Center for Humane Technology | Your Undivided Attention Podcast
Episode 49: The Dark Side Of Decentralization

Tristan Harris: Is decentralization inherently a good thing? It's a big trend now. People are talking about Web 3 or having decentralized social media platforms where you own your own data, decentralized cryptocurrencies like Bitcoin, or 3D printing, where people can fabricate anything they want at home. But if the world lived on Bitcoin, then you can no longer sanction countries like Russia when they invade sovereign nations. And if you decentralize 3D printing, then anyone can print their own weapons at home. Decentralization takes on new meaning when we're talking about decentralizing, the capacity for catastrophic destruction.

Tristan Harris: I'm just Tristan Harris and this is Your Undivided Attention, the podcast from the Center for Humane Technology. Today on the show, we're going to explore the decentralization of dangerous technologies throughout history and how social media might be a new decentralized weapon. Here to guide us in that exploration is Audrey Kurth Cronin, one of the world's leading experts on security and terrorism. Audrey is a distinguished Professor of International Security at American University and the author of several books. Most recently, Power to the People: How Open Technological Innovation is Arming Tomorrow's Terrorists.

Tristan Harris: Audrey Kurth Cronin, thank you so much for coming on Your Undivided Attention.

Audrey Kurth Cronin: It's an honor to be here, Tristan.

Tristan Harris: So you have written this terrific book called Power to the People, which is kind of a history of how new technology got distributed into the hands of more and more people and lessons that we can draw from history, where we might have created technologies or democratized technologies that we might have thought were beneficial or benevolent and later we found out might be dangerous. As we get into that, because I think our listeners are obviously aware of how we talk about social media and its impacts on society, you're going to provide kind of a much broader view. Just wanted to ask you, as a starting point, what inspired you to write this book?

Audrey Kurth Cronin: Well, Tristan, I wanted to write about how there's a decentralization of power that is not just a matter of the heavy focus on counter-terrorism that we've had in the United States for the last 20 years, but is also a broader phenomenon that reflects developments in technology. Not just social media, but also developments in other digitally enabled technologies. So what I was trying to do was trace how individuals and small groups have used new technologies that were intended for good, how they've diffused, and then how oftentimes they're used for very negative reasons in very dangerous ways. Violent ways. I wanted to trace that process in a much more rigorous way rather than just assuming that everybody understands exactly how we ended up with terrorists, insurgents, and other types of violent, small groups.

Audrey Kurth Cronin: The other thing I wanted to do was to provide an alternative to the huge focus on states and how they're using various types of technology, especially AI, but everything from drones also to the communication suites, the surveillance suites, that are becoming so attractive to autocracies. There's such a focus on states that I think this centralization of power is never put in juxtaposition to the decentralization of power that's also going on and I think the two things are intersecting. So I was trying to focus on the decentralization of power to make a bigger point about where we are overall in the world.

Tristan Harris: I think a huge parallel between your work and ours is that it can often sound really depressing. We might talk about the history of weapons or biotechnology or terrorism or synthetic biology. I mean, this can become a very dark conversation. So just to maybe say upfront that, however dark this conversation may get, I think we both share a deep motivation for getting to a positive future and figuring out what are the criteria it would take to get there.

Audrey Kurth Cronin: Yes. I also think that there are some practical things that we can do. When we fully understand the dangers, we can mitigate them.

Tristan Harris: Right. So why don't we do the fun thing and start talking about some of those dangers, but maybe do so through a lens of history. In your book, Power to the People, you go through the history of new technologies as they emerged and how we thought about them. I think the trend that you're tracking in throughout your book is a history of where individual people, through tinkering... Because I think Nobel's story is actually really fascinating. I'd love for you to talk a little bit more about it because there's a link between the invention of dynamite and later the Nobel Peace Prize. But I think that just the fascinating aspects of how he had to come up with this technology that, at the time, he thought was going to be incredibly beneficial and I'd love for people to kind of situate themselves there. Because I think we find ourselves in a similar situation today, where we think of social media as totally beneficial, we have thought of it as a totally beneficial thing, and I think later we can discover some parallels in how things went dangerous.

Audrey Kurth Cronin: Exactly. So Alfred Nobel was trying to develop something that would improve upon the disadvantages of gunpowder. Before the development of dynamite, you had to use gunpowder to build any kind of infrastructure. Like to get through a mountain, you would use little plugs of gun powder that you would stick into a hole and they might move the work ahead by six inches a day. And people died. All those workers who... There were accidents. The gun powder would come blowing up in their faces. So therefore, you had to have people who were using their life energy in order to try to move those huge boulders and those rocks. Afterwards, you had to use pick axes. I mean, I don't want to belabor the point, but it was an extremely hard way to build anything.

