted from the street to the Valley and then I started looking at, wow, what are all these cash rich firms doing with that cash hoard? I mean, think about it, Apple. Apple was interestingly the first chapter of my last book, which was actually about the financial-

**Demetri Kofinas:** 00:11:53 Makers and takers.

**Rana Foroohar:** 00:11:54 ... makers and takers. And it's funny, in that book, I was trying to talk about how financialization had become a real issue in our economy, that financial markets have become the tail that wags the dog. And so, business was really being led by finance instead of the other way around. And I wanted to try and find the most Kafkaesque example I could of how a company was interacting with the financial markets in a way that was just distorting, unproductive, unhelpful.

**Rana Foroohar:** 00:12:19 And what I thought of was back in, I think it was 2014 or so, Apple had a ton of cash. I mean, it still does, but it had about 250 billion on its balance sheet at that point. It was 10% of all of corporate America's liquid reserves.

**Demetri Kofinas:** 00:12:32 Was that around the time Carl Icahn was rattling the cage through a dividend?

**Rana Foroohar:** 00:12:35 Carl Icahn was rattling the cage, and every time Carl would tweet, the share price would go up, and Tim Cook, who had had dinner with them in his home, and they had gotten to be buddies, was handing back money. And I thought, this is insane. I mean, for starters, why is this tweet not market manipulation? But then I started thinking, well, why are these buybacks not, and these dividend payments in the way that they're being done, not market manipulation? Because this is essentially paying out the top 10% of the country that owns 80% of the stock.

**Rana Foroohar:** 00:13:05 This company hasn't actually needed to come to the financial markets for operating capital since the early 1990s. Is this what our markets are for? So that huge tech companies can issue tons of debt at really cheap rates, then park their own profits in overseas bank accounts where they're not taxable, at least not at the current rates in the US and we can get into the Trump tax cuts and some of what's happened to that cash word sense. And that's happening within an industry that one could argue every part of it that's really important was taxpayer funded, the internet, GPS, touchscreen technology.

**Rana Foroohar:** 00:13:42 Think about that. That all came out of the Pentagon and came out of DARPA, and this is what we've got. So, I looked more deeply at that phenomenon in this book. And what I found was that basically 80% of corporate America's wealth was living in the top 10% of firms that had the most data, the most IP, the bulk of their cash hoard was an overseas bank accounts, not in cash, but in bonds, corporate bonds. So, they had become, in some ways, underwriters, unregulated underwriters.

**Rana Foroohar:** 00:14:15 I mean, Google and Apple were buying up corporate issuances in the same way Goldman Sachs would have, sometimes 30% of a new offering, but we had no idea what was going on. And that just struck me as, wow, there is a new too-big-to-fail industry. If we think Wall Street has still got problems, this industry is incredibly opaque and nobody knows about it.

**Demetri Kofinas:** 00:14:37 So you mentioned a lot of things just now.

**Rana Foroohar:** 00:14:40 Sorry to throw so much at you.

**Demetri Kofinas:** 00:14:41 No, it's fine. There's so much I want to talk about. These types of conversations are challenging because you're right in my sweet spot.

**Rana Foroohar:** 00:14:46 Awesome. Love it.

**Demetri Kofinas:** 00:14:47 It's like both of the areas that I'm most interested in talking about, technology and finance and also culture. So, two things you mentioned that stuck out to me. One is that the markets have become a mechanism for transferring wealth.

**Rana Foroohar:** 00:14:57 Yes.

**Demetri Kofinas:** 00:14:58 Right? And it's a positive feedback loop.

**Rana Foroohar:** 00:15:00 Yes.

**Demetri Kofinas:** 00:15:00 And it's generating larger and larger amounts of inequality. And in a sense, that is being reflected in our politics.

**Rana Foroohar:** 00:15:07 100%. And actually, you're touching something. I said that there was a third part to that question about how is Silicon Valley like Wall Street. If you think about Wall Street as the purveyor of a kind of economic neo-liberalism, the idea that capital can go wherever it wants to go, that's usually where labor's the cheapest. That creates a lot of great things, but it also creates tremendous inequality, and it's one of the reasons we have the politics that we do, because you have these intense pockets of pain in certain countries because of the dislocation of jobs.

**Rana Foroohar:** 00:15:36 Well, Silicon Valley puts that on steroids. So, if you think about capital being able to fly over the problems of the nation's debt, data can do that even more easily. So, I think about a company like Facebook as almost the apex of neoliberalism. And I think a lot about this battle between Zuck and Elizabeth Warren. And I almost think of it as, I mean, he's right when he says that she's an existential threat, not just to breaking up Facebook, to the entire economic order that it represents.

**Demetri Kofinas:** 00:16:06 So we've gone from hot money to hot data.

**Rana Foroohar:** 00:16:09 There you go.

**Demetri Kofinas:** 00:16:10 That should be your third book.

**Rana Foroohar:** 00:16:11 Yeah, hot data. I like it. I like that title.

**Demetri Kofinas:** 00:16:13 So one is that wealth transfer, we can go down that rabbit hole for hours. And another thing you mentioned is Janeway's Innovation Economy, you mentioned ... We had Bill on the show as well.

**Rana Foroohar:** 00:16:23 Yeah, he's so great.

**Demetri Kofinas:** 00:16:23 And we talked about this. Absolutely. And to even be more specific, it's not that the government created the internet, it's that the government ceded the internet.

**Rana Foroohar:** 00:16:33 That's a great way to put it.

**Demetri Kofinas:** 00:16:34 The government made the funds available to invest in what was otherwise an un-investible proposition. Something that would have been so expensive, riddled with so much risk. And the other thing that Janeway talks about is that the private sector is seeking to exploit and monetize as much of this existing technology as possible, but that you're not seeing that other transformational technology, and that there is a role for the state as an investor in the early stage of the economic cycle, of the innovation cycle where risk is fraught and where the private sector is unwilling to make those investments.

**Rana Foroohar:** 00:17:07 100%. And it is interesting, I got interested in Janeway because I heard him speak several years ago at an INET Conference and he was digging into the idea of big tech's role in inequality. And back then that was still just a kind of a mind-boggling idea, right? I mean, these were the innovators. These were the job creators.

**Demetri Kofinas:** 00:17:25 Heresy.

**Rana Foroohar:** 00:17:25 It's a heresy. How could you? But he really got me thinking and then I dug a little deeper and I started reading people like Mariana Mazzucato, who makes the point very smartly in her own work that, look, there are different ways of doing this. If you're Danish, if you live in Israel, these countries actually take stakes in the things that they support with taxpayer dollars.

**Demetri Kofinas:** 00:17:45 We couldn't even take a stake out of the companies we bailed out.

**Rana Foroohar:** 00:17:47 Well, exactly right.

**Demetri Kofinas:** 00:17:48 Right? So, I mean, even in that case.

**Rana Foroohar:** 00:17:49 We need another podcast.

**Demetri Kofinas:** 00:17:50 In that case, we actually, on top of that, we paid them twice.

**Rana Foroohar:** 00:17:53 Right. Exactly. No, I mean, it's kind of unbelievable. And it gets too, I mean, talking-

**Demetri Kofinas:** 00:17:58 Regulatory capture, all sorts of stuff.

**Rana Foroohar:** 00:18:00 Oh my gosh, yeah. And also, this mythology, this American mythology of bootstrapping. I mean, listen, we were talking earlier, like you, I'm the child of immigrants, I believe in bootstrapping, but the idea that we're all in it alone all the time is a false narrative. And it's killing us. It's going to kill the system if we're not careful.

