Transcript of "Can Tech be Governed?" With Jonathan Zittrain and Kendra Albert – September 10, 2019

So my name is Kendra Albert. I'm a clinical instructor here at the Cyberlaw Clinic, and a lecturer at law here at the law-- lecture on law here at the law school-- at law, on law-- you know. And I have the honor today of getting to host a conversation with Jonathan, who's been a friend and a mentor for a long time on, can tech be governed?

Which is a easy question that I think we'll be able to dispose of within this hour span. So I'm going to first introduce Jonathan, and then we're going to talk for a little bit about-- especially given his history in the space and the long history of work that he's produced-- how he thinks about this problem now in this current-- at the year of our Lord, 2019, the current trash fire.

What I'm going to then ask you to do-- so I'm giving you some warning so you can prepare for itis I'm going to ask you to talk with your neighbors. I know that's not traditional to these
Berkman luncheon format, but there's so much knowledge and wisdom in this room, and I'm
excited to tap into it before we go back into a full group conversation.

I should note, in case you are unfamiliar with the rote announcement, or missed the very prominent sign outside, this talk is being recorded, and I believe it is being livestreamed. No?

I think it's not being livestreamed, but will find its way online.

All right. So even if you're not held accountable for what you said immediately, you may be held accountable for it later. And I guess that goes for Jonathan and I, as well, so here we go. But just to start off with your bio, since you have so many fancy titles, that it'd be truly sad to not share them.

Jonathan Zittrain is the George Bemis Professor of International Law of Harvard Law School and the Harvard Kennedy School of Government, Professor of Computer Science at the Harvard School of Engineering and Applied Sciences, Director of the Harvard Law School Library, and Faculty Director of the Berkman Center for Internet and Society. He also serves as the Vice Dean for Library and Information Resources. I'm sure I missed some.

I'm working on something at the dental school, but it's--

Sounds great.

--not come through yet.

So his research interests are ethics and governance of artificial intelligence, battles for control of digital property, and a whole bunch of other stuff-- which that I actually won't list, because it'll take too long. We chatted beforehand, and I'm not going to do the thing where I force him to read from his own book that he wrote in 2008-- you know, would you read into the record your previous statements on the topic?

But I am going to read it to y'all. So in 2008, you wrote this book called The Future of the Internet-- and How to Stop It. Spoiler-- I'm not sure we stopped it.

I'm working on a sequel right now called Well, We Tried.

Yeah. And in it-- I'm going to paraphrase your theory-- you talk about the power of generativity and general technology as [INAUDIBLE] platforms, ones where users can build their own ways, to their own paths through building their own things. And at the end of the book, from the conclusion, you wrote, "The point at which a generative project"-- that's my insertion-- "is worth the effort of bad people to game it is a milestone of success.

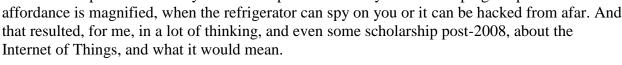
It is the token of movement from the primordial soup"-- nice-- "that begins the generative pattern to the mainstream impact that attracts the next round of problems." Well, the internet has succeeded, I think. It is worth the effort of bad people to game it. So here we are meeting the problems. I wonder how your thinking on the value of generative systems has changed, since you wrote that in 2008.

Great question. I think the paean I wrote in 2008 to generativity-- a great word that I think might have been suggested in a workshop, as I was otherwise arm-wavingly talking about how excited I and others were about the future of the internet, by Julie Cohen-- the generativity is about the idea that anybody could contribute to a technology.

Now, of course, anybody-- do you really mean anybody? But gosh, compared to the status quo-and as you know, the book took some pains to talk about typical consumer-facing technologies, and the way in which they were appliance-sized-- that is kind of like, congratulations, here's your technology. Enjoy, but only enjoy in the ways that we allow you to.

And that, as technology gets more sophisticated, the theory went, that could either mean that the appliancization and the control by the vendor, or whoever can influence the vendor, that control can become that much more comprehensive. It's one thing that's like, darn it, why can't I set my refrigerator to go below negative 10?

I have some specimens I really want to keep cold. I feel my freedom impinged upon. That lack of affordance is magnified, when the refrigerator can spy on you or it can be hacked from afar. And that resulted, for me, in a lot of thinking, and even some scholarship post-2008, about the



So hold on.

Yes?

I'm going to do the part where I interrupt you for your time--

Please.

--so we get used to it.

Yeah, yeah.

So what's the security harm of not being able to set it below 10 degrees? Is it just that your milk is-- some bad attacker can't deep freeze your milk?