Audrey Kurth Cronin: Alfred Nobel came from a family that had just declared bankruptcy at the time that he was born, so he was born into desperate poverty, living in Sweden. His father also worked for the Russian czar, building sea mines and various other kinds of military weaponry. Through his hard work in their backyard shed, Nobel figured out a way to put nitroglycerin, this unstable chemical, into a stabilizing medium. It caused the nitroglycerin to be able to be stable enough that you could stick it in a little tube and then put a fuse on it and have this powerful high explosive that could now pulverize rocks.

Tristan Harris: And that's where we get the iconic image of dynamite. These tubes with the little fuse at the end. Everyone's familiar with that and seeing the Wile E. Coyote. You know, the ways that this was depicted.

Audrey Kurth Cronin: The reason why Alfred Nobel endowed the Peace Prize was that he had this horrifying realization that what he had invented was potentially very destabilizing for the world. Now, he died before the first world war broke out, but his very close friend was the most prominent Austrian peace activist, Countess Bertha von Suttner. He tried to support her work and then, ultimately, he left all this money to endow the Nobel prizes and particularly the Nobel Peace Prize. And that's not by accident. I think he had a deep sense of guilt.

Tristan Harris: That's actually fascinating. What do you think had him wake up to that? And that's before he actually saw the catastrophic use in two major world wars. There's actually this thing... this is paralleled in the modern day tech industry... where founders receive this story of themselves. That they see all these people benefiting. They have this enormous scale. Wealth accrues to them. They're the guy or the girl that invented some powerful world-changing technology. That can't not go to your head. There's a positive sense of affirmation. And generally speaking, when there's negative consequences, people who are in that position tend to want to suppress that or look away from that. Because of course going to be some negative consequences. That's unavoidable and we can say that openly. But then there's this really interesting thing where you're speaking about a kind of a reckoning. A moment of waking up to the downsides being really catastrophic. Do you know what was his process?

Audrey Kurth Cronin: He saw large numbers of casualties, many of whom were innocent civilians, particularly as the decades went by and leaders had more and more protection. And he began to feel deep angst about it. He didn't talk about it publicly, but I believe that is why he endowed the Nobel prizes. He certainly wrote about it. Because he couldn't face the horror of the downsides of his own invention. He thought perhaps his factories would convince people of how horrible a future war would be and that would be a deterrent to ever having that kind of a war. But Alfred Nobel watched all of that unfold and he was horrified.

Tristan Harris: I think people just don't realize just how accessible dynamite was and just how much even the manufacturers of dynamite were clamoring to be regulated so that we could get out of this. You write in your book, "The technological enthusiasm and hobbyism of today is strikingly similar to at the turn of the 19th century, and it has led a comparable degree of willful blindness about the risks. In 1903, the managers of a big New York dynamite manufacturing company begged publicly to The New York Times for new laws to abide by. They said, 'It's one of the easiest things in the world to buy dynamite. Enough in this city to blow up half of lower Broadway. A total stranger could go into a dynamite powder company in the city and by all the dynamite he had money to pay for and not a question would be asked as to what use the explosives was to be put. I have often talked to other powder men about selling explosives to everyone willing to buy, whether he'd be able to give a satisfactory account of himself or not. But the law is at fault, not the powder men. Give us a law, which we will all must obey and we shall be only too willing to follow it.'"

Tristan Harris: In reading those words, I often think that this is what I wish that heads of TikTok and Twitter and Facebook would just say. Because they are handing out memetic dynamite. They are handing out division dynamite, dynamite that basically divides society daily, and they should be clamoring to be regulated so that we can all change these business models.

Audrey Kurth Cronin: That's exactly right. In fact, the people that were most worried about it were those who... They called them the powder men. The people who actually sold dynamite in their little shops. Because they were afraid that they would be responsible for helping to lead to the deaths of a lot of innocent. I see those parallels with what you're saying about today's major tech companies. Because with that kind of power, you also have tremendous responsibility and I don't see much of that responsibility being shouldered.

Tristan Harris: Completely. In this case, the purpose of that [Technolostan 00:10:54], the big five tech companies grouped together as one giant super nation state, is to maximize shareholder value. So much of our current dangerous weapons are often tied with that narrative. With nuclear weapons, where they're obviously so horrible and horrific that we would never use them. It really makes me wonder. Can you imagine a world where Zuckerberg endowed the Zuckerberg Prize and the Zuckerberg Prize worked to basically give away 99% of his wealth, which if I'm not mistaken, he's committed to doing anyway, but do that immediately to kind of rebuild the social fabric that has been grossly eroded through the inadvertent consequence of the business models of the thing that he created.

