## Greater Good Gathering - Panel IV Connection: Building or Destroying Personal Relationships?

Moderator FRED DAVIE

Panelists
TODD RICHMOND
SORAYA CHEMALY
ROBIN C. STEVENS
ROB PEGORARO

The Greater Good Gathering held on February 6–7, 2019 explored the future of public policy and how best to advance the greater good in the 21st century in light of technological innovation, economic disruption, ideological polarization, and governance challenges. Event co-sponsors included Columbia University School of International and Public Affairs, Columbia Law School, Union Theological Seminary, The Academy of Political Science, and Public Works LLC/Brain Storm Consulting.

FRED DAVIE: Hello and welcome. My name is Fred Davie. I am Executive Vice President of Union Theological Seminary, which is just across the street from here. I am going to start by saying I feel like I am completely out of my element. I am a Presbyterian minister. Across the street, we spend time dealing with issues of meaning and social justice. Esther said in the previous panel that perhaps there should be a panel on government and regulations, as it relates to technology.

I am beginning to feel like this should be a panel on religion, faith, and values as it relates to technology, but that is for another time. Our job here today is to look at the way the world is changing because of the Internet and these new technologies that seem to be emerging daily in various forms and facets. On this panel, we hope to explore, briefly, the impact of technology, as you saw in the film on human interactions and engagements, on everything from dating virtually to sex with robots to artificial intelligence and the production of the so-called useless class to social media and criminal gang activity, for starters.

We are supposed to do all that, in an hour, including having our panelists give us five-minute presentations apiece, talk a little bit among themselves, and then do some questions with you. So, let us get started with our panelists. The first panelist we have here is Todd Richmond. He is director of Pardee RAND Tech & Narrative Lab and Director of USC's Mixed Reality Lab.

**TODD RICHMOND:** Hello. We live in complex times, and complexity requires two main skills. One is abstraction. The other is representation. It is the only way that you can deal with complex problems. Trained as a scientist, I learned those things along the way. I was never explicitly taught them.

It turns out there are fields that do study that. So, I advise you, maybe, to do what I did, which was marry an artist, because it turns out that artists have thought deeply about abstraction and representation. Key to that is a conceptual model. Let me give you two conceptual models for the way that I frame the world, which I think is helpful for thinking about how all of this human, digital, and virtual stuff works.

The first is that technology fundamentally breaks time and space. What that means is we have gone from a world where humans are physically co-located and have real-time communication, to now you can be not physically co-located and have a real-time communication or synchronous communication. As humans, it is difficult, I think, for us to make that transition. We have learned our way around it, but fundamentally we want to be in the same room, at the same time, because then our brain does not have to fill in a bunch of gaps. That is the problem with technology. It gives you many gaps that your mind fills in.

The second conceptual model is that I believe there are no solutions. This is a callback to the last group. The best that we can get in this world is an emulsion. An emulsion is, for instance, oil and vinegar. They do not mix. If you shake them up, they will separate the minute you stop shaking them. That is the way I view humans and digital technology. Humans are analog, in real time. We are born. We live. We die. Digital is, at its heart, zeroes and ones. It is on and off. It is black and white. I consider those orthogonal.

You cannot form a solution. You have an emulsion. As long as you are shaking the human and the analog, meaning I am looking at my phone and checking my computer, it seems like it is all mixed together. But the minute I leave my phone at home—God forbid, I forget it when I go to work—all of that digital stuff actually separates out. What happens when you add egg yolk to oil and vinegar? Mayonnaise. Mayonnaise is not a solution. It is a stable emulsion. That egg yolk has formed a binding agent between the oil and vinegar. What I spend my time doing is looking for egg yolk in the technology world. I believe that story is one of those binding agents. It is the reason that Instagram changed their feed to have stories. Stories is how we engage the world in information. I believe play is another thing.

Addiction goes along with play. Addiction was mentioned briefly. Then the third is policy. It is the reason I first left my chemistry faculty position and went to work in digital media. Now I am at a cinema school, but I have moved to a public policy school because we have technology companies dictating policy, ad hoc, driven by profit, and that is a very dangerous world to live in.

DAVIE: Thank you. Next on our panel is Soraya Chemaly. She is the director of the Women's Media Center Speech Project and organizer of the Safety and Free Speech Coalition, both involved with curbing online abuse. She is also the author of *Rage Becomes Her: The Power of Women's Anger*.

**SORAYA CHEMALY:** Thank you. I am going to do what Adrian said not to do, and drain my cognitive resources by reading from my phone. I am really interested in the direction that our conversations have taken for two reasons. One is we have not talked about money. I do not know how to have these conversations without talking about money.

The second is that I am interested in how technology affects cognition, but I am much more interested in how cognition affects technology. We just saw some clips from a movie about dating apps. I would argue that the logic of dating apps—which sometimes disturbs people who are worried about sex and tech, certainly when you put sex and tech together—is the logic of the Internet, for a variety of reasons. One is that we can see in dating apps, how biases in culture work. In most dating apps, the people who are most rewarded, if you are a man, are white men, with a peak age of 50, which means that, in fact, aging through a dating app is optimized for

white men. The peak age for women is 18. If you are a black woman, you are literally, if not harassed off the app, pretty much left alone.

We can see, in these apps, how racial and gender biases work. Not necessarily because they are uniquely producing these, because they do produce them, but because they reflect them and then amplify them at scale. The other thing about a dating app is that it reflects the degree to which sex is considered transactional and women are considered products and property.

If you are thinking about rape culture, we know that in our culture, rape has never really been considered a human rights violation—regardless of what is happening to you—and that it is legally based on the idea of property. In the United States, black women, historically, could not be raped because they were property. White married women could not be raped because they were their husband's property. The last marital rape law was passed in this country in 1992. There are still many people in the country who do not acknowledge that it is valid. We see, in the sexual objectification principle of dating apps, this quality of shopping, and the quality of sex being transactional, as something you take from someone or get from someone. You were rewarded. In that model, women have historically been the prizes that men are rewarded with.

I do not think that it is a big leap to say that. When products, not just dating apps, are born of the imagination of elite young white men with sexual entitlement, who are being overfunded by older elite white men to experiment with society, we end up with these problems that we are here talking about. The other thing, too, is that we see in these apps a really meaningful shift from learning through text and learning through image.

That is sort of happening in one dimension. We are about to leap dimensions. We are literally going to have these immersive experiences, and we are not talking as a society about what it means to perceive the world in these ways or to derive knowledge about the world around us in that shift. We see that a lot in dating apps, but I would say we see it everywhere. It is also gamified. There are ranks and ratings. It is a toy. You are flipping, and you are being rewarded. That is evident in virtually all of these systems. I use Twitter all the time. I am a journalist. Twitter, for example, verifies people. Now, in theory, verification is a good thing if you are a public figure, but in fact, if you're a woman, verification is not good. It is a visible signal that you have higher status, which literally brings out misogynistic and racist people who would like to put you in your place regularly.

What we see happening on dating apps is a sort of microcosm of what happens in these other spaces. We have a fake distinction between public and private. The technology is dissolving that, and sometimes that is good. For women and women's rights, we have the ability to shine a light on private topics that were mired in shame and not considered family-friendly in mainstream media. We can shed light on those issues. We can talk about rape. We can talk about pregnancy. We can talk about abortion and all of these efforts to destigmatize women's lives. But at the same time, we experience, in the same dissolution between public and private, the fact that our vulnerabilities become institutional vulnerabilities.

I am married. I am not on dating apps. But as a journalist, for example, every morning when I open my inbox, I'm flooded by messages from men I do not know. Those men might be saying hi. They might be sending me videos of themselves masturbating, or they might be threatening to rape me. My experience, as a professional female journalist is radically different, I would argue, from a journalist who is a man. James Fallows was here yesterday. I bet our inboxes are pretty different. When we talk about any of these, whether we are talking about threats to democracy or what this means in terms of our social values, I would argue that what we are really talking about is, who perceives risk? Who decides what is normal and how do we then deal with that risk? One of the biggest issues I think we have is around this issue of identity protective cognition in society.

When I say any of those things, I can say these systems reflect biases. We have market forces. There are hierarchies that we need to deal with. I can use that kind of language. If I go feminist wonky, I can say that we have a white, male supremacist, hetero, patriarchal capitalist society that is exploitative and that is systematized in virtually every aspect of our lives. And we won't use the right language to do that because, when I say that, I am the aggressor. That makes me aggressive. It makes me threatening. When women talk about #MeToo, when the vast majority of women are sharing #MeToo stories, and when we incur huge costs just to navigate the threat of male violence, online or off—it is identity protective for men to deny that, and to say: "You are exaggerating." "It is not as bad as you're saying." "It did not really happen that way." "Maybe he was just joking." There are all of these defense mechanisms because, in fact, we prioritize the protection of masculine ideals over the safety, experiences, and needs of children and women. That is not just true in dating apps. It is true in all of these apps. That is what I think about.

DAVIE: I am sure there will be more to say about that later and probably plenty of questions for you as well. Before we get to that, we will hear from Robin Stevens, who is the Director of the Health Equity & Media Lab at the University of Pennsylvania Nursing School. She is studying the interaction between the online and offline social worlds, and risk behaviors among youth of color. Robin, welcome.

ROBIN STEVