THE BROOKINGS INSTITUTION

BROOKINGS CAFETERIA PODCAST

TECHSTREAM: WHERE TECHNOLOGY AND POLICY INTERSECT

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PROCEEDINGS

DEWS: Welcome to the Brookings Cafeteria. The Podcast about ideas and the experts who have them. I'm Fred Dews. On this episode a discussion about a new Brookings resource called Techstream, a new publication site on Brookings.edu that puts technologists and policy makers in conversation. To explain what Techstream is, and some of the issues it covers, I'm joined on today's episode by Chris Mesorole, a Fellow in foreign policy and Deputy Director of the Artificial Intelligence and emerging technology initiative.

Also, on the episode, Darrell West, the vice president and director of government studies at Brookings answers a listener's question, on how the Coronavirus might affect the U.S. Presidential election. This is part of our policy 2020 ask an expert series. If you have a question for a Brookings expert, send an audio file to bcp@brookings.edu. Follow the Brookings Podcast Network on Twitter @policypodcasts. To get information about and links to all of our shows, including Dollar and Sense the Brookings Trade Podcast, The Current and Our Events Podcase.

And now on with the interview.

Chris, welcome back to the Brookings Cafeteria.

MESEROLE: Well thanks for having me, it's always a pleasure to be here.

DEWS: Let's start at the very top. Tell us what is Techstream.

MESEROLE: So, Brookings Techstream is a new platform that we have launched. The purpose of it is to really try and hold tomorrows Tec policies conversations today. And what we mean by that is we've kind of been through this cycle repeatedly over the past decade or two, where a new technology will come out and we really won't grapple with its policies consequences or policy and societal implications until, in many cases it's really too late either to manage the downside risks or even in other cases to really seed and cultivate some of the

benefits it brings. And so, the idea behind Brookings Techstream is that we kind of want to move upstream to the tech sector itself and begin engaging or putting policy makers, fill society, academic researchers any conversation with technologists as early as possible in the life cycle of the new technologies. So, we have just launched it and we're really excited to see where it goes.

DEWS: So, Chris, you've talked about what sounds like a gap about what Techstream is filling. So, is there no one doing this kind of connection between policy makers and technologists? And also, why aren't policy makers doing this already?

MESEROLE: Yeah, so I think that there are a couple of different gaps actually. One is just this fundamental gap that is in terms of expertise where technologists often times don't have a great understanding or an in depth understanding of the policy making process in general. They may have a decent kind overview of what's happening in terms of our politics and political systems. But in terms of understanding how policy is made, what the incentives and structures of our political institutions really look like on the ground they tend to not have a deepened understanding or awareness of that. And as a result, they don't really always understand what's politically feasible. Conversely, I think policy makers really struggle often times to understand the kind of underlying technology that is at the heart of so many of the tech policies issues that we are dealing with now. Probably a great example of that would be the Zuckerberg hearings in Congress where it was just very apparent that many of the Congress people that were interviewing Mark Zuckerberg didn't really have a firm grasp of how Facebook worked much less how some parts of the internet work some basic things like email. I think we've seen this kind of time and again, and so one of the big challenges that we have is this knowledge gap or expertise gap between the tech sector and the policy making sector.

And the other gap is the temporal gap that I alluded to earlier where there is this where a

new technology will come out, a new product or protocol will come out. It will take a few years to get adopted, that scale anyway and it'll take a few more years for the policy implications to become apparent and then it will take a few more years for governance structures to be put in place surround, by the time all is said and done its usually can be up to a decade before we have really grappled with these technologies at which point and time, very often we are dealing with a new generation of technology and we have to kind of start the cycle all over again.

And so, there's two gaps that we need to address and unfortunately there's really not a lot of good forum in which to kind of close or narrow those gaps. There's certainly been an effort lately to put policy makers in deeper conversation with the tech sector. The universities of mobs that have been more aggressive about bringing out policy makers to the labs. But there's a limit as to what you can do in person and I don't know that that's going to be the way that we solve this problem on its own. I think we are going to kind of have educational programs for Congress people going to the tech sector and vice versa ideally. But we also need to have just much broader and much richer conversation within our political discourse and in our immediate ecosystem. And that's where there hasn't been great resource for these kinds of conversations to happen for tech policy reps at large. Some of my colleagues at law for using a great job in navigating a lot of the tech policy conversations. But its primarily constrained to just the national security domain. And there's not a great place to go right now for just tech policy conversations at large. There are obviously some, but I think there is a lot more that could be done and a lot more conversations that need to take place. The goal of Brookings Techstream is to provide a home and a place for those debates to occur.