**Demetri Kofinas:** 00:18:20 I feel like though, part of the resurgence of that narrative came out of the failures of the government. What we saw in 2008 was a larceny, right?

**Rana Foroohar:** 00:18:27 Yeah.

**Demetri Kofinas:** 00:18:27 What we saw was the system grinding to a halt, and the power behind the throne, stepping in front of the throne and saying, "Okay, we're going to save the system, and now since we're here, actually we're gonna get a little greedy and we're gonna actually just really rape you."

**Rana Foroohar:** 00:18:40 Yeah, yeah, well.

**Demetri Kofinas:** 00:18:41 People saw that.

**Rana Foroohar:** 00:18:42 That's right.

**Demetri Kofinas:** 00:18:43 And I think among other things, the rise of this type of ideological framework became more popular because people were like, "Well, screw the government. The government's not here to protect me. The government's here to rape me. The government's here to take my wealth."

**Rana Foroohar:** 00:18:54 Yeah, and I think maybe more particularly screw the elites.

**Demetri Kofinas:** 00:18:58 Oh, absolutely.

**Rana Foroohar:** 00:18:58 Which, you know, folks, I think ... One of the things I'm fascinated by is when you talk about the big tech regulation push, it's far left and far right. There's a lot of people that see Mark Zuckerberg, Jamie Diamond, Larry Summers, whoever you want to throw into the basket, that kind of Silicon Valley, Wall Street, Washington beltway, as being all part of the same group of elites that they feel sold them down the river, didn't care about their interests, are part of a rigged game that they're never going to be able to engage in.

**Rana Foroohar:** 00:19:28 And I actually think that we're moving, and we've already moved from occupy Wall Street to occupy Silicon Valley and those guys, particularly if you see a progressive Warren government, I think that the tax issues are going to change dramatically. The ability of them to monetize debt, the way in which the business model is conducted is going to just change dramatically. And that's gonna lead to a big correction, I think, in valuations.

**Demetri Kofinas:** 00:19:50 I want to talk about that too. In fact, we've got a real issue here, Rana, which is that I put together a rundown, but then this morning I saw your appearance on CNBC and it got me thinking about how I want to talk about SoftBank and WeWork and Uber and some of these Ponzi schemes that exist in financial markets. The AliBaba. So, we're going to do our best. But what you touched on, there was in the book you talked about how that you believe that curbing Silicon Valley's nefarious side effects will become the signature economic issue for lawmakers over the next five years.

**Rana Foroohar:** 00:20:22 Yeah.

**Demetri Kofinas:** 00:20:23 We had a crisis in 2008, right?

**Rana Foroohar:** 00:20:25 Yeah.

**Demetri Kofinas:** 00:20:25 The market's melted down. We hit 666 on the S&P. And even then, we didn't get the type of regulation that people expected and we certainly didn't get fairness in the bailout.

**Rana Foroohar:** 00:20:37 Yeah.

**Demetri Kofinas:** 00:20:37 Right? What do you mean when you say that? Are you saying that we're going to get real progress in terms of regulating Wall Street? And what's that regulation going to look like? I've heard another interview you gave on the way over here. Well, you

said if you could have your perfect candidate, you would merge Andrew Yang and Elizabeth Warren into one.

- Rana Foroohar:** 00:20:53 Yeah, get their brains together maybe.
- Demetri Kofinas:** 00:20:55 It feels to me like part of the problem is that I don't see anybody that's really addressing this coherently cause Andrew Yang doesn't want to regulate. Andrew Yang wants a dividend because he wants more money to the inputs, to the behavioral inputs into the surveillance capitalist model.
- Rana Foroohar:** 00:21:07 I'm so glad that you asked about that and I didn't have time to flush out. But what I mean to say is that I want someone like Yang who understands enough about the technology and the subtleties that he's not going to make a statement like just break them up, which is more a slogan than a solution. I love Elizabeth Warren. I think the world of her. I think she's got her heart in the right place. But nobody, including Warren, has a 360 view on how regulation is gonna ping pong around.
- Rana Foroohar:** 00:21:36 And we can talk about that because there are things we could do that would address the financial issues. There are things we're going to do that would address the monopoly issues, but then they can have side effects and things like national security in privacy and civil liberties and first amendment.
- Rana Foroohar:** 00:21:50 You need, one of the things I recommend in my book actually is a task force of the smartest people independent to sit down with a short timeframe, not forever, but a year, 18 months, and at least make a playbook of what are the issues and what are the possible externalities when you start to move one lever. I mean, we really need to do that and it can be done. Europe has gone and France in particular has gone some way towards doing this.
- Rana Foroohar:** 00:22:15 But what I like about Elizabeth Warren is that she takes on the power aspect of this and power is the commonality between what happened in 2008 and what's happening now. The reason I'm more worried, and I think it's actually a bigger deal now, is that we're talking about an entire economic system. So back then we were talking absolutely an important deal. The financial system melts down. Our tax payer dollars are used to bail it out. That's huge.
- Rana Foroohar:** 00:22:41 But we knew what was happening. We knew what the solutions were. I think we made the wrong bet. We didn't ask the private sector to take any pain. Right now, we're dealing with not just

the business model of the fangs, but everybody's business model. Data surveillance is ... Starbucks knows plenty about you. J&J knows about you. John Deere knows, maybe not so much about you, but a lot about cabbages.

- Demetri Kofinas:** 00:23:05 We'll talk about John Deere here as well.
- Rana Foroohar:** 00:23:06 Yeah.
- Demetri Kofinas:** 00:23:07 And that's also a threat in terms of cybersecurity.
- Rana Foroohar:** 00:23:10 So that fact, this is everybody's business model. It is as Shoshana would say, a new kind of capitalism. That fact just exponentially increases the urgency. And at the same time, and we haven't even gotten to my chapter on the Uberization of everything, the nature of these firms and the way that they invest and create jobs or don't create jobs is so different than firms of the past.
- Rana Foroohar:** 00:23:34 So you look at a company like Facebook or WhatsApp, that's the famous example that everybody uses. The market caps are huge, as big as some of the last generation of tech firms, but they create a fraction of the jobs. And same again if you look at the industrials of the past. So that disruption, that model is coming, that's gonna crunch white collar jobs so much. I mean, you can't even believe the amount of investment that is going into software now.
- Rana Foroohar:** 00:23:59 Long-term, if we had the right education plan in place, that would be a net gain. But in the short-term, there is going to be broad and deep job dislocation of a kind that if we think that out of work steel employees or truck drivers are upset now, man, just wait until the middle classes, the upper middle classes start to feel this pain and I think we're going to have a real revolt.
- Demetri Kofinas:** 00:24:20 So many things to talk about, just to fall on the point about WhatsApp. Another great example that I've used in the program before is Kodak and Instagram. Instagram got bought out the same year that Kodak went bankrupt.
- Rana Foroohar:** 00:24:32 Isn't that interesting?
- Demetri Kofinas:** 00:24:32 Yeah. So, your point is that the way that money is made today, you can scale.
- Rana Foroohar:** 00:24:37 Yeah.

**Demetri Kofinas:** 00:24:37 You can scale a very small number of employees and shareholders or partners or whatever, and you can capture that market.