So I thought, at first, you were saying, what's the-- how unfree do you feel to be unfrozen? And it is not that unfree. And we even have come to such expectations, initially just grounded in physics, and later grounded in what vendors of products might have for us, around--

We're still grounded in physics.

Still grounded in physics, somewhat, about what the products can and won't do. And so I guess the worry now is, kind of when you think of a general purpose PC and a general purpose internet, the PC can be reconfigured to do anything at any time. The internet can communicate between any person and any other person at any time, so much so-- I remember being amazed at this because it was in such plain sight, but I didn't quite appreciate it at first-- there's no main menu on the internet.

Talk about what valuable real estate that would be, if there were a main menu to the internet. And there isn't. The internet is like, yeah, you're on the internet. Don't look at me. Look at whoever you want to look at. I've connected you to whoever you want to be connected to. It's that level of genericity-- generic-ness-- about what you can do that I was so excited about, and that we didn't ask for from our appliances.

It's like, a fridge is a fridge, and if you want something a lot colder, by a freezer. If you want some even colder than that, I assume there's some industrial deep freezer you can get. But as things-- this is why, again, Internet of Things is so relevant, and remains so-- as any given thing is able to be reconfigured into any other thing or set of functions, that is a lot of power up for grabs.

And my question looked after to the generative lens, and it's a somewhat simplistic one, in hindsight-- was, where will that power go? Will it redound to the benefit of the vendor, who's just going to be able to, I don't know, start tracking your fridge door opening, start selling it to

insurance--

Mine cryptocurrency on your fridge processor. That has happened--

I know.

--with my fridge.

Wait, with your fridge?

This is a problem.

With your literal fridge, or your model of fridge?

I fear I've said too much.

Jonathan's [INAUDIBLE] attack service just went up, as a thousand hackers listened to this video and found out what kind of fridge he had.

Yes. Redefines what a cold call is in law school terms. Too soon, too soon. But even jumping a level of abstraction higher right now, so much, to me, of the current story of technology is that it is taking away from a basket of miscellary that we might call fortuity or randomness.

Everybody always talks about the weather, but nobody ever does anything about it-- sort of a clarion call about climate change right now, but an old Mark Twain quote. Taking out of fortuity-- can't predict it, can't control it-- gosh. If things go on the internet, who knows what happens? It's so organic, and that is both scary but liberating, next to Walter Cronkite telling us what to think.

But that moved away from the fortuity, thanks to strength in technology and its reach. Wherever you turn, there's a camera [INAUDIBLE] deposited a microphone over there moments before things started. And so you never know when there's surveillance, or even more important--

Sousveillance?

Sousveillance?

Yeah.

Yes, coming back at you. And in fact, how many of us are enabling it ourselves by the instruments we've festooned ourselves with? Just to quickly finish that thought, we're taking, as humanity, stuff out of the random bucket and putting it into the it's now possible to learn, to predict, and even to control this buckets.

And then we ask, how shall we govern it? And the thing is we haven't figure out how to govern the stuff that we could govern before. And now, it's like, well now, there's that much more, and that's why, to me-- and I'll probably stop talking-- the question, put dryly, and in law school terms, of intermediary liability, which is to say some aggregated platform, or vendor, or entity is in a position now, thanks to these new tools and technologies, to learn about us and to affect us.

What are their responsibilities, if we act out? That is now a question that, after a 20-year interregnum of not visiting it, we are visiting, wow, really intensely. Sorry.

You don't need to apologize. I was interrupting you.

I feel like I'm being all over the place here.

No, so I wonder-- you labeled the box randomness or fortuity--

Yes.

--and I think that's actually stems nicely into my next question, because I don't know if I would label it that way. I would label it the systemic distributional effects of the system before the technology.

You're going to need a bigger Sharpie.

Yeah.

It's a lot of--

It is a lot of-- we can abbreviate systemic distribution-- anyway, so know my question there is, you have-- you highlighted that we have the opportunity to start over, in some ways. But certainly, in many contexts, the stuff that was in the box before has translated onto the new technology.

Mm-hmm.

I think that your point about this not reconsidering for 20 years is, in some ways, true. But you may know what I'm about to say next, which is there are plenty of people who've been suggesting that it is, in fact, this very systemic distributional effects that come before that force us to reconsider how we hold accountable these digital platforms that have generative effects.

Yes. So first, on what to label the box-- the box of fortuitous, which in Monopoly, we would call chance. People still play Monopoly? OK. Is anybody playing Monopoly right now?

It's not a very good game, and it was secretly about socialism [INAUDIBLE].

Oh no, until Parker Brothers seized it.

Yeah.

Yep.

Yes, it was the Landlord's Game. But we digress. This is actually a-- fortuitously or not-- good example.

Yes.

The chance deck, if you're playing the game, it's like, I don't know what I'm going to get. If it's chance, it's usually not great. Bank error not in your favor. But somebody made the deck, so it's not like the game appeared out of nowhere.

Mm-hmm.

I think those two concepts exist at once, that stuff that any given person or entity might think of as previously being in this thing we call fortuity, is really-- I guess what I mean by it is it felt more immutable. It's not something I can affect. It's just something under which I exist, or labor, or suffer.

And part of the optimism, among some quarters early on, was, cool, now we can rewrite the game. That was so much of the thought of the distributed generative internet, including on content too. Anybody can blog. That was global voices. That was, indeed, often the spirit of our center, I think, was, let's not accept things as they are.

Let's build and change. But of course, who's at the table building is a huge question. And the question you just left us with was, gosh, over the past 20 years, it's not like there hasn't been anybody waving a flag here and there. If I had to track in the conventional wisdom, and only in the conventional wisdom, the trajectory of thinking around these topics, I loosely have two categories, and maybe a third around the corner.

And I'll just really quickly mention that. The first category I would describe as what I'd call the rights framework, and that I should-- I don't know if it's just a disclosure or a confession, as a board member of the Electronic Frontier Foundation. EFF was among the leaders of the rights framework.

I see at least one EFF T-shirt in the room right now. The rights framework said the biggest thing to worry about online-- and I'm just paraphrasing-- is that our buzz will be harshed. Who is "our" is another question. But this is cool. There's all sorts of new stuff we can do, and some of the biggest dangers are governments fearing that stuff they thought they could control is about to be taken and placed into the fortuity box.

They're going to fight against this. That's the spirit of the cryptoanarchist manifesto of Barlow's Declaration of Independence of Cyberspace. And we should talk about Barlow. And we need to preserve the freedom of the space by not-- by looking at things from a rights perspective, and an atomized, for any individual, what can you do? What levers can you pull online, or as a builder of code, a computer science person?

That was the right's framework, and that was the spirit behind what has become just a handle for a bunch of these issues now-- so-called CDA 230. I don't know if we want to get completely into that, but just to say, the idea in the American legal framework that Congress would, as basically a footnote, a peripheral item of a larger law, meant actually to regulate the internet for the purpose of keeping material that was harmful to minors-- pornography-- away from them.

Say also, however, you shouldn't think that, if you are an intermediary and you edit stuff, that will suddenly mean that, by having dared to edit and come in and take stuff out, suddenly you're responsible for all the stuff you're editing from other people. That's roughly what 230 was saying. That has been seen as a great element of freedom, of allowing stuff to be built without worrying that you're going to get sued out of existence because one commenter did something awful to somebody else.

It's also become basically a license to build something, to see the cloud arise from all of its awful uses, and be like, not my problem. And that starting, I'd say, around 2010, has led to a second framework that uses a completely different vocabulary around assessing the state of the internet. And instead of thinking about it in terms of rights, which is still a powerful language, it's talking about what I'd call public health.

Is this hurting people? And if it's hurting people, what would make it hurt people less? And if that could be done, who could do it? And if they're refusing to do it, ought they to be encouraged or required to do something to hurt people less? That's a totally different framework from the rights framework.

The rights framework would say, don't have the intermediaries—whoever they might be—be the net police. The other would be, don't let those who build stuff and start the dominoes going, and not only—walk away from it is too simple—profit from it in an ongoing way, not have to take responsibility for what they're doing—especially in an era where, thanks to, say, good AI, they can.

They can't just protest that the internet is too damn big. There's so many posts on Facebook. We can only hire so many people around the world to look at them. It's like, yes, but you can train an AI model. What could possibly go wrong, is what the rights people will say. But this is the debate that's joined, poorly, because the values and the vocabulary are not well yet mapped.

There's no API to allow communication, not only between people, I think, but within our own heads about it, in the conventional wisdom. I will leave off my third thing.

I don't-- I want to hear--

We'll get back to it. Don't worry.

OK. So I wonder about that mapping of the rights framework onto a harm framework, because it actually strikes me in-- that there's some pretty big tie-ins to critical race theory and legal theory related to-- and I'm thinking particularly of Words that Wound, and the work of folks like Kimberlé Crenshaw and Mari Matsuda on how do we take these traditional First Amendment [INAUDIBLE] rights frameworks, and start reframing them to more adequately consider the harm that is being caused.

And so I wonder how you engage with scholars in other traditions, or critical race theories directly, around the places where we've already seen this tension erupt. Because I think you're right that there is a rights framework and a public healthy harm framework-- although, I'm not sure the public health people would use public health in the same way.

Well, sometimes literally public health, when it's like anti-vax stuff is going through, and shouldn't there be some responsibility not to surface it on a search for, "should I vaccinate my child?" But this almost gets to the question-- notice I've been saying in the conventional wisdom, in the kind of canon, and I think that nicely joins the question of, who defines the canon?

And what is the canon? And I should only maybe speak around cyberlaw as a field. It's not like there haven't been people writing from all different angles, and methodologies, and viewpoints about it, but there's kind of been a cyberlaw canon that almost boils things down to like e-commerce law, and what you should know.

Notice we've been talking a bit about all this stuff. We have yet to really mention a case. I'm actually kind of surprised we mentioned the law.

I try.

Yeah, right. But in the conventional framework, I think there is a tendency-- and I surely share it too-- to grasp for the familiar, which is to say what's near you and to reinforce it. And that's why thinking about a research center and its priorities, it's not-- and gosh, I'm about to-- this is where it's like, just don't finish your sentence-- but I was going to say--

Those are the best sentences.

I was going to say, there's, of course, a rich debate around science, and engineering, and objectivity. But I imagine there would be people among us who would make the case that, if you're going to learn physics, there's carts that go down hills and all that, and then let's send you to the History of Science Department, and you can have a frank exchange of views.

Debate on what a cart is and what a hill is, and [INAUDIBLE]--

All of that kind of stuff. And yet, at the end of the day, the bridge falls or not. And again, you were even saying, at some point, physics kicks in, and there's such a thing as physics-- some would say-- or would they?

I won't tell the historians of science.

Right. But in this--

I mean, it's probably actually STS.

In this field, I think, given that so much of the environment in which we exist, that is constructed by, mediated by the technology, is built by people, even though there's no one person who's like, yes, I built that-- unless, in our era of concentrated power and software, it's like, well, actually it's Mark Zuckerberg right? And like four other people, and here they are.

All right, that's something to talk about on platform regulation. But the fact that it is built by people creates such, at least, a clearer and more obvious, I think, to a larger group of people, way of saying to them, this stuff doesn't have to be the way it is. And in fact, part of when I found my own excitement rising, even in an era where there's less to be-- or at least juxtaposed with the excitement-- a lot to be mortified about, has been to ask not just, here's a phenomenon-- how do we regulate?

What parts of it do we allow or not? And again, who is we here that could credibly be doing that? But rather, what if it acted entirely differently? And I got to say, for me, that has meant maybe a year's long immersion in my own bandwidth into thinking about how you'd construct stuff differently, and in particular, the differences between centralized and distributed.

Now, centralized and distributed is still—it's a network architectural question. It can apply in lots of different areas. I don't know that that's still engaging with critical race theorists, but it is possibly bringing to the table—it's not just, again, how do we assess this and do we like it or not, but what would we build?

How would it look different-- both in the technology and institutionally, the configurations. Because it might be that the technology could support new institutional configurations at a time when it's not just like the tech is letting us down. It feels like everything is letting us down right now. And a lot of the questions of internet governance are reflected larger questions of governance with a capital G.

I think that's right, and I think that-- you already raised this question, but I think close our oneon-one discussion with a, is-- who is the us? Because I think one of the major critiques of theeven my own characterisation of like, "now is a trash fire" at the beginning, is that, for many, many people, it's always been a trash fire.

And I think that, actually, that's-- I looked back on the history of cyberlaw, and looked-- I remember being surprised in myself, as someone who entered the field and roughly 2011, finding that folks have been writing about race and gender online for literally-- since as long as being online had existed. But that that work doesn't feel like it had really penetrated as much of the canon, as you were saying, of cyberlaw until relatively recently, with [INAUDIBLE] work and Ruha Benjamin's work, who's going to be coming and speaking in two weeks, which I encourage everyone to come to.

Jerry Kang, 20 years ago, yes.

So I wonder if you can talk about who you think tech is governed for right now, and what that-how that informs what you do, going forward.

Well, at the risk of generalizations--

I just invited it.

Fair enough.

Tech is produced for who can pay for it. And if there's another area that somebody wanting to be integrative around internet and society would be thinking, it's actually the microeconomics of the space, the-- perhaps even by design-- boring and Byzantine ways in which the act [AUDIO OUT] looking at something triggers-- as I put it in, I think, a piece that has yet to be published--

Spoilers.

--more computational effort to do something with that, click than the Apollo command module had. Again, it's taken out of the fortuity basket. It's like, you didn't even want to look at that. And again, by you, I-- let's see. It's probably some of these mobile phone. Or maybe I've said too much. They're here.

And that microeconomics story is a really important one because, if we're talking about-- and have yet to resolve, again, [INAUDIBLE] what we want the space to look like, it's really hard to just make it so. There was a time [INAUDIBLE] what, 2005, or around that era-- when it was like Wikipedia was the point of a spear that was going to reconfigure how people interact with each other, how knowledge is generated.

And then it became-- it turned out it was just an arrowhead. Where's the rest of the spear? Wikipedia works in practice, but not in theory. And then the next thing was like, and you know what, maybe Wikipedia doesn't work so well anyway, at which point, it's like, now what do we do?

I have not seen myself in more open and welcoming time for people to contribute to this field. I have not seen a time of less certainty about what the canon of the field is. Among my colleagues, I have not seen them as puzzled as they are now-- and I count myself among it-- and that is, in its way, inspirational.

It's a moment—at least in the academy, but I think also in the public at large—of some deep-seated ambivalence about what we're doing, and to be able to make something of that moment, and to integrate mastery of multiple fields, including the microeconomics I was just talking about, with the critical race theory, with the network theory, with the people who can build stuff and say, let's see if it takes off.

Because it's still possible to build pretty much anything you want, and put it online, and see what happens. Let's see what we can build together. It's certainly my highest hope for a research center like ours.

So I need one more thing I should say on that front, which is a kind of aim that was general and present, but feels more specific and urgent, in the wake of the situation going on with MIT-- is having a constellation of centers that are, in the words of David Weinberger, small pieces loosely joined-- something that our center has been working on-- a network of centers around the world-so that you don't have all your marbles in one basket. And as much as you try to integrate under one roof as many views as possible, there should be multiple roofs-- rooves? I don't know.

I think that your point about the sort of interdisciplinarity of these problems and the way in which, traditionally, the law-- the cyberlaw canon has not necessarily been super receptive to that interdisciplinarity is a great point. I think that you're right that the many centers feels like a way to mitigate some of the potential harms of bad actors at any one particular center.

I do think that the-- and I'm going to speak for myself, and not for you, and not for Berkman, or Harvard Law School, or anybody else, really-- I think there was a sort of reckless-- people have

use the term techno-optimism, and I think that's fair. Actually, when I went back and read the conclusion of your book, it, as you may remember, opens with the discussion--

I regret the subsection titled Reckless Techno-Optimism. That was reckless.

The thing I quoted from opens with a section on Nicholas Negroponte, and that the power-generative power, the One Laptop per Child--

Although I think there's some skepticism [INAUDIBLE]

There is some skepticism.

OK.

I will give you that. I think that, for me, what I take away from that is that-- those questions of harm, of the public health model, that just a rights-based model is never going to be enough, because you're always trading off the rights against something. And that, I think, that the-- there's a way in which an early techno-optimist perspective was, we're not just going to like throw--we're not just going to change everything. We're going to change everything, and there aren't going to be any drawbacks, right?

Yes.

That there weren't going to be costs associated, and that's--

Yes.

Well, there goes my phone. And that seems like one of the striking things that we're dealing with now.

Well, I should say, certainly, in my thinking around generativity, there-- one footnote in the book that I might be proudest of-- I know I'm an academic, when I say that--

They're actually endnotes.

[INAUDIBLE] footnote that really-- yes. So the endnote I'm most proud of is talking about-- as I'm extolling the virtues of generativity, and isn't it cool that anybody can do anything and nobody can really stop them-- there's a footnote to, I think, a New Yorker piece called "The kid who built a nuclear reactor in his shed" about, I think, a 12-year-old kid who built a nuclear reactor in his shed.

And it was an endnote to a paragraph. It was like, is there such a thing as too much generativity? And that's even taking into account, of course, a generative model, which is it yields catastrophic success. Bad actors show up, for which my solution was we need a generative defense, rather than expecting somebody from on high to help us.

But separately, before the bad actors show up, is just, when it's there too much generativity? And as the power of the movement of bits has grown, and has become so much more integrated with the physical world, it's starting to move towards the nuclear. And I want to acknowledge that. The [INAUDIBLE] I maybe should end on, though, is--

You keep trying to end it, and I keep--

True.

No, it's fine.

All right, so here's the thing I want to say, though, about risk taking, because risk taking the kind of thing that, on an innovation checklist, or even a how to make an institution, or polity, or anything-- thrive-- checklist, is take risks. And I think it's-- I won't speak for all scholars-- I couldn't possibly, but I'll speak for myself-- in a scholarly mode, taking risks means not just writing a new piece on your existing theory that nails down one more piece of it, or a case study further to my generativity, or-- which we haven't talked about, but could-- information fiduciaries and loyalty by companies backed up by law.

But rather, are you willing to study, and spend time with, and write in areas where, honestly, you're going to be a student again? And when you deploy all of those fancy titles as the very first star footnote to an article indicating the authorial affiliations, and then say stuff that's going to be, quite literally, sophomoric, that's a form of risk taking that, at once, I can see wanting to encourage, get out of our comfort zones, and at the same time, is, when is risk taking recklessness?

Especially when that translates to, let's do this project, and this project carries with it some real risks. It's like something, something, something, Iran, something, something, something. All right, well, they're on an export control list, and there's all sorts of-- but it's like-- and so [INAUDIBLE] a lot of people it's mindful about that [INAUDIBLE] probably [INAUDIBLE] not only trying to be most in touch with one's own compass, but getting radar pings back-- to totally mix my metaphors-- from the compasses of others to do it, and acknowledge when you need to make a course correction.

Thank you. So we've covered a lot of ground, and there's a lot more to cover. And I'm conscious that we, I think, have 20-- roughly 20 minutes left together. So now, I'm going to turn to the audience participation, and not the part where somebody puts up their hand and asks a four-minute question that's actually a comment. Love y'all. I know the community. I'm just saying.

Present company excepted, of course.

Me, ask-- give in-depth comments that are supposed to be questions?

Everybody's [INAUDIBLE] company.

So what I'm going to ask you to do is turn to a person or a couple people next to you, and first, I'm going to ask you to introduce yourself. And then I'm going to ask you to-- either you can take up the core question of what was advertised on the tin of the talk, which I'm not sure we gave, which is, can tech be governed?

Although, I think, in our own way, we have answered it maybe with [INAUDIBLE] law, which is to say no.

No, I think the answer is it has to be. It's that we must assume it can be, and work towards it, while having the humility not to think that we are just running an ant farm here.

OK. Well, we can talk about it too.

Fair enough.

So you can either take up the question of, can tech be governed, which is a big one, or any of the smaller questions that we've embedded, which is like, what fields feel like the most relevant to bring into these discussions going forward, which of these problems feel as most "tackle-able" from an interdisciplinary lens, or just raising other questions that came out.

So I'm going to actually give y'all five minutes to do that, and then I'm going to try to get us back together for a full group conversation. And in the spirit of Berkman, Wikipedia, and formerly the bumblebee, although people now know that how it flies-- I'm going to hope that, despite not knowing whether this is going to work, that it will, and it will result in good conversations. And I'll see you back here in five minutes.

I can tell that there are lots of amazing conversations going on, but I'm just going to continue to speak into this microphone to interrupt you until some of you-- John Penny, I'm talking to you-stop speaking. So one of the great things about the fact that this is the beginning of the year and this is our kickoff event is we actually have lots of time to continue these conversations.

But first, I'm going to be nosy and want to know a little bit about what you're saying in the conversations. And so I think I preceded some-- I won't say volunteers-- I "volun-told" some people that I thought they were going to have interesting thoughts, and that I would enjoy hearing them speak.

And then I will move to a-- maybe a slightly more actual volunteer model. This is academia, so volun-told is kind of how we do things. I'm going to go over here first and ask if there's a group from-- you are not required to have a question. I just love to hear what struck you about your conversation, or any interesting things that came out of it.

Hi. Jess Daniels. It was all very interesting, and we had a good group. A lot of [INAUDIBLE] governance in our group. And several people raised the issue about black women being attacked on Twitter, and as a case study of, how do you govern, given that, and how do you govern and put black women at the center of those who are being harmed?

And one of the other questions was about the imbalance between the resources that corporations have, that are running these platforms, and civil society, who's trying to do some of the intermediary work of governance. So that was where we were.

I know that one of the things that you wrote a lot early about, Jonathan, was IETF, and the rough consensus running code model. I'm wondering, given the group's provocation around the variable resources, if you want to talk a little bit about how you see that changing, that very democratic, in a traditional sense-- meaning it was mostly white dudes-- process.