DEWS: So, I think law fair is a great analogy for what people can expect on Techstream. So, can you go into that a little bit more. In terms of its format, what will people find on

Techstream? And also, who can contribute to Techstream?

MESEROLE: Yeah so one of the guiding hopes for Techstream is that it will be very much an open platform that will not just be limited, even though it's on the Brookings website and it's a site on the Brookings domain. That it will be a home for experts even outside the Brookings network whether its Brookings resident fellows or non-resident fellows. We want people who are in labs all across the country and even across the world to be able to contribute to this. Same for the society experts and researchers who are dealing with some of the policy and societal implications of technology. The goal is really to kind of open and create a new platform in which those conversations can take place and leverage some of the convening power that Brookings has in eight of those conversations. And I think it's something that law fair, to bring it back to your question has done really well within the national security domain for any one of the given each topics that they cover there able to get some of the best experts in the world to come to their site and contribute their thinking and really advance the conversation in meaningful ways. And that's one of the big long-term goals for Brookings Techstream is that it would do something similar for a lot of the tech policy conversations that we're having. And not in just a national security domain but across a wide variety of domains. And we're looking forward to building that out in the years to come.

DEWS: Let's talk about some of those issues, some of those domains. When we think about technology and we think about policy. Sometimes we think about threats, but we are also thinking about opportunities or just technology issues that don't have to necessarily imply threats. What's kinds of issues in technology is Techstream going to be grappling with?

MESEROLE: So, I think to start we'll probably be focusing a lot on things like disinformation, election integrity, certainly public health given the current environment. But

ultimately, I think, the goal is to have conversations about the downstream policy implications of new technologies whatever they may be. And so, in some cases those will be very relevant to say like our political discourse. I was a developer using some of the early twitter APIs at the end of the 2000's. And it was very kind of obvious that the way that Twitter had architected its API and API is short for Application Programming Interface and it's a way for developers to connect into a site as a third party. And what was very clear, as I was doing that work, was the way they had constructed their platform and the protocols that they had developed for it where going to have pretty major consequences for how political debate and discussion happened. Especially as the audience and user base of a platform like Twitter grew the importance of those protocols and their implications were going to grow over time as the audience grew. And that became a lot of the concerns that I had then was related to the way that the platform design was structured and that was leading to certain behaviors that I was seeing even in the late 2000's in terms of rewarding or incentivizing people to have extreme positions on things. It was incentivizing the political conversations to be pushed out of the margins. But that was really something that was coming up just with the protocol. It was something that you kind of had to think through a few steps ahead at the time. There's other protocols and other technologies that will come out where the downstream implications depending on the main of the application. So, another example might be in the manufacturing space if we have a new generation of robotics that use reinforcement learning, there's certain tasks that they can perform that they couldn't before and that will have downstream impacts on very specific industries and labor markets that we will need to address. And so, in our case the goal of Brookings Techstream is not necessarily to look at things in terms of just threats to politics or to elections but to start to really think through across a broad range of applications what their downstream impacts might be.

DEWS: Let's focus on a current threat that's on everyone's mind and that is as you mentioned is Public Health which is the Coronavirus Pandemic and COVID-19. Can you talk about the intersection of tech and policy making in that context?

MESEROLE: Yeah so, I think that that is such a fascinating intersection to try and think through and grapple with. And I think on a macro scale, I think that one of the things that's pretty apparent now is that for us to relax the stay at home orders and the lockdown. One of the discussions we are having, is really ultimately in affect, it's a renegotiation to some extent to our social contract, to our governance contract where we are debating in real time how much of our privacy we are willing to give up or how much of our information about us and our movements the state is entitled to in order for us to enjoy the freedom of movement that we have become accustomed to in the past. And I think that conversation and renegotiation is happening entirely along a fault line that is being imposed by technology. Where we've got these new technologies now that enable real time mass tracking of movement, that in the past just wouldn't have been possible but today thanks to ubiquity of smart phones and in particular the GPS chips within them were able to geo locate individuals as they go about their day. And where it just wasn't possible or feasible in the past and so it opens up a new avenue for surveillance that did not previously exist. And I think to bring it back to Brookings Techstream one of the early posts that we had on there was by some excellent scholars Ryan Kelo and Oshkonsel Tawny, Carl Berkstrom who are thinking through the downstream impacts of a new contact tracing protocol or exposure notification protocol that Apple and Google have been developing using Bluetooth technology on smartphones. Where the goal of that technology was to make it possible for phones to communicate or keep a register of other individuals that a person has been near, and then as people were diagnosed with COVID-19 that it would be possible to go back in time and

notify people who had been exposed to that person while the disease was contagious. The challenges of implementing that kind of protocol are pretty significant if you're also trying to do it in a privacy preserving way. And Apple and Google have, to their credit tried to anonymize it to the extent that they can, but the piece that we ran on Brookings Techstream was basically arguing that even the measures that Apple and Google had taken in trying to preserve the privacy of their users was still probably not going to be enough. I would probably argue with the piece itself that we ran. I think that Apple and Google have actually done a pretty good job in terms of building up the protocol that they have developed. But the broader point is that we need to be having debates about those kinds of protocols before their deployed because once its released and app developers can start building applications based on their protocol. The install base of IOS and for Android in the hundreds of millions and even billions of users and so the finer points of protocol that they're developing are going to have massive immaterial impacts on people's lives all around the world. And that's the kind of conversation that we were hoping to have on Brookings Techstream, and I think in some cases it's probably the best example of both what the platform can do and also of how its most relevant to the COVID crisis itself.

DEWS: I just wanted to share with some of the listeners some of the recent content that's on Techstream. I'm just going to scroll down the home page which people can find brookings.edu/techstream. I mean just today there's a piece about COVID-19 and apps, there's a piece about the earn it act which is in the senate judiciary committee that could weaken cyber security encryption for our online financial lives. Trade secrets there's a piece on encrypted messaging apps and propaganda. There's a piece on can artificial intelligence help us design vaccines, surveillance technology in South Korea and the pandemic. It goes on and on. There's a all different kind of content, there's a lot of content about COVID-19 obviously but there's a lot

more so. Anyway, it seems like it's a broad look at technology issues that you have.

Let's move on to kind of a regional focus. I mention South Korea, I know there's content that's related to China. So, it seems like there's not particularly an area of focus unless you count the globe as your area. Can you talk a little bit about just how broad geographic scope Techstream has?

MESEROLE: Yes, I think for us one of the really interesting things about technology is just how global it's become. So, I think for the most part we still associate a lot of technical innovation is happening primarily in Silicon Valley for example and to be sure that's where just an enormous amount of innovations still happening. But the whole tool system that we have built around next generations technologies whether that's cloud computing, whether that's open sources software where things like get hub that allow developers to coordinate around the world. It's made it possible for developers all around the world to really create and distribute products and apps that have pretty significant policy and societal implications all around the world. We don't view Brookings Techstream as really being constrained to any one region. I think we want to talk about the technologies that are going to be having an impact on our lives and on global society, wherever those technologies are being developed. In this case, for a lot of the technologies that we care about now some of the regions where we will probably end up focusing on are places like Russia or China and the sense that they are using some of these technologies a bit differently than the U.S. is. I'm thinking in particular of disinformation campaigns and the way that those campaigns are being developed and deployed by either the Russian and Chinese state or proxies acting on their behalf. So, we will be having like a global focus so it wouldn't surprise me if there were some regions that were covered a little bit more extensively than others. And the same is probably true in a COVID crisis where I think we have

a lot learn from countries like South Korea or Taiwan in terms of the technologies that they've been using to manage the renegotiation of the social contract that I was mentioning earlier. Taiwan and South Korea have both done just a fantastic job of containing their virus outbreak to date and one of the ways that they have been able to do that is by better integrating technology with their public health policy. And so, I think we have a lot to learn from those countries and I suspect we all continue to look at what they're doing and explore what parts of the system that they've built can be brought over to the U.S. or other democratic countries.

DEWS: Chris I want to go a little bit deeper as to how you personally became involved in this Techstream concept. The intersection of technology and policy. You mentioned earlier that in the 2000's you were an actual developer, developing API's. Was there any particular moment or event that occurred that made you think as a technologist, at the time that, there needs to be more integration into my work in technology of public policy? And now here you are at a public policy organization doing technology policy.