**Rana Foroohar:** 00:24:44 Yeah, absolutely. It's a winter takeoff phenomenon. When you shift from an economy that is run on tangibles, widgets, things you can touch and feel to an economy based on intangibles, it becomes easier to create a network effect, become big, eat everybody else's lunch. You're also needing to put less capital investment into the ground floor onto main street. And that's one of the interesting things. Remember Trump's tax cuts a couple of years ago? We were all told, "Hey, we're going to give the big tech companies a lower rate. They're going to bring all this money home. They're going to invest it."

**Rana Foroohar:** 00:25:15 Well, for starters, they put it in share buy backs, but the fact is they don't have to invest as much as you would invest to say, build a new factory. I mean, the entire nature of capital investment in the economy changes. And so that's changing, I could go on, that's changing the Fed's calculations about interest rates. That's changing how we think about productivity. We are in a new world in which the main resource is data. And if we don't find a way to divide the pie of that new world up more equally, we're in for a world of political pain.

**Demetri Kofinas:** 00:25:47 So kind of, you touched on this before, you touched on it again, the point has to do with barter.

**Rana Foroohar:** 00:25:52 Yeah.

**Demetri Kofinas:** 00:25:53 It's the fact that a lot of value's being transacted, but it's not being priced.

**Rana Foroohar:** 00:25:57 That's right.

**Demetri Kofinas:** 00:25:57 And that in order for economies to function properly, a capitalist isn't the function, you need to have prices. We have had an imperfect capitalist system for years because things like the environment are not prices in many cases. And so, we end up exacting costs onto our environment that we wouldn't otherwise if they were priceable. It seems that we've been going in the opposite direction. And that kind of brings us to a point about industrialization where people went from being people to being labor to now being inputs.

**Rana Foroohar:** 00:26:23 Absolutely. Or the raw material. I mean, it's amazing. It really is like you're living in The Matrix.

**Demetri Kofinas:** 00:26:30 Oh, we talk about The Matrix on this show a lot.

**Rana Foroohar:** 00:26:31 It is true-

**Demetri Kofinas:** 00:26:32 It's religion on this show.

**Rana Foroohar:** 00:26:33 Really? Oh my God, it's so true though. I mean, it's prescient. It's-

**Demetri Kofinas:** 00:26:38 Very prescient.

**Rana Foroohar:** 00:26:38 We are the raw material and our own patterns, our behaviors, our thoughts are being studied, analyzed, and then sold back to us.

**Demetri Kofinas:** 00:26:48 So a number of things. One, when you were saying this is even worse, this is worse than the financialization, this sort of "datazation." You have a great quote in the book and it flushes out one side of why I agree with you. You write, "One of the reasons that it's tough to tackle the challenges wrought by big tech is that we spend so much time being distracted by it."

**Rana Foroohar:** 00:27:09 100%.

**Demetri Kofinas:** 00:27:10 One of the things I often think about is the automation, and I don't mean it in the way that most people think about automation. I mean that we live in a world where more and more of our lives happen automatically. We just assume things will work. We assume our car will work. If it breaks, we don't know what to do. We certainly can't fix it. And the average Joe engineer on the block can't fix it. You need to have computers to fix these things. If you get lost or if your phone goes down, you don't how to get home in many cases. I mean, it's the same sort of phenomenon of pilots who don't have enough flight time who are relying on the automatic pilot, the auto pilot, and then when the autopilot goes down, what do they do?

**Rana Foroohar:** 00:27:47 It's such a deep thing. You're making me think about Zen and the Art of Motorcycle Maintenance. I don't know if you've ever read that-

**Demetri Kofinas:** 00:27:52 I have not, but I've heard it's a great book.

**Rana Foroohar:** 00:27:54 It's really right in that area from a philosophical standpoint. It's also very, what you're saying is kind of Marxian, it's like we are in this sort of capitalistic cycle where we're becoming more and

more dislocated from the means of production. But what you're talking about is very true.

- Demetri Kofinas:** 00:28:12 Except we're being dislocated from ourselves. We're being-
- Rana Foroohar:** 00:28:14 Indeed.
- Demetri Kofinas:** 00:28:14 ... pulled apart. Right?
- Rana Foroohar:** 00:28:15 Indeed. Indeed. And we're in an attention economy. This is a term that was coined by Tim Wu, who's at the sort of forefront of thinking about ways to regulate this and the Columbia Law professor. To get back to your point about why technology's distractions are making it hard to solve the problem. Let me just give you a little example that I've been thinking about a lot.
- Rana Foroohar:** 00:28:38 One of the things that I talk about in my book is that, and you may already know this, but in 1998 when Larry Page and Sergey Brin, the founders of Google wrote their initial paper about search. They did that at Stanford. It's online. Anybody can read it. There's an abbreviated version. Then there's a longer version that's over 30 pages. And of course, as I was researching this book I sat down and read the entire thing.
- Rana Foroohar:** 00:29:02 Well, I get to almost the end in the appendix section and there's a two paragraph section on advertising and its discontents. And it basically lays out exactly where we are. The guys say, "Okay. We've now told you what the search engine is and how it will work. Now, how do you monetize it? One easy way would be through targeted surveillance, looking at people's personal data and then selling advertising against that."
- Rana Foroohar:** 00:29:30 However, they concluded that that would create a diametrically different set of interests between companies and users that companies could potentially mislead users, that even public entities could be misleading. I mean, they essentially predicted exactly where we are. So that to me was a mind-blowing thing. I thought to myself, surely other people are talking about this. I've missed it. Somebody else's reported this, some New Yorker writer has written the like long story of that, two paragraphs.
- Rana Foroohar:** 00:30:00 No. Guess why? Because people aren't reading. They're too busy tweeting, journalists. I mean, I'm stunned by the fact that sometimes all you have to do is show up and read the documents, but people don't do it anymore. And that's the tip of the iceberg. So how are we going to solve something like climate change when we're all busy interacting in 280

characters and children are now as the latest Common Sense survey said, getting most of their, not just entertainment, but news from YouTube.

- Rana Foroohar:** 00:30:28 I mean, my own son, I mean, think about this. He is in a household, divorced household, two very involved parents in both households, three journalists, one activist, highly educated. He will sometimes come home and talk about these facts he's heard online that are just so clearly fake news. And I think, what's happening here, that this is someone who is at the highest level of privilege and is being inculcated with these ideas through these new forms of media.
- Demetri Kofinas:** 00:30:55 So it's actually really scary. And we've done a number of episodes on this. I did one where it's the only one I ever did where we didn't have a guest. And I put together a series of clips, including from The Matrix and it was based on Theodore Kaczynski's paper, Industrial Society and Its Future, the Unabomber. And one of the things that I talked about and sort of that I want to bring up here is that, and Shoshana kind of touches on this when she talks about the unprecedented. It's so unprecedented that we don't really understand what's happening. We don't see how it's dramatically changing our lives and everything around us. Talk about the extent to which people are distracted. It's scary.
- Rana Foroohar:** 00:31:38 Well, it is. I mean, two or three thoughts there, just to dig down into the brain science for a minute. We're kind of at the beginning of this. There's not a lot of peer reviewed work, but what we're seeing is that brain patterns are being changed. Our ability to concentrate is being lowered. College professors, high school teachers are now complaining that kids can't come in and study the basic books. I mean, you mentioned at the very beginning my quote from Mary Shelley. I just hope my kids will be able to ... Well, I know my daughter will make it through, but I hope Alex will be able to make it through Frankenstein.
- Rana Foroohar:** 00:32:10 The idea of doing 300 pages of reading is becoming a problem for kids. Now, some people would say, "That's all right. We've had these shifts in the past from print to television, or, when comic books were new everybody got kind of exacerbated about that." But I am skeptical.
- Demetri Kofinas:** 00:32:29 It's not the same thing because it's because it's not one-way. It's two-ways.
- Rana Foroohar:** 00:32:31 That's it.

**Demetri Kofinas:** 00:32:31 There's two-way communication there. And again, to bring up Shoshana, the whole point about predictive algorithms is that the best predictions you can make are the ones that you've already secured through your actions. If you guide-

**Rana Foroohar:** 00:32:41 There you go.

**Demetri Kofinas:** 00:32:41 ... if you guide the foot traffic on Pokémon Go to that restaurant, you can predict with 100% reliability that you're going to sell 50 pizzas today cause you know cause you sent the traffic there. It's not that you're predicting the traffics.

**Rana Foroohar:** 00:32:54 And talk about an asymmetry of information.

**Demetri Kofinas:** 00:32:57 That's the thing. You mentioned it earlier, it's power. This is about power.

**Rana Foroohar:** 00:33:00 It's about power. And it's about free will. Do we have free will?

**Demetri Kofinas:** 00:33:04 It's about free will also.

**Rana Foroohar:** 00:33:06 Do we have free will?

**Demetri Kofinas:** 00:33:08 Again, I'm jumping everywhere. I'm all over the place here. The papers are scattered.

**Rana Foroohar:** 00:33:12 I hope your readers won't mind.

**Demetri Kofinas:** 00:33:12 Yeah, no.

**Rana Foroohar:** 00:33:14 Oh, sorry, your listeners.

**Demetri Kofinas:** 00:33:14 No, they won't. I love this. I just want to make the best use of it. So, you mentioned George Soros in the book, another trigger. What's it called, trigger warning George Soros. Trigger warning-

**Rana Foroohar:** 00:33:23 Oh my gosh, I hope we don't lose half the readers right now.

**Demetri Kofinas:** 00:33:25 Yeah, yeah. So, he gave a speech at Davos in January, 2018. He also gave one in 2017 and I think he gave one to 2019 as well. But there's an excerpt of that I pulled from your book. And he's explaining, for example, how big tech was divesting people of their autonomy, and he said that, "It takes a real effort to assert and defend with John Stewart Mill called the freedom of mind. There is a possibility that once lost, people who grew up in the digital age will have difficulty in regaining it."

**Rana Foroohar:** 00:33:55 Yes. I worry so much about that. I see such a difference, not only in my children, and it's interesting, there is a difference possibly because of their gender, but also their age. I have a daughter who's 17 and a son who's now 13. Some of the early research is showing that tween and teen boys are amongst the most susceptible to being kind of pulled into-

**Demetri Kofinas:** 00:34:17 Why is that? I wanted to ask you about, because I've seen the same thing.

**Rana Foroohar:** 00:34:19 Okay. So, what I've been told, and again, I think we're at the beginning of this research, but what I've been told by some psychiatrist is that tween boys, if you think about it from an evolutionary standpoint, they're geared up to be out with dad hunting, shooting, learning, learning about the world with a lot of quick action and reward, reward or punishment quickly in repetition. So, they're looking for high repetition, quick feedback and reward. That's exactly what you get online.

**Rana Foroohar:** 00:34:51 The only other thing that I have found in my own life that even remotely replaces this is basketball for my son, the highest speed, quick repetition, quick reward game. So, I basically try and push him off now to YMCA as much as I can to keep him off the phone.

**Demetri Kofinas:** 00:35:05 I read that in the book. You put that in the book.

**Rana Foroohar:** 00:35:06 But that's what we think so far. We don't really know. I mean, teenage girls are being affected too. Many of them are, of course, prone to depression and anxiety. Those levels, interestingly, in recent years, had been tailing off and now they're coming back, which is something that Jean Twenge looks at in her book, *iGen*, which I quoted in this, is also a great read.

**Rana Foroohar:** 00:35:26 Again, pretty new research, but what we're seeing is that social media in particular is she likens it actually to alcohol, to a glass of red wine. Maybe one drink is good for you because maybe you don't want to be the only teetotaler at the party. And there's some antioxidants and that's good. Okay. So, you don't want to be the only kid without a phone, that makes you kind of an isolated weirdo. But the more you start to have that second, third drink, the more hours that you spend with social media in this kind of bubble world where images are being perfected in this very unreal way, the more you start to suffer from things like anxiety, depression, girls are getting eating disorders, having self-harming behaviors.

**Rana Foroohar:** 00:36:08 I was actually moderating a conference on this topic recently, and there were a bunch of kids there, high school and college kids, and during one of the breaks, one of the young women came up to me and said, "You know, I feel weird about how I use my relationship with social media that the other day it was my dad's birthday and I wanted to wish him a happy birthday, but I thought I didn't really want to post it, I just wanted it to be personal. But then I thought, if I do this and I don't post it, if I don't have a picture or something on my Facebook page, is it real? Did it really happen?"

**Demetri Kofinas:** 00:36:41 Wow.

**Rana Foroohar:** 00:36:42 So that is mind blowing and to me that gets to what you're saying, which is that this generation is being shaped differently.

**Demetri Kofinas:** 00:36:52 So many thoughts. So also, for listeners, Nicholas Carr, the author, has written a bunch of books on this, on technology and the brain, Sherry Turkle also.

**Rana Foroohar:** 00:37:00 Yeah, she's great.

**Demetri Kofinas:** 00:37:01 Yeah, she has.

**Rana Foroohar:** 00:37:01 She found, actually ... I spoke to her recently and some of her research is on empathy. She's doing a lot of work on how this changes how we relate to one another as human beings and how we actually empathize. She found that if I were to pull out my phone right now and put it on this table between us, that would automatically decrease the empathy of the conversation. And by empathy, I don't mean that we're unliking you. It means I'm looking to understand you and where you are. Can you think of anything more useful in our society today than trying to reach across the table and understand where someone else is?

**Demetri Kofinas:** 00:37:33 Yeah, so in Alone Together she actually gives a great scene when she's at the ZOO and her daughter sees a turtle and she makes the point like it would've been better if they just had a robot, like why do they even have the regular turtle there? And she was sort of confused by that. It might've been her daughter or a girl that was next to her. But her book, Alone Together, is very good for listeners. We had Jonathan Haidt on the program. We talked about-

**Rana Foroohar:** 00:37:54 He's great.

**Demetri Kofinas:** 00:37:54 He's also great. We talked about how social media is particularly harmful to girls. But this larger thing about gender is also problematic because we're at a period of time today where so many things are shifting, norms are shifting, or they're being questioned. And I just feel like people are losing their footing. And even to have a conversation like what you're describing, you have to stereotype boys. And there are a lot of people that are gonna tell you that's not okay.

**Rana Foroohar:** 00:38:19 Oh, I know. I know.

**Demetri Kofinas:** 00:38:20 So this is a big problem.

**Rana Foroohar:** 00:38:22 Well, this is why I want, my daughter is looking for colleges, to go to University of Chicago because it's like the last pretty safe space.

**Demetri Kofinas:** 00:38:29 That's also, by the way, you're a child of immigrants. I find that we, immigrant children or immigrants tend to be more normal when it comes to this stuff.

**Rana Foroohar:** 00:38:39 Yeah.

**Demetri Kofinas:** 00:38:40 They're less ... Just in the same way that Americans have a really screwed up relationship to food.

**Rana Foroohar:** 00:38:46 Yes, oh my gosh, yes.

**Demetri Kofinas:** 00:38:46 It's similar. It's similar. It's like ... But the larger kind of thing-

**Rana Foroohar:** 00:38:51 I just love that. I just love that you said that.

**Demetri Kofinas:** 00:38:52 That's why they have these fad diets. It's true because Americans have these fad diets, and I think the research that I've read has a lot to do with the fact that there is no food culture, kind of. Maybe in the South there's more of a food culture, but I don't know how good it is because there's an obesity epidemic in some of the Southern States.

**Rana Foroohar:** 00:39:06 Yeah. No, but I see what you're getting at. I mean, I was not hot housed. I think that there's two trends that are intersecting, let's say. It's funny, I actually wrote a piece that I thought was very sensible, but got a lot of hate mail DFT over a year ago on why supposedly liberal college campuses are so illiberal in terms of curbing, conservative folks that come and speak. I mean, okay, somebody doesn't like it, you write a letter, you speak out.

**Demetri Kofinas:** 00:39:31 Too bad. Grow up.

**Rana Foroohar:** 00:39:31 Yeah, right. So anyway, that got a lot of hate mail, but that trend of a certain kind of I would say illiberal liberalism coming to universities is actually intersecting with the first generation of digital natives that are in this like multifaceted kind of mirrored fun house world that is distorting and confusing and complicated and really, I mean, if you go back in history, it's not unprecedented.

**Rana Foroohar:** 00:40:03 Neil Ferguson, the historian, I actually quote his book, The Tower and the Square. He looks at disruptive technologies and their effect on society. And he talked a little bit in his book about the printing press and how, when you had Martin Luther, you had everybody being able to read the Bible in their own language, you got a lot of great things eventually, but first you had 150 years of religious wars all over Europe. So, we may be in that period right now.

**Demetri Kofinas:** 00:40:28 That's an interesting analogy because like the printing press, you were able to experience a dramatic shift in terms of your capacity to experience or learn independent of other people.

**Rana Foroohar:** 00:40:38 That's true.

**Demetri Kofinas:** 00:40:38 You were reading a text and now I remember why I brought up the episode we did, 27, Industrial Society and Its Future. By the way, for listeners, we also did an episode, I think it was 66, called How The Internet Happened, where we talked about a lot of the things that Rana mentioned, specifically with Google, but with all lots of other companies.

**Demetri Kofinas:** 00:40:58 But one of the things I mentioned in that episode, Industrial Society and Its Future, was how you could be sitting in a railway car and every single person in that car is experiencing a completely separate reality than anyone else. The simple example is that everyone has their own newspaper and each one of those newspapers is running its own advertisements. And there are no rules, and there has to be no relationship between one or the other.

**Demetri Kofinas:** 00:41:22 And I think, we all sort of understand that intellectually, I just don't think, and then right back to Shoshana, who has written, I think one of the best books of the current century, I have called it. When I read it, I was really blown away by it. I don't think that we understand really what that means, how profound that is.

**Rana Foroohar:** 00:41:40 Oh, it's huge. It is the post-fact world.

**Demetri Kofinas:** 00:41:44 It is the social schizophrenia.

**Rana Foroohar:** 00:41:45 Yeah. That's a great way to put it. I mean, the fact that you and I can search the same term and have different results depending on our patterns and our previous movements online is stunning. I mean, it creates, just as you say, completely different realities. I mean, sometimes I feel like a Luddite because I still read three papers in print every day, as well as a number of things online, but I'm pretty disturbed because I find even in comparison to some younger people that I know in the business, I feel like I'm better informed because I'm just spending less time and that I have a more balanced view.

**Rana Foroohar:** 00:42:25 I mean, that's one of the reasons I find myself writing these stories that I think are very normal, but then get these kind of far right or far left political reactions. We're all being pushed to the extreme in this schizophrenic world that you're talking about. It's fascinating. Actually, I recently wrote an article, there was some studies that were done on Republicans and Democrats and their perceptions of each other.

**Rana Foroohar:** 00:42:49 And of course, as you would imagine, both sides had more extreme views about the other side than was warranted. We're in these filter bubbles. I live in Brooklyn. I can't tell you how many dinner parties I go to where people think that Republicans are just raving lunatics. And I'm like, I grew up in rural Indiana in a cornfield. I know the Trump voter. They're my best friend from high school.

**Rana Foroohar:** 00:43:12 But what's interesting is, so why is this? They dug down and they found that the patterns really correlated with the amount, first of all of media consumption in general, but then of course of social media and kind of non-traditional forms of media. Even the New York Times read online was more polarizing than say an old-style network news program that's supposed to hit just to the middle.

**Rana Foroohar:** 00:43:37 So this dynamic is polarizing even what we think of as conventional news sources. And the only solution really is to interact with each other. They found that the people that have the least bias are the ones that actually spend the most time with people from the other side. So, it tended to be educated Republicans and interestingly, uneducated Democrats. Elite Democrats were all sitting at their dinner parties-

**Demetri Kofinas:** 00:44:03 That makes all the sense in the world.

**Rana Foroohar:** 00:44:05 ... in the park slope. And poor Republicans might be in talk radio filter bubble. So, talk about the need for empathy, real human communication, and we're losing it.

**Demetri Kofinas:** 00:44:16 Wow. I mean, I can't tell you how much that last point resonates. I've had a few falling outs where I've just stopped talking to some people and they're both ... Again, to your point, illiberal liberalism. It's not liberal.

**Rana Foroohar:** 00:44:29 No, it's not.

**Demetri Kofinas:** 00:44:31 It's not. It's not liberal. Liberal means that you are tolerant.

**Rana Foroohar:** 00:44:33 That's right.

**Demetri Kofinas:** 00:44:33 And they're intolerant.

**Rana Foroohar:** 00:44:34 That's right.

**Demetri Kofinas:** 00:44:34 I've gone to a lot of these parties where there's like a litmus test. It's not even a litmus test. They just assume that you're going to agree with their political points of view and if there's any divergence, there's like an awkward moment, like, how do I handle this? You might know I'm a person. I have lots of different views and just because I don't tow every line-

**Rana Foroohar:** 00:44:51 100%.

**Demetri Kofinas:** 00:44:51 ... you know, it doesn't make me.

**Rana Foroohar:** 00:44:52 It's so illiberal and it's also incredibly anti-intellectual, which is another thing to worry about.

**Demetri Kofinas:** 00:44:57 It is anti-intellectual. So, two things I want to mention to listeners again, we mentioned Jonathan Haidt, *The Righteous Mind* touches on all the things Rana is talking about.

**Rana Foroohar:** 00:45:06 Yes, great book.

**Demetri Kofinas:** 00:45:07 Absolutely. It helps explain so much about why people can dislike others so much whose views diverge from their own. Accountability is something I want to talk about though. Because you talked about it in terms of anti-intellectualism. I think this is a huge problem. I think you especially are in a unique place, but both of us to some degree are in a unique

position because we are forced to be accountable as a result of our profession. We can't just make stuff up.

- Demetri Kofinas:** 00:45:33 Actually, sure, I could make stuff up. I'm independent. I don't work for the Financial Times. I could start making things up and if I can monetize that audience, that works just fine. And lots of people actually do that. But actually, I would be embarrassed. So, accountability. People aren't accountable. And one of the things that drives me nuts and this I think is actually more of a phenomenon on the right.
- Demetri Kofinas:** 00:45:52 I don't have any numbers to back it up, it's anecdotal, but I feel like the conspiracy theories, there's a larger panoply of conspiracy theories on the right and a willingness simply to indulge with them. I'll give a great example of one in fact that I think you have every right to believe in a conspiracy, but it's a perfect example.
- Demetri Kofinas:** 00:46:10 So when Jeffrey Epstein ended up murdered, because you write about this in the book, you write it by your own particular reaction. My reaction was, wow, this is super suspicious, but I have no freaking idea what happened. I just heard something. It's perfectly possible the guy killed himself. And I saw a bunch of people just immediately going on social media and saying that he was murdered and everything else. And I'm like, maybe, but you have now lost all credibility.
- Demetri Kofinas:** 00:46:38 You have also biased herself. You're not positioning yourself to confirm that bias. You're not actually trying to get to the truth. This is a common problem. As the story goes on more and more, it looks like increasingly like there's some really bad shit happening. I don't know if you saw the ABC anchor, Robbie, what's her name? She's one of the anchors on good morning America. She was between takes, she was on set, her mic was hot and she was talking about how they had a ... She and her producers that put together a story and they were sitting on it for three years, ABC would not run it.
- Rana Foroohar:** 00:47:08 Oh, wow.
- Demetri Kofinas:** 00:47:08 They had Bill Clinton. They had Prince Andrew.
- Rana Foroohar:** 00:47:11 Wow.
- Demetri Kofinas:** 00:47:12 Yeah. Now I think that she later found out that ... Well, she knows she was probably being recorded because they record

between takes. She probably looked at it, one of the producers signed it off and put it out.

**Rana Foroohar:** 00:47:22

And let her out.

**Demetri Kofinas:** 00:47:22

That is probably a way to push the story. But in any case, my point is even something like Epstein, you guys shouldn't be talking out of your ass. If you don't know, don't say anything. And I think that lack of accountability is a problem because it allows for this flourishing of so many conspiracy theories, alternative theories. But that brings us just to another problem, which is actually a two-fold problem. One again, is the technology. It is that there is not one consensus hallucination of what reality is. The Matrix, again, there is no real reality. Where do we get, is there a turtle shell at the bottom of that?

**Demetri Kofinas:** 00:47:57

And the other point is that the official narrative, the state has lost credibility. And Donald Trump's a great example of this. Donald Trump pulled troops out of Syria. And what did the mainstream media do? Instead of focusing and saying yes, the way that he did this was horrible, but we also have to admit our foreign policy is a disaster. The Bush administration was a colossal disaster. Obama's foray into Libya was a disaster. We pushed all this stuff.

**Rana Foroohar:** 00:48:25

It's a really interesting question. You're making me think. This is slightly off topic, but I think maybe not. I was maybe a year ago getting ready to do a hit on CNN, the latest iteration in the US China trade issues, and right before Trump hadn't given a press conference in a while. But he got off a plane, decided he was going to talk. So, boom, my hits cancel, but I've still got my headset in, so I start listening.

**Rana Foroohar:** 00:48:50

I hadn't actually watched him on TV for a long period of time. He spoke for about 20 minutes. And I was blown away, not by the factuality of what he said, but the fact that he believed it himself. He was authentic to himself. And what I was thinking was, that's powerful to a viewer on television. And why does nobody write that? And so, I wrote this article saying this guy is a complete master at delivering messages and we need to pay attention to this and quit dissing him for getting this or that wrong.

**Rana Foroohar:** 00:49:26

Guess what? If you're a television viewer, you're watching emotional energy, you're watching body language, you're watching confidence, you're watching the animal instincts. I got kind of slammed for writing that piece.

**Demetri Kofinas:** 00:49:37 Really? By commentators?

**Rana Foroohar:** 00:49:39 Oh, a lot of liberal, yeah, commentators. I mean, I'm a card-carrying Democrat, but-

**Demetri Kofinas:** 00:49:42 They were terrified that you might be speaking the truth.

**Rana Foroohar:** 00:49:44 Well, it's just interesting. There's something about the current environment in which the lack of accountability, the polarization has somehow made it all the harder to tell the truth or to be anywhere in the middle. Being in the middle is really, really difficult these days, and it's exactly what we need.

**Demetri Kofinas:** 00:50:04 So a lot of thoughts. I had Andrew Marantz on the show also recently. He came out with a book called Online Extremists, Techno-Utopians, and the Hijacking of the American Conversation, anti-social. And during the episode, early on, very early on, he said, "This is what Donald Trump has done to us as a country." And I said to him, "Is that right? Has Donald Trump done this to us?" I think there is an echo chamber in sort of leftist progressive media.

**Rana Foroohar:** 00:50:29 Oh, yeah. That gives him too much credit. He's a symptom of a change that was happening.

**Demetri Kofinas:** 00:50:33 It also doesn't take accountability. Also, the media. This is another issue unfortunately. We have a lot of hams in the news.

**Rana Foroohar:** 00:50:41 Yes, that's true.

**Demetri Kofinas:** 00:50:42 You have a lot of people that are just narcissists and people hate them. Understandably, they hate them.

**Rana Foroohar:** 00:50:46 That's very true actually. You know, it's funny, I worried a little bit about being a journalist, writing a book that was very critical of big tech.

**Demetri Kofinas:** 00:50:54 You were very critical in the book.

**Rana Foroohar:** 00:50:56 I was, I was very critical.

**Demetri Kofinas:** 00:50:57 You were critical of also, you've named names, you did not pull punches.

**Rana Foroohar:** 00:51:01 I didn't pull punches.

**Demetri Kofinas:** 00:51:01 Sandberg is one of them where you were very hard on her. I think completely in pure fairness.

**Rana Foroohar:** 00:51:07 Well, I think that, I got to say, I think if she wasn't a woman, she'd be taking a lot more heat.

**Demetri Kofinas:** 00:51:12 100%.

**Rana Foroohar:** 00:51:12 A lot more heat. And I hear that there's a book coming out in the spring about her. I wonder what it's going to say. I mean-

**Demetri Kofinas:** 00:51:17 A critical book or-

**Rana Foroohar:** 00:51:19 I hear there's a critical book coming out in the spring.

**Demetri Kofinas:** 00:51:22 Of course, Shoshana calls her the typhoid Mary of surveillance capitalism.

**Rana Foroohar:** 00:51:25 Oh, she's like-

**Demetri Kofinas:** 00:51:27 It's a great name.

**Rana Foroohar:** 00:51:27 Actually, that's the best analogy. I mean, I get so angry when I hear Zuckerberg, but particularly Sandberg on the Hill month after month saying, "Okay, yes, we're so sorry about this latest mishap, but we couldn't have possibly imagined." What do you mean you couldn't have imagined? You perfected the AdSense model at Google and then you brought it and further tweaked it at Facebook. I mean, she's ground zero with all of this and anybody that was there nose. I mean, Roger McNamee writes about this in his book, Zucked.

**Demetri Kofinas:** 00:51:54 Zucked.

**Rana Foroohar:** 00:51:55 Yeah.

**Demetri Kofinas:** 00:51:55 With a big thumbs up.

**Rana Foroohar:** 00:51:58 Great title. Yes, exactly.

**Demetri Kofinas:** 00:51:59 They are so disconnected. It's like freakishly disconnected. I think you and your book mentioned Lloyd Blankfein quote of we're doing God's work.