Well, it kind of gets back to the distributed and centralized point. If we were still in an era in which the biggest architectural decisions about the digital space were being made, say, through the auspices of something called the Internet Engineering Task Force-- and what I love, by the way, about our community is there's going to be people here who are totally still into the IETF and are part of it-- it doesn't have members, but it has people who participate-- and there are going to be people who will be, like IET what?

And back in the day, that was the group that helped to work on and came to consensus-- rough consensus on internet protocols, the basic unknown protocols that anybody would be entitled to build into their software and hardware so that the stuff could interoperate. And of course, what those protocols permitted would have a huge impact-- as we like to say, when you want to sound highfalutin about it-- all the way up the stack to the applications, and to the content, and to the users.

And a decision down here about, OK, is there going to be an identity bit, put bluntly? Well, under a rights perspective, you can think of all the problem is I got to carry my internet license with me, when I'm on the internet. That doesn't sound great. And then, when you think about accountability for harms, it's like, well, I don't know, it was bits that did it, does not sound like a satisfying answer to the problem of abuse.

Again, it's a moving target because we now, while we still operate through protocols blessed by the IETF, and adopted by vendors and others building software, it's-- all right, well, what's happening on Twitter? And Twitter is, I'm using an app, and what I see on Twitter is what Twitter says I'll see. And I got to say, from the point of view of a research center, many of whom our alums are working at Twitter in different departments-- we are--

Some of my best friends are at Twitter.

Right, absolutely.

And how to interact with that corporate sector, because the era in which-- they might be. There have been times when they'd say, all right, we're ready to give you \$1 million, and you know some other folks that could use \$1 million coming from Twitter, and then Twitter can feel better about what it's doing. I don't mean specifically Twitter, of course.

I mean the entire corporate internet sector. They're willing to do that, but then it's like, well, do we want that money? Does that affect our policy recommendations? We, these days, tend not to

take that money. OK, well, then how do you interact with them? Ideally, as peers across the table, and as ones who can, in the true internet spirit of the way to get online is to find anybody already online and just share their access—that is literally how all internet access works, right?

There's not some central internet switching station that puts us all online. It's all by getting online with somebody already online, including ISPs. You can bring people to the table that way, but are they going to share data with us? How do we know the scope of the problem? We could do the Pew survey approach or the ethnographic approach, and hear from people harmed, but you'd want to complement that.

Well, what do you see from the-- what's the right-- the air traffic control tower, the prison tower that is Twitter central looking down on all of the users with a unique view that only they have. And in this current environment, getting them to share data is both inappropriately and appropriately, depending, really hard-- nay, impossible to do.

There were tentative arrangements with some academics to study this stuff, but again, now we all put on our privacy hats. You share data what now? Or you put on your GDPR hat, and you're like-- if you're Europe, you're like you processed what now? That turns out to mean, from a corporate risk perspective-- no, when we say risk taking, that's not what we mean.

Safer not to work with the academics-- or anybody, for that matter. That's a real problem. And I don't have a solution for it, but I find myself still working really hard for the benefit of our center and those-- the research we could do, and the students here, and others, who want to be able to work on real data. How to make that happen, to me, is one of the big almost library-style [INAUDIBLE] our time.

I thank you for that. And I want to actually come back to what this group was talking about before, which is-- bless you-- sorry-- the unique experience, and centering the voices of black women who are harassed on Twitter. I think that sometimes there can be a tendency-- and I've seen this in myself-- to look at marginalized groups as canaries in the coal mine-- like, oh, they saw it first, and then they can predict the outcomes.

And I do think there is a benefit to that, which is that it often does actually require people to engage substantively with the experiences of marginalized folks online, especially of women of color and black women. But the end of the story about the canary in the coal mine is not a positive one. I'm pretty sure that canary dies.

I love how the canary has like a tag on it that says, the future is here, it's just not evenly distributed yet.

Right. The canary in the coal mine is the future is here--

Yes, right.

--not evenly distributed.

Particularly apt with tweets and Twitter, the canary.

So what I want to say there is that I think there-- in our desire, as researchers, and as a center that does do interdisciplinary work and take disparate pieces and put it together, it's so important not to think about that as, oh, what can we gain from this person or what can we gain from this experience to speak to everyone else, but rather to take seriously the idea that each individual person's experience-- the canary has as much right to continue to live-- this metaphor is shitty. I'm going to stop using it. I just swore, and I didn't ask if that was OK. Oh well.

It talks to me about the importance of synthesizing experience and statistic.

Mm-hmm.

There's a real obsession with big data these days, and what we can learn, thanks to new tools and thanks to the data sets-- including learn for the sake of understanding better the parameters-- what's really going on online. But that alone, in the absence of actual experience and being able to hear [INAUDIBLE] may not at all resemble others online, including literally each of our--we're using Twitter, we get very different experiences back from it.

That just seems to be really vital and an important reminder-- I'll just say again-- personally about how to temper the joy of, great a new data set of harms-- this is so cool. It's like, wait a minute. It is productive and useful, but gosh, just stop for a minute and think about [INAUDIBLE]

Well, speaking of hearing from folks, the time gets away from us, as it always does. I'm going to take one last comment, and then I think we're going to wrap up. So I'm going to take it from this group over here, since I so unkindly called out John Penny already. Go ahead.

Hi. Thanks for the wonderful talk. So we are discuss this question from a comparative perspective and the global context, because I come from China, and I'm a visiting scholar here. So I just told Joe and my friend about my research project is Chinese social credit system. So it's more like the Chinese government to use the big data analytic tools and the algorithmic technologies to apply in area-- and that in that area, they will collect the information data from the citizens and give you a scoring record so you will have a credit score.

So they ask me, when we talk about can technology can be governed-- so in China, it can be governed or not-- yeah, I think this is very big and challenging question. I think, because from China's context, it's a little bit different from the Western part, because that technology play much, much more a role in China's development purpose.

So it's [INAUDIBLE] have some relationship with the prosperity with the country. So why do you give more meaning on technology in this sense, so it will make this governance issue more complicated and more challenging? So I think, if we talk about why the technology can be governed, we should first of figuring out what kind of the barriers for this question.

So I think in maybe Asia context or Chinese context, there are several barriers. The first is the knowledge gap, and the second is the awareness of the citizens. Recently, there is optimistic trending, because of the social media-- also the Western socialist media's news. So the Chinese internet users have much, much more awareness of privacy than before.

So now, the agencies who deal with this issue now issue more regulations than before, try to protect the privacy of the citizens-- and also, the pacing problem, because the legislature always chasing from those challenging issues. So this, basically, what we discussed. Thank you.

And it also seems to raise the question, if we're talking about can tech be governed, how do you-who watches the watcher? If you are using the technology to govern, then you have a whole other set of questions associated with that. So I see we're almost at time, and so I want to offer-Jonathan, if you have any concluding points.

Well, yeah, it's both inspired by the last comment and maybe kind of a nice statement of a piece of a research agenda, for which I'd certainly welcome help, which is, as the technology gets more powerful, do we accept that it's going to turn the dial up on control, and then it's just a fight of how to govern it, so that the control is responsible and that the right outcomes happen, if we can agree on what the right outcomes are, et cetera, et cetera? Or is it somehow this kind of Canutian can we just try to push some stuff--

Hold on. I have no idea what Canutian means.

King Canute? No? Well, we're not going to get into that.

OK.

There's no fighting city hall or the waves. Is it, well, actually, let's change the technology to somehow try to put stuff back into the fortuity bag? No one-- gosh, this is now going to be a terrible reference, but here we go-- no one should have the Ark of the Covenant. It should be put into a warehouse never to be seen again. That was--

That's Star Wars, right?

Kendra was trying to get me to say "actually."

I actually it was mostly just doing it for the look on his face, which was like sheer horror.

But right, it's the end of the movie. It's the end of Raiders of the Lost Ark, of like, this power is too great. It's the ring. It's the One Ring. Can we just put some of this crap back into Mount Doom? I don't know the answer, but I think it may be, good luck with that.

Once you reveal there can be a One Ring, and you actually forged one, someone, something's going to want it. And so there's an institutional design question-- how do you distribute that power, or not have one ring-- have many? Well, that didn't work either. But versus, is this too

much power for anybody to have, given what we know, being mindful of history, about how power accretes?

And there is a lot of power in this institution, in this space, spent well or not-- a lot of debate around that. But if you're in this room, you are part of it or proximate to it. And I mean that both for the warning that it sounds like it is, and that I'm trying to take to heart, and for the opportunity and responsibility it represents for us to learn what we can, express what we can.

And through our corner of this university, the Berkman Klein Center, there will be a science fair upcoming where you can learn about the ridiculously broad kaleidoscope of projects taking on so many different pieces of this puzzle, and have a chance to see where you might want to fit into it. And I really invite you to do it. This center contains multitudes, and I hope you'll be among them.

Thank you. Thank you everyone.

Do you want to actually announce here time? Thank you.

The open house is September 24 at 5:00 PM, I think somewhere around here. Hopefully we'll see you there.

Milstein East ABC.