MESEROLE: Yeah so this is a long time in the making. I think one of the things I was doing you know a decade plus ago was as I mentioned building some apps on the early API's of Twitter and other platforms. But at the same time my academic research was focused on conflict and extremism. So, I remember, I think it was 2009 or so, and from 2009 early into the air of spring there was this narrative of Twitter is great. It's a social tool that will really help democratic movements around the world and it allows democratic activists and human rights activists to coordinate with each other and get their word out. And all of which I think was very much true at the time, but I remember also thinking the same reasons that those groups are leveraging Twitter are also why eventually you'll start to see actors like Al Qaeda or others really harness them as well. And then sure enough it was a couple years later that it was the

Islamic state that perfected the use of Twitter for recruitment purposes and they also were obviously on Facebook and other platforms too. And then we saw the same kind of cycle play out where Facebook really built out really powerful recommendation algorithm and had targeting platform. And as they were building that out it was also; I think apparent to those of us where dealing not just with technology but kind of trying to think through how these technologies can be exploited from the perspective of malicious state or non-state actor what might happen. And I think there were a number of us that were worried about what Russia might do with some of those platforms and sure enough in the 2016 election they clearly were able to exploit those platforms pretty masterfully and without a lot of awareness that they were doing it, at least within the tech sector. And I think both of those experience combined with a few other instances of good intentions or the development of technologies either with good intentions or just kind of not thinking about how they might be used and exploited let to really bad political outcomes. Like the experience of watching that happen a few times made it clear to me that I like 2017, 2018 that we really needed to have a new kind of policy conversation around technology where we weren't just focused on what had happened in the last 2 or 3 years but that we were actually trying to figure out given the state of the art and the new cutting edge technologies of this moment. What kind of problems are we going to face 2 or 3 years from now, once they've kind of become adopted and exploited at scale? And that's a different kind of conversation that we've ever really had before. But if we're ever going to try and catch up to the technology itself it's something that we just have to do. Otherwise we're always going to be behind the curve. And along with a colleague of mine Alaina Polyakova, we wrote this article in Foreign Policy magazine I think in 2018 kind of making the argument that we need to start thinking through the policy and silent implications of new technologies as early as possible. And the kind of core idea

that we put forward in that article kind of became the genesis or germ that ultimately led to Brookings Techstream as we kind of thought through what we could do to facilitate the kid of conversations that we thought weren't happening but needed to happen. So, it's been a long journey but we're really proud at how it turned out.

DEWS: Yeah, I will put a link to that Foreign Policy magazine article in the show notes. So, speaking of getting or staying ahead of the curve, how do you personally stay ahead of the curve in this work, you're at home now but you're based in Washington, D.C., that where your office is. How do you as a researcher of a think tank stay on top of emerging tech at labs and universities and anywhere else that you need to stay up with?

MESEROLE: Yeah, so thankfully the good news is that technologists like any other community kind of have their community water coolers so to speak that most folks at the leading edge of those fields will aggregate or come to it to just share information with each other. And sometimes that's kind of formal websites. Technical Sense is the best place to go to the places I go often to try to keep abreast of what's happening on the tech side. Would be like Archive.org or the IEEE.

I mean just making sure that we're up to date or keeping tabs of what the state of the art is across a number of different technologies. But then there's also the less technical water coolers, so to speak, where folks are just having kind of a little bit more of a free form conversation and so that might just be following the right people on Twitter or it could be something like one of the prominent early stage renter capital firms. It's called WY combinator and they have a message board of sorts that's called hacker news that you can kind of get a pretty decent feel for what's on people's minds who are at the cutting edge of developing some of these technologies if you just spend some time there. There not necessarily places that a lot of people

in D.C. will spend time idly reading and catching up on news but thankfully there's no shortage of places to go to get this information and its actually been one of the encouraging things of the last decade and especially the last few years of that. I think it's got a lot easier for people outside of the technical community or people who have technical backgrounds but aren't' working as an engineer specifically to keep tabs of what's going on in those fields. Everybody, I think is readily concerned with a lot of the challenges associated with the internet right now but there's also a lot of benefits and I think that's one of them.

DEWS: Well, you've already published a whole bunch of new pieces since Techstream launched at the end of April. Can you talk about some of the thinks you are working on now, what you expect to come out of the project in the coming months?

MESEROLE: Yeah so, I think we're excited to see where the project goes. I think we've done a lot of work so far on the intersection of public health and the pandemic with different tech policy issues. Unfortunately, the longer the pandemic goes on I think those conversations will only become more important. So, I imagine we will continue to do work in that space. I also think that coming into the pandemic there were a whole number of really important tech policy conversations going on, whether that was around data privacy or disinformation or the impact of these technologies on things like extremism. And I think all of those conversations are ones that we are here to take part of and really try and advance the policy conversations around not just in light of COVID but in their own terms. Because I think eventually, hopefully we will get a really good handle on the pandemic and those issues may feel like they have gone away a little bit right now because we are all so focused on the pandemic and rightly so. The underly causes of those issues haven't gone away and I think we're still going to have to have all of those really important conversations and hopefully we can start to do that a little more aggressively in the

months to come.

DEWS: Can you just explain how people can contribute to this? What do they need to do if they want to write a piece for Techstream?

MESEROLE: Yeah, so we're really here and open to publishing who are not affiliated with Brookings and there's a few ways to do it. One is to email me directly, if you just go on the Brookings website, my email is listed there, there's a contact form. We read everything and we'd be glad to engage with you. There's also an about page on Techstream that has further information on how to get in touch with us. And further information as well about the kind of content that we are looking for. The whole point of the site is to really try and put technologists and the policy community in conversation and so if you have valuable insights base on your own technical and or policy expertise, we'd love to hear from you.

DEWS: Well that's terrific Chris. Thanks for coming onto the show today and congratulations on the launch of Techstream.

MESEROLE: Thanks, so much Fred, it's been a pleasure as always.

DEWS: You can learn more about Techstream on the Brookings website, Brookings.edu/Techstream.

And now here's governance studies Darrell West on how the Coronavirus could affect the Presidential election.

MS. KING: Hi, I'm Kristina King from Long Beach, California. And I'm wondering if a Brookings expert can share how the Coronavirus outbreak is likely to affect the election?

WEST: Thanks Kristina for your question. I'm Darrell West and here's my response. Several months ago, President Trump was cruising towards a possible reelection. He had a strong economy. A 3.5 unemployment rate and a stock market was at a record high. All of those things,

historically would have predicted an easy reelection for him. But now the Coronavirus has hit and that tide has turned dramatically against Trump. There are three particular problems that he faces.

One is the economy. Right now, the experts are anticipating that we are going to have a 15 - 20 percent national unemployment rate. That is a huge problem for any president seeking reelection. If you think back to presidents who have lost their reelection bids, generally they had a very weak economy. This was the case in 1980 for Jimmy Carter when he was campaigning for reelection and the same problem ended up defeating George Herbert Walker Bush in 1992.

The second problem is the health problem associated with COVID. Right now, we are headed to 70 thousand fatalities and that number could end up being higher than that. Trump has been criticized for having a very slow response in dealing with that health emergency. Public opinion surveys suggest that he has demonstrated a lack of empathy for all of the human suffering that is coming out of that. And so that is a big problem for him as he is headed into the reelection because people see Joe Biden as a more sympathetic figure, someone capable of greater empathy. Somebody who cares about average people. So, that has created a big problem for Trump.

And so, the third obstacle is what posters like to call the right track, wrong track question. In which we ask people, is the country headed in the right direction or is it seriously off in the wrong direction? Right now, the percentage of Americans saying the country is headed in the right direction is only 37 percent. So almost two-thirds of Americans believe that the country is headed in the wrong direction. Historically that has predicted big problems for any President seeking reelection. So based on those facts, those are ways in which COVID has possibly derailed a Trump reelection strategy. Trump had planned to campaign on a strong economy and

to betray Democrats as socialists but now the economy is weak and both Democrats and Republicans have supported multi trillion-dollar Federal assistance programs. So, it's going to be much harder for Trump to defeat Biden. His only hope really is if the COVID fatalities drop and the incident rates really fall dramatically and that the economy then stages a strong recovery. If that happens, Trump would be in a stronger position. But if those things do not happen that would be a major problem for President Trump.

DEWS: You can get more policy 2020 content at Brookings.edu/policy 2020.

The Brookings Cafeteria Podcast is the product of an amazing team of colleagues, starting with audio engineer Gaston Reboredo and producer Chris McKenna. Bill Finan, director of the Brookings Institution Press does the book interviews and Lisette Baylor and Eric Abalahin provide design and web support. Finally, my thanks to Camilo Ramirez and Emily Horne for their guidance and support. The Brookings Cafeteria is brought to you by the Brookings Podcast Network, which also produces Dollar and Sense, The Current and or Events Podcasts. Email your questions and comments to me at bcp@brookings.edu If you have a question for a scholar, include an audio file and I'll play it and the answer on the air. Follow us on Twitter @policypodcasts. You can listen to the Brookings Cafeteria in all of the usual places. Visit us online at Brookings.edu. Until next time, I'm Fred Dews.

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Carleton J. Anderson, III

(Signature and Seal on File)

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