**Rana Foroohar:** 00:52:08 Yeah.

**Demetri Kofinas:** 00:52:09 Well, I wasn't sure if he was joking. Was he?

**Rana Foroohar:** 00:52:10 He was totally joking.

**Demetri Kofinas:** 00:52:11 Was he joking?

**Rana Foroohar:** 00:52:12 He was joking. They're not joking. That's the thing. There was something in the papers recently about Sheryl standing up when somebody was attacking Mark or not attacking, but being critical in the media about Mark and saying, "How can you do this to this kid?" That kid was, first of all, like put aside the Freudian mommy dynamics there, but this kid is a billionaire that is running a public company that is unaccountable because of a loophole from leftover from 1996. I mean, that's insane. If I were a shareholder in that company, I would say that's a management, that's a governance crisis.

**Demetri Kofinas:** 00:52:51 That's the least of our worries. Let's just try talking about Tesla or SoftBank or something else. We will talk about those things. But just to drive this point home, your managing editor, Gillian Tett, wrote a piece in The FT today where she talked about how Facebook ... Well, she talked about a number of things, but Facebook has basically gone back on their promise to shepherd Social Science One, which should have been an academy industry project that promise to follow academics from across the world and give them access to private anonymized data from two billion Facebook users.

**Demetri Kofinas:** 00:53:23 But there was a quote that she made available in that article, and it was from a Facebook official, and she said, "Making user data available for research on a large scale in a way that protects individual privacy is just incredibly hard, maybe impossible." What bullshit. Of course, it's not impossible. And you guys promised that you were gonna make this available and you couldn't even do that. In other words, this brings us back to the point, Janeway's. And also, we did another episode, to plug my show, I've been plugging it all day.

**Rana Foroohar:** 00:53:51 As you should.

**Demetri Kofinas:** 00:53:52 Yes. Who else is going to plug in if not me?

**Rana Foroohar:** 00:53:54 That's right. That's right.

**Demetri Kofinas:** 00:53:54 I have my cousin from ... I'm Greek, as we said. All my family's in Greece and I have a ... My youngest cousin likes his own Facebook posts and I said, I go, "What are you doing liking your posts?" And he goes, "If I don't like them, who will?"

**Rana Foroohar:** 00:54:09 I love it. I love it. I'm very sympathetic to that.

**Demetri Kofinas:** 00:54:11 Yeah, yeah, yeah. Alexandros is his name. So that goes back to Safi Bahcall. We did an episode with Safi Bahcall on phase transitions, and we covered Vannevar Bush and the relationship between the government, the military, and academia. And we had a similar situation also with Bell Labs, and Facebook's not even willing to do that.

**Rana Foroohar:** 00:54:30 Yeah.

**Demetri Kofinas:** 00:54:30 Right?

**Rana Foroohar:** 00:54:31 Yeah. Well, I guess the question is why do we believe anything at this point that Facebook-

**Demetri Kofinas:** 00:54:36 We don't. And isn't that the problem?

**Rana Foroohar:** 00:54:37 Yeah, it's 100%. I mean, this company has just a leadership crisis of a kind that I don't really know how they're going to come out of it at this point. I mean, definitely Zuck or Sheryl are going to have to go, one if not both, and I think that that's probably going to happen by 2020.

**Demetri Kofinas:** 00:54:55 I want to try and transition effectively here.

**Rana Foroohar:** 00:54:58 Sure.

**Demetri Kofinas:** 00:54:58 There are a number of things I want to get to. The next thing that I want to try and connect here is to take it from what we've done so far, which is talk about big data as a primarily private sector phenomenon and now attached to it the state component. So already we know, for example, Amazon has strong ties to the surveillance state. Dwight D. Eisenhower was the first to talk about the military industrial complex. It was actually originally the military industrial congressional complex.

**Demetri Kofinas:** 00:55:27 It seems that we have something similar today with the surveillance economy. Google also, Niantic Labs. Shoshana talks about this at length. Again, a book I highly recommend listeners read. I also want to say this, I do highly recommend Rana's book. I put it right up at the top of my shelf along with Shoshana's book and a number of other, these other books-

**Rana Foroohar:** 00:55:49 Oh, I'm honored to be in that spot.

**Demetri Kofinas:** 00:55:49 ... that are doing a lot of very good work in this area. Let's talk a little bit about this. I don't know much about who these players are. I think it's very scary that Amazon has so many relationships that we don't understand when Jeff Bezos owns the Washington Post. This kind of brings us, again, it kind of, it's a way of talking about the unprecedented. These companies have become so big and so powerful so quickly and we were caught off guard. We don't really realize. In your research, can you flesh this out for me, what are we talking about here? How interconnected is the private sector of these big tech companies with the government?

**Rana Foroohar:** 00:56:27 Hugely interconnected. I mean, Eric Schmidt, the former CEO and Chairman of Google is sitting on kind of semi-government board that is essentially creating digital defense policy. I mean, he's running that. Amazon is the main purveyor for government procurement at this point. I mean, they do logistics for the CIA. They deliver documents. There's a lot of deep ties, but let me pull back for a minute, because there's also a fascinating juxtaposition here.

**Rana Foroohar:** 00:56:57 We spoke earlier about how in some ways the biggest tech platform firms are the apex of the multinational corporation. The neoliberal capital data can go anywhere. They're completely supranational. I mean, if you think about it, Google is still operating a research center in China. Now, would Raytheon be able to do that? I don't think so, but Google with its AI division is arguably more important for national security than any kind of old-line maker of military equipment.

**Rana Foroohar:** 00:57:27 Now, I don't know completely what the answers to these questions should be, but I can tell you one thing. This defense, the big tech companies from Facebook to Google have given that we can't be touched, we can't be regulated, we can't be liable for any of the same kind of regulation as other companies because we're your national champions and the battle against China is beyond nationalistic. It's so cynical. These are companies-

**Demetri Kofinas:** 00:57:54 That's Zuckerberg's like go-to.

**Rana Foroohar:** 00:57:55 That's Zuck ... I mean, one of the best moments-

**Demetri Kofinas:** 00:57:57 If you regulate us, it's going to put our national security at risk.

**Rana Foroohar:** 00:57:59 China is going to take over. These companies would love to be in China. I'll tell you, the only reason Amazon is now playing the

China card is that it can't get in because of Alibaba. So, they've decided to go the other direction and say, "We want to own everything to do with government procurement." What I'm concerned about is two things. First of all, it's a false narrative that regulation will somehow penalize America in the innovation battle with any big country from China to the European Union.

- Rana Foroohar:** 00:58:30 Our advantage has always been decentralization. Our advantage has been allowing many, many different companies to grow and flourish. Unfortunately, what the statistics are showing is that for the last 20 years, as big tech has gotten bigger and bigger and bigger, the number of innovators has gone down by a number of measures, entrepreneurial zeal per capita, the Kauffman Foundation has done really great research on this, but basically there's black holes now because these firms will come in and buy up anybody that they think is going to compete with them. There's a lot of research to show, Stanford research shows that innovation tends to slow down dramatically after a company goes public for obvious reasons. Smaller companies-
- Demetri Kofinas:** 00:59:07 Look at Apple. Look at Apple.
- Rana Foroohar:** 00:59:08 Look at Apple. It hasn't had-
- Demetri Kofinas:** 00:59:10 It's a perfect example.
- Rana Foroohar:** 00:59:10 Totally.
- Demetri Kofinas:** 00:59:11 What do they keep putting out? Higher resolutions screens, fancier watches.
- Rana Foroohar:** 00:59:13 Credit cards.
- Demetri Kofinas:** 00:59:14 It's a fashion company.
- Rana Foroohar:** 00:59:15 Exactly. Or a financial company.
- Demetri Kofinas:** 00:59:18 It's a consumer electronics company. It's not doing anything interesting anymore.
- Rana Foroohar:** 00:59:20 So this is a false narrative that the Schmidt's and Sandburg's and Zuckerberg's are putting forward. That's point number one. Point number two is that we are headed, like it or not, to a splinternet. I think that the US, Europe and China and some of the emerging markets that China is going to pull into its orbit via the one belt, one road infrastructure program, I think we are

going in fundamentally different directions in terms of how the digital economy is going to be regulated.