Audrey Kurth Cronin: I think that a Zuckerberg or any of the leaders of our Technolostan... That's new to me, I like that. Any of those leaders. I still have some hope that they're going to find some conscience.

Tristan Harris: I want to zoom out for a moment. Because if we do broad situation awareness of where we are in the year 2022, we have an acceleration of these new capacities, these technological capacities, we never had before. I can buy drones from Amazon. I can download swarming algorithms off of GitHub and use those drones in various ways. I can combine those drones with facial recognition. I mean, you can combine all these technologies in ways that we haven't even thought about. And the deployment of them, the existence of them... That's kind of what I think brings us to this conversation today is a shared recognition that technology is moving faster than our society at appraising of them. And as we invent all these new technologies and we do it at increasing speed and anyone can combine them... I think the premise of your book is this kind of question. How do we manage this accelerating deployment of technologies who may not, again, just like dynamite, look obviously harmful or dangerous, but can certainly and are very obviously able to be repurposed to be very dangerous. That is the meta problem.

Tristan Harris: We've actually described this in our work as the situation we find ourselves in is kind of like a bowling alley and we've got these two gutters on both sides. On one side of the gutter are what we call catastrophes. Catastrophes are the decentralized capacity for anyone to cause exponential damage. By the way, a meme could be a catastrophe. The fact that on TikTok someone could post, as they did recently, and suggest that December 17th will be National Shoot Up Your School Day.

Tristan Harris: So let's say I'm Russia and I want to spread that meme. That this could be National Shoot Up Your School Day. It's just a rumor, but I can post that on TikTok and it has a certain enragement, incitement, inflammatory, capacity that all these kids are going to say, "Is this real? Should I not go to school?" And this is exactly what happened. My understanding is that actually no shooting did happen, but if I'm Russia, I win in both cases. Either a shooting does happen and I've created stochastic terrorism or nothing happens and I've still created mass panic.

Tristan Harris: So to make this example concrete in the two gutters analogy, the ability for smaller and smaller actors to deploy an exponential consequence, whether that is millions and millions of people being aware of National Shoot Up Your School Day even though that doesn't exist or the ability for anyone to build a drone and to point it at sensitive targets, for anybody to build viruses in their basement... These are all catastrophes. So we don't want that. That's one of the bad scenarios we don't want to happen.

Tristan Harris: On the other gutter, we have dystopias. Dystopias are surveillance states that are basically monitoring the use of all of these dangerous technologies. Because, of course, you're going to need to have regulations. You're going to need to say,

"Well, maybe we should make sure people don't post these rumors about National Shoot Up Your School Day or we should make sure that we regulate who can get a gene compiler on their desktop computer or who can access CRISPR or maybe we should regulate who can buy drones." But again, that leaves you more towards an authoritarian, draconian, dystopic society, where everything is monitored and surveilled and that's more of the China model.

Tristan Harris: So each of those gutters are getting bigger, I think it's important to say. On the catastrophe side, we have more and more technologies that make up decentralized capacities to create a catastrophe or chaos and, on the other side, governments that are able to, with surveillance at scale, take up and monitor more and more space. And so when we've articulated on this podcast in the past that we're looking to find this thin little runway in the bowling alley of what is a digital open society that recognizes the acceleration of these decentralized tech capacities that are being built into society and put into more and more hands and, on the other side, making sure we don't create a kind of closed or authoritarian or surveillance state. And that that is one of the master problem statements that we all have to answer. I know that what brings you and I both to this conversation is... not that we are naively optimistic, but the premise of it is we got to find the answer to that question. So just curious to first lay that out there and let you respond to it and then we can dig into where relevant stories from your book that might be able to shed some light.

Audrey Kurth Cronin: Well, I completely agree with that way of laying out the two gutters. One of the things I was very worried about in writing this book and actually before I began to write it... I don't believe in being an alarmist. I've been studying counter-terrorism for decades and I've always tried to find the way out or the solution to the problem or the more strategic perspective. Yet by talking about the chaotic side, the gutter that is all about how these technologies are used and clusters of technologies in particular... So how do you talk about that without having everybody go immediately to the other gutter, which is about putting in place a surveillance society. I don't want to be justifying here moving from one gutter to the other gutter. That's not what the story is. It is about how to find the middle way. The Romans would call it the via media. This is not a new problem. We need to find that moderation. That new way of governing. There's this intersection between mobilization through social media and other forms of communication, increased reach by which we can talk about quadcopters and other types of projections of force, and then finally systems integration where you can use AI and other kinds of tools to give that kind of power, unprecedented power, to small groups.

Tristan Harris: Let's actually dig into that. Because I think that might sound like abstract topics for folks. I'd love to just break down exactly what you mean. So could you explain what you mean by mobilization and reach and integration?

Audrey Kurth Cronin: Well, mobilization was one of the things that caused the nation state to come into being. I mean, you had, with the French revolution, the levee en masse, which was basically conscription, which enabled Napoleon's armies to develop huge numbers of people on the battlefield. That was the beginning of conscription and the extremely powerful numbers that were in the professional armies that went to war with each other in the first and second world war. So mobilization was at the very heart of power for states. What I'm arguing now is that mobilization is no longer under the control of states or armies. It's now under control of individuals or sometimes nefarious actors. Sometimes we can mobilize for good things. If it's a cause that you support, you're bringing attention to abuse of power, or police killings. There are lots of ways that mobilization is bringing positive effects, but it's also bringing people to the battlefield.

Audrey Kurth Cronin: Not just ISIS. ISIS is the example that everyone knows best. That was the most dramatic example. But we also see mobilization of people to carry out violence individually. You have the Christchurch shootings, where that perpetrator was mobilized by what he had read on the internet and then he used live streaming to mobilize others to follow him. You can see a contagion effect of many other people copying what people who have sent their messages out do. We have an increase in violence, an increase in anger, an increase in the ideas that oftentimes lead to that violence. That's what I mean by mobilization. And social media of course is probably the key factor in all of that.

Tristan Harris: So what I hear you saying is I could have a state that conscripts an army and I can move 100000 people from this to this territory and I'm Napoleon. That's the previous era. New era is I'm an ISIS terrorist in Afghanistan or Iraq and I broadcast on Telegram channels and I can get 5000 people to move from Europe to Syria or something like that through propaganda. That's that first piece of mobilization. So then the second piece of reach?

Audrey Kurth Cronin: Reach is about the ability to project lethal force. So you can attach an explosive to a quadcopter and send it over into the governor's compound in Kunduz, in Afghanistan, which happened about a year and a half ago. You can use explosives to have kind of a leveraged effect. Remember that having an effect is not just having large numbers of people on a battlefield. It's also giving power to people who can have a political effect that's very targeted and then they spread that political effect through the first factor, which is mobilization. So the ability to use reach through facial recognition technology, through algorithms, through AI, through capabilities that might only have been able to be used by an army, that's what we're seeing. And we're still fairly early in that.

Tristan Harris: That's the key thing that I got when reading this part of your book, which is... I mean, obviously an army could move projectiles from one part or have a missile

that can shoot thousands of kilometers or something like that, but increasingly we're decentralizing those capacities. And so more and more people have access to be able to, with a drone, move something through time and space. And then the last thing you were talking about was autonomy and integration with direction/

Audrey Kurth Cronin: Yes. Well, as is well known, it's very difficult to integrate all of these technologies. It used to be that you had to have a national command center in order to do that, but now because of the ability to download algorithms, the ability to integrate through AI techniques, you can actually have very complicated systems that are working well with each other. You don't have to rely on advanced, highly trained human beings and the strong structures that states had before now. Now, you've got the Houthis in Yemen and you've got lots of non-state groups that are increasingly powerful. It's the leverage between these two. It's not that they can go toe to toe with the US military, but they don't have to. What's better is to operate under the radar, below the level of physical, armed response, and have a political impact that hollows things out from within.

Tristan Harris: Yeah, completely. I mean, 9/11 would've could have killed what 3000 something people on that day, but then the use of that event to become propaganda to recruit many more people and to spread that and market target that into other groups that can be radicalized and recruit more people into bin Laden's al-Qaeda and ISIS networks and so on. So it's not just the number of people that are killed. It's the ability to enact power. To use asymmetries of power in a new way.

Tristan Harris: Just to provide another parallel to the framing you've brought up, we've had a previous guest on our podcast, Daniel Schmachtenberger, who's talked about the situation that we're in is that we have the power of gods, but unless we have the love, prudence, and wisdom of gods, that power that we're wielding is dangerous. And nowhere is it written that you can democratize these kinds of godlike powers into everyone's hands and have our species, not self-terminate in some way. I say this, again, not to be an alarmist, but just to frame. We have to have some vision about how do we wield these more decentralized, catastrophic capacities?

Tristan Harris: What I loved about your story with dynamite in your book is we actually have an example of something that was seen as initially positive, beneficial, and then we slowly realized it was dangerous and then we actually had a response. We had a regulatory response. We had a media response. I just wanted to first frame all that for you and see if you can react to it and then maybe we can talk about, I think, the optimistic case of how did we take this thing that was everywhere... dynamite was available for everyone... and then get to a world where we started wielding it with the love, prudence, and wisdom of gods. Maybe not all the way, but certainly better than it was before.

Audrey Kurth Cronin: I love that phrase. The love, prudence, and wisdom of gods. Yes. Well, the response to dynamite does tell us a little bit about where we could find a little bit of that wisdom. Because the Europeans relied heavily on regulation, as Europeans are more tending to do now, and they passed various laws through all the capitals in Europe and ultimately they tamped down the wave of dynamitings that had been very, very violent in the 19th century and, by the time the turn of the century came, things had gotten better in Europe.

Audrey Kurth Cronin: But in the United States, we were way behind. In our usual way, we focused not our regulation, but there was a tendency to pass laws against immigrants. Because the belief was that it must be the immigrants who are causing all the bad things to happen even though the truth of the matter was that those people who were carrying out terrorist attacks actually were living in the United States and were long-term residents or even citizens of the United States when they did that. So we started with immigration laws and then major police crackdowns. Ultimately, one of the key elements in the answer was that the railroad stepped in because they got tired of having their railroad cars blow up because there was no regulation of the dynamite that was being transported by them.

Tristan Harris: This is actually so fascinating as a parallel because what I hear you saying is, okay, so we've got dynamite and we realize it's a problem. Actually, Europe realizes it's a problem first. This may be paralleling some of our history. And then in the US, we kind of misdiagnose the problem and we turn it into xenophobia when in fact it was more around how do we regulate the technology? And then what I just heard you say is how business stepped in because... well, the business of railroads, which were the infrastructure on top of which dynamite was used that were causing too many accidents. I just want to anchor that for listeners because I think, if you just make that comparison, it's possible that we could be living in a moment just like that, where we actually need some new institutions, but we don't have them yet. Dynamite is a good example of having made a transition in which we do what we needed to do.

Audrey Kurth Cronin: Yes. I believe that very strongly. I used to work on Capitol Hill and I'm accustomed to advising members of Congress. One of the things that I hear from Silicon Valley friends and just people who come and testify before Congress is a lot of frustration about the level of ignorance. Some might even say they're concerned it's incompetence. Inability to be able to regulate technology companies in any effective way. I understand where that frustration comes for many different reasons. Some people point to the generational differences. Some people point to political interests. There are lots and lots of reasons, but they definitely don't understand technology well enough. But at the same time, those who understand the technology have some responsibility to teach them, to mitigate the downsides of their own technologies, to build in protections at

the development phase of new technologies. I don't see Congress and our tech companies as being at odds. If we have any hope in the future of building effective government institutions, we need to be able to have both of them being honest about what the downsides are and being smart about them.

Tristan Harris: Right now, I would say Zuckerberg has a fiduciary duty to... Whenever there is research showing that, let's say, they caused genocides in certain countries or something like that, it'd be much easier for them to shut down those research departments and not look. Also when they're competing game theoretically against other platforms and, if they're the platform that tries to play nice and do research about where their platforms might be causing polarization or genocide or something like that, they're just going to lose to the platforms that don't do that. And so this is a classic multi-polar trap tragedy of the common situation where government... We need some third actor to basically step in and create a requirement, a binding by law, that everyone has to do that.

Tristan Harris: We could easily imagine a world in which the Apple and Google Play and app stores just basically require that companies, that apps that are of a certain size, that basically become the primary communication or information bases for democracy, have to do that research. I mean, that's doing it through the app store model. You could obviously do it through government as well. There could be an externalities fund. That, actually, when you start, you have to allocate a portion of your stock essentially to a forecasting of possible ways that things could go wrong and you have to actually allocate resources into that. And also a cleanup fund. Knowing there's going to be problems and you actually have to allocate a portion of your stock to that.

Tristan Harris: So that now there's a skin in the game process. There's an actual stakeholder that's in your cap table as a company that is resources that are devoted to anticipating negative consequences and also ameliorating them when they show up. As opposed to, if I did that, I'd be increasing my cost as a company and, if I'm Facebook and I do that and TikTok doesn't do that, then I'm just losing. These are the kinds of things that could happen that are not about speech, but about design choices that are unsafe or safe.

Audrey Kurth Cronin: Yes. I think that we have to get to the point where tech companies understand their responsibilities and their dedication to the public interest becomes more important than their dedication to profit. I hate to say that because it sounds very idealistic, but I'm not sure how else we can get out of this situation.

Tristan Harris: In your book, you actually do talk about what happened with the end of dynamitings in the US and what coincided with that. I think maybe one thing we haven't really talked about is the relationship between political and social upheaval and political discontent, social discontents, and the relationship between that and the use of these technologies in more dangerous ways.

Because I think... not to be more dystopic, but we're in a similar moment where there's a lot of political and social upheaval. There's, in that time, in the early industrial era, exploitation of a labor class and major transition from agrarian to industrial societies. In that transition, there's more social upheaval. That social upheaval can translate into uses of some of those technologies. I think that might have a parallel lesson for where we are today. Do you want to speak to any of that?

Audrey Kurth Cronin: Yes, it does. There was a tremendous amount of worker discontent. There was a crushing of the unions, particularly in the United States. There was huge increase in inequality towards the end of the 19th century. There was a huge impact upon individual lives, where they had to move into factories and then were highly abused or overworked. There are parallels to how our workers are having to adjust to the impact of digital technologies today and there's this opportunity to use a lot of accessible technologies in the same way that there was the opportunity to use dynamite. But ultimately you had, particularly in the United States, you had FDR come in and... First, you had to go through the depression of course. Hopefully we don't have one of those coming. But ultimately you had a rebalancing of what the society valued and also what it looked like and how stable it could be domestically and you had the civil rights era. These things followed on from the abuses of the latter part of the 19th century. I think we may be going through a similar period, but my hope would be that we would get to you some of the solutions without some of the violence that occurred then.

Tristan Harris: That's my hope too. In that spirit, we're going to take a quick interlude with our executive producer, Stephanie Lepp and then go back to my conversation with Audrey.

Tristan Harris: Hey, Stephanie.

Stephanie Lepp: Hi, Tristan. So you have been talking with Audrey about this phenomenon of the decentralization of the capacity for catastrophic destruction. And so first and foremost, just to make it super concrete for our listeners, what kinds of, let's say, tools are becoming available to civilians that can be used for catastrophic destruction?

Tristan Harris: Yeah. Just to ground that, they don't all have to be catastrophic in and of themselves but that their use could lead to catastrophe.

Tristan Harris: Like if you think about TikTok, you don't think about a meme going viral in less than an hour to a hundred million people... That doesn't sound like something that's catastrophic or dangerous, but if I'm Russia and I want to, the day before I invade Ukraine, create a meme that goes viral saying that nuclear weapons are about to go off in your hometown... and of course that's going to go viral... I now

have the perfect means to do that. Whether it's amplifying the trucker convoy in Western countries at the time that I'm invading Ukraine or I want to amplify the National Shooter Day meme, it's never been easier to do that. So that's a kind of contagious communications. That's a new capacity that's in anyone's hands.

Tristan Harris: Another example is hacking tools. It used to be that you had to be an expert in cyber hacking to hack into infrastructure, but thanks to the fact that the NSA's hacking tools were leaked, now many different, so just hackers in their basement, can go online into online forums and download these hacking tools. It used to be really hard to build a drone. I mean, think about the early 2000s when the US military had these drone weapons that it could use. Now, anyone can buy a DJI Phantom drone off of Amazon and get swarming algorithms from MIT off of GitHub for free and then start combining those things. Or even facial recognition. It used to be something that was expensive, that only a handful of AI departments in maybe governments or universities had access to, and now facial recognition technology is available to everyone. What's really worrying is the way that you can combine these different technologies together. You could combine drones and facial recognition and explosives and now you have a pretty dangerous weapon.

Tristan Harris: We're just scratching the surface on the trend line, which is that there's going to be increasing technology democratized into more and more people's hands. We, the public, likes to focus on the positive aspects of that. Well, isn't it great that now anybody can do a drone and can use that for planting trees at scale because you can have drones and AI that's scanning the ground to plant trees faster and faster. But the problem is really looking at this negative dark side that, frankly, the more anybody has access to it, the more anyone can cause real danger.

Stephanie Lepp: Well, let's talk about that. The danger, the dark side, explicitly. So this decentralization of the capacity for catastrophic destruction is dark. I think one thing that our listeners might be wondering is how do you hold it? Specifically for you, Tristan. How do you hold this? Even if we just think about it in terms of how do you sleep with this awareness.

Tristan Harris: To be honest, it's not always easy. I remember reading Audrey's book late at night before doing the interview with her and it's not good bedtime reading. It's just like listening to Paul Hawken, who is one of the authors of Drawdown, the book about climate change, and he has a rule that says don't read climate news after 4:00 PM. I just want to say to listeners that this material isn't easy. It's very challenging to wake up and look at this stuff. In fact, I remember meeting some people in Washington DC who knew some of the clinical psychologists who work with the joint chiefs of staff. These are the people who know about all of the things that are going wrong in the world. It used to be that only a handful of people at the tops of institutions had to hold the weight of some of these ominous futures, but in a world of decentralized catastrophe, now more of us

are aware of them and more of us are holding them as individuals. We're not military leaders. We're just regular civilians, parents, teachers, listeners of this podcast.

Tristan Harris: One thing I might recommend is Daniel Schmachtenberger actually has a great video online called The Psychological Pitfalls of Working on Existential Risk. I think it's a good video on what attracts people... Like where are there problematic or perverse ways that we get attracted to this material? People who are attracted to catastrophes or thinking about this stuff all day. I don't think it's a good thing for our health. This stuff is real. It's not hypothetical. The reason that I think we want to raise more awareness about it... The premise is that we want to actually mobilize our institutions and mobilize companies to act and to help protect these things. And there are ways of doing that. I believe that... I think Audrey talks about in her book that drones are starting to be required to have software that basically says you can't fly near these sensitive areas. When the drones start moving in that direction, they just don't fly. Now, again, there's going to be more ways that people hack around some of these limitations, but we need to start thinking about per attacking against these decentralized capacities.

Stephanie Lepp: So there is actually an existentially hopeful implication of decentralized catastrophe and that is that we can't leave anyone behind. We increasingly cannot alienate anyone because, within the context of decentralized catastrophic capacity, their alienation can become an existential threat. I would love for you to talk about that and what it means for our national security strategy.

Tristan Harris: Well, as you said, in a world where anyone can take their pain, their psychological pain and suffering, and translated into catastrophes that affect the whole world or the whole planet, the way out of that is we have to care about everyone. We have to have no shut ins. We have to have people caring for each other. We have to have a system, an economy, a political system, in which people feel agency. A positive sum world. This is actually why Daniel Schmachtenberger in his work talks about how we cannot play a win-lose game. We have to create a new win-win game that creates omni win-win outcomes for as many people as possible. Can they build systems in which everybody is winning? Has dignity, has basic respect, has love, has compassion.

Stephanie Lepp: Well, and not leaving anyone behind doesn't mean no consequences. The way that I think about it is we don't have to choose between consequences and compassion. Just because we can't alienate anyone doesn't mean they shouldn't face the consequences appropriate to their actions. Be those consequences jail time or whatever they might be. I mean, people should endure the consequences appropriate to their actions and also have the opportunity to learn and change and grow for their sake and all of ours. I guess what this

implies to me is a reorientation of our national security strategy or our defense strategy. If the power of gods without the prudence of gods leads to self-termination, and we have the power of gods, then the Department of Defense should really be on helping us develop the prudence of gods.

Tristan Harris: Otherwise, if you don't do that, again, you're left with swinging the other way on the pendulum towards creating some kind of master totalitarian surveillance state in which every action on every computer... If that desktop gene compiler that lets you build the next pandemic virus from your computer, then you have to ubiquitous surveillance on everyone's machines. So we have to choose. What does it look like? I think a society that's in between is a society of sousveillance instead of surveillance. Surveillance is watching from above. Sousveillance is watching from within communities and from the side. The way that we existed in tribes is we had people caring for each other. In a tribe of only 150 people, you would know when someone looks like they're feeling a little bit estranged from their community or they're not doing very well. I think each of us walking out of this episode can say what does it look like to care for the people that are in our own lives who are not doing so well?

Tristan Harris: In the spirit of optimism, I also thought it'd be great for you to cover what happened in the way that the media covered dynamite. There's an actually distinct role in how we got past the contagious spread of the idea that people should be using dynamite to create bombings everywhere. The media had to go through a process of really upgrading and coming up with a standard for media professional ethics and a lot of had to do with social contagion theory. So can you talk a little bit about the media's upgrade process? Because I think that's going to be key for how we deal with more of these decentralized dangerous capacities in more and more hands that we're going to need to be responsible about communicating if and when they happen.

Audrey Kurth Cronin: Yes, I'd be happy to. The media at the turn of the century were making enormous amounts of money. You had the Pulitzer papers, the Hearst papers. You had papers that sold for five cents each that made more money than they'd ever seen before in all of the history of newspapers. So there was this huge drive... it was a machine... whenever there was an attack, a dynamiting attack, to have explosive coverage, pun intended. To have extremely sensationalized coverage of that attack and then to sell newspapers on the corner by the millions. It was a great business model. Many of the great media empires were built that way, but ultimately they came to realize that they had a responsibility for the fact that these attacks were spreading. That responsibility ultimately led the better papers, not all papers, but papers like The New York Times to develop editorial standards and the professionalization of the media is dated to that period. They began to realize that they were part of the problem and they began to institute much stricter rules about exactly what would be reported, how, what

the facts were. There were a number of different editorial standards that were put in place and this helped end the wave of dynamitings internationally.

Tristan Harris: I think what you just said is so crucial. Because I agree. I actually don't think it would've been possible to end the wave of dynamitings if you had a perpetual viral sensationalized news media that profited directly from trying to get as many people to be afraid of it every time it had happened. The social contagion theory has had a really prominent role in our history of violence. In 1970, researchers noticed an increase... This is from your book. Researchers noticed an increase in violent crime following well-publicized assassinations such as the 1963 killing of John F. Kennedy that led to more murders in the United States. Other research found that widely publicized bombings and kidnappings inspired copycat attacks. And careful analysis of aircraft hijackings between 1968 and 1972 also demonstrated a clear relationship between successful aircraft hijackings in the United States. In 1972, the total number of aircraft hijacking attempts of foreign boarded planes peaked at more than 60 and researchers found that the best predictor for a hijacking was a prior hijacking that was well publicized and broadly perceived to be successful.

Tristan Harris: So this is really critical stuff when you understand how powerful and contagious certain ideas are, when you can discover, say, a new way to sow panic. When we mentioned TikTok before. Another example with TikTok is this devious licks challenge, which was basically a TikTok meme. It was a video where people actually showed how to destroy their high school bathroom. It's literally you walk into the bathroom and there's a video of someone put pee in the soap dispenser and they flushed McDonald's Big Macs down a toilet and they just made a wreck of the bathroom. This is awful, but TikTok is making this stuff go viral. I mean, that's what the business model is is let's make this stuff go viral. But I think of this as we've already laid out the dynamite lines. We've already laid out the fuse so that anytime someone wants to launch a dangerous meme like this, we make these things go as contagious as possible. That's why I think social contagion theory is so fundamental to how we're going to have to deal with these problems.

Tristan Harris: Now, the question I have, and this is I think I'm really posing and I think with fundamentally as the situation we find ourselves and why I find social media to be so dangerous and catastrophic, is that now instead of having a small number of newspapers who could adopt that responsibility framework, that could be institutional, that people had to have certain degrees or certain education, certain ethics training to become part of those institutions, whether it was major newspapers was like The New York Times or Hearst or whatever it was... Now, when three billion people are now individual newspapers or you have 15-year-olds who are walking MTV stations or you have influencers who are 20 years old who have 10 million, 20 million followers and are telling people what they should think about COVID, that to me is the structural problem that's going

to prevent a media responsibility framework from taking place if we have this decentralized broadcasting world of social media and we don't come up with some responsibility framework that as you gain more power... Like if you have less than a million people that you're reaching, you might have a different responsibility framework than if you're reaching more. But we now have individuals, many individuals, who are reaching more people than the newspapers in the 1800s reached.

Audrey Kurth Cronin: I think that's a wonderful idea. If you could have required ethics training and required professionalism training after you have a certain number of followers, I think that would be a great idea.

Tristan Harris: I think that when you view it that way, more systemically, it's like we've over given out these god-like powers to every one without pairing it with that responsibility. In our country, we know that we have to pair rights with responsibilities. That is the key framework. It's rights decoupled from responsibility that I think is the philosophical error that we have made in decentralizing these capacities. We have to recognize, again, the twin gutters of on the one hand, you take your hand off the steering wheel and you get decentralized catastrophes and chaos everywhere because you're not putting any controls on it, there's no licenses for anything, and the other side, you get the dystopias of overreach and power and licensing for everything and dystopian abusive governments. And we don't want either of those outcomes. I just want to say that I really appreciate how elucidating your book and your work has been at I think framing this for people and giving them a much deeper historical perspective for why these issues are so urgent. I just want to thank you so much for coming on the podcast.

Audrey Kurth Cronin: Thank you, Tristan. I've really enjoyed our conversation.

Tristan Harris: Audrey Kurth Cronin is a global expert in security and terrorism. She served in the Office of the Secretary of Defense for Policy and is a life member of the Council on Foreign Relations. Today, Audrey is a distinguished Professor of International Security at American University in Washington DC and the author of several books. Most recently, the subject of our conversation today, Power to the People: How Open Technological Innovation is Arming Tomorrow's Terrorists.

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