- Rana Foroohar:** 00:59:47 Now, if we were smart on this, as in all things to do with trade, we would be really teaming up with Europe right now to say, "All right, we are a liberal democracy, I hope still, let's talk to other people with this system and find out what the rules of the road should be. Let's come to some standards that we can both live with." Instead, we are embroiled in this false narrative put forward by the companies themselves, who by the way, are now the biggest lobbying group in Washington. They have bought out so many regulators, so many academics who write about this topic-
- Demetri Kofinas:** 01:00:20 Absolutely.
- Rana Foroohar:** 01:00:20 ... who do the amicus briefs that are being looked at by the courts in small print. You find out that they're Google consultants.
- Demetri Kofinas:** 01:00:26 Absolutely.
- Rana Foroohar:** 01:00:26 Unbelievable.
- Demetri Kofinas:** 01:00:28 Absolutely. We've talked about this as well on the program. We've done a number of episodes on China. There's also something else, which is, there's a historical, this again is part of the problem people don't read. I'm 100% with you. People should stay the hell away from news and try and read it only-
- Rana Foroohar:** 01:00:42 Yes.
- Demetri Kofinas:** 01:00:42 ... in a controlled manner.
- Rana Foroohar:** 01:00:43 Yes.
- Demetri Kofinas:** 01:00:44 And not just like read whatever comes on their social media feed 100%.
- Rana Foroohar:** 01:00:47 Nassim Taleb, I don't know if you've ever had on.
- Demetri Kofinas:** 01:00:49 No, I would love to have the Nassim. I've actually reached out to him. He's a difficult person to get ahold of.
- Rana Foroohar:** 01:00:53 He is. He's not on email very much too. He walks the walk.
- Demetri Kofinas:** 01:00:56 I know. I've been trying to get him on for years.

**Rana Foroohar:** 01:00:58 Well, I interviewed him once way back when, when his last book was coming out and he told me he didn't do it any high speed data, any high-speed media at all, that he read basically only books, and he had a stack of amazing books on his [inaudible 01:01:11].

**Demetri Kofinas:** 01:01:10 I actually have a thought about that as well, quick interjection on it, and I don't want to get lost on the point, but I actually think that physical books will actually command a high resale value in the future because I think people, or maybe not a high resale value, but they will come back into demand because I think-

**Rana Foroohar:** 01:01:26 Interesting.

**Demetri Kofinas:** 01:01:26 ... that people want to wait to read without having their thoughts surveilled.

**Rana Foroohar:** 01:01:30 Oh God, yes.

**Demetri Kofinas:** 01:01:30 I think that'll be a powerful thing. I wanted to kind of make a point before I move us to the overtime Rana, and a couple of points. One is ... Both of them steeped in history. One is that we've seen this before. We've seen that when a technology becomes mature, there is this phase of consolidation, and we saw the regulation of heavy industry and the banking sector and everything else in the late 1800s, early 1900s.

**Demetri Kofinas:** 01:01:55 Certainly the banking regulation didn't go as well as we would have liked. I think it was done much better after World War II, but regardless, something similar has to happen again and will happen. I'll also say something else, which touches on your point about China and these selfish companies that operate for their own private benefit. Fine, what's the way they've been built. That's the culture. But this idea that I should be more afraid of Xi Jinping than of Mark Zuckerberg.

**Rana Foroohar:** 01:02:28 Right.

**Demetri Kofinas:** 01:02:28 And it also, if you've read history, you know IG Farben, you know about IBM, IBM's role in supporting the Nazi killing machine with their punch cards, the DuPont family, the Rockefellers, the big banks supported Mussolini. They supported Francoist Spain. They supported the Nazis. They funded them all up until the trading with the Enemy Act. They continued to have relationships, I think IBM had relationships right through the end of the war with the Nazis.

**Rana Foroohar:** 01:02:57 This is such an important point. And you know what, you're calling to mind is the fact that Facebook hired this nefarious PR firm to go after George Soros. Mark Zuckerberg and Sheryl Sandberg are Jewish. This firm ended up using antisemitism to try and smear Soros. I mean, there is no reason why we should think a large multinational corporation run by unelected people is any better than any other kind of large state monopoly, namely China. I mean, I actually think of big tech and China as being kind of similar in some ways.

**Demetri Kofinas:** 01:03:33 Well, I mean, again, to bring it back to the Nazis. The Nazi regime, the fascist regime, and Mussolini's Italy also, of course, Mussolini pioneered this. The relationship between the public and private sectors was instrumental in enabling totalitarianism. To bring it back to George Soros, one of the other things that you quoted in his speech from Davos, he said that he feared, "alliances between authoritarian states and these large data rich monopolies that would bring together nascent systems of corporate surveillance and an already developed system of state sponsored surveillance."

**Demetri Kofinas:** 01:04:05 Which is one of the things I want to talk to you in the overtime. I also do want to talk to you about, you have such a deep knowledge of financial markets. You've covered it for years and years. I want to talk about the macro picture, touch on it to the extent that we can, and I also do want to talk about SoftBank, AliBaba, WeWork, Uber. Again, try to mix it in as much as we can.

**Demetri Kofinas:** 01:04:25 For regular listeners, you know that the drill. If you're new to the show or you don't support us yet, you can head over to [Patreon.com/HiddenForces](https://patreon.com/HiddenForces) and subscribe to our audio file, autodidact or super nerd tiers and get access to this week's overtime where I'm going to continue our conversation with Rana, as well as access to a transcript of this week's episode, as well as to my beautiful multi-page 12-page rundown today full of pictures, including a Frankenstein and Mary Shelley's-

**Rana Foroohar:** 01:04:55 Oh, that's so great. I love that we can download all that.

**Demetri Kofinas:** 01:04:58 Yeah. It's available to our subscribers and those who support us on Patreon. Rana, stick around, we're gonna continue this on the overtime.

**Rana Foroohar:** 01:05:06 Awesome.

**Demetri Kofinas:** 01:05:07 Today's episode of Hidden Forces was recorded at Creative Media Design Studio in New York city. For more information about this week's episode, or if you want easy access to related programming, visit our website at [HiddenForces.io](http://HiddenForces.io), and subscribe to our free email list. If you want access to overtime segments, episode transcripts, and show rundowns full of links and detailed information related to each and every episode, check out our premium subscription available through the Hidden Forces website or through our Patreon page at [Patreon.com/HiddenForces](https://Patreon.com/HiddenForces).

**Demetri Kofinas:** 01:05:46 Today's episode was produced by me and edited by Stylianos Nicolaou. For more episodes, you can check out our website at [HiddenForces.io](http://HiddenForces.io). Join the conversation at Facebook, Twitter, and Instagram @HiddenForcesPod, or send me an email at [dk@hiddenforces.io](mailto:dk@hiddenforces.io). As always, thanks for listening. We'll see you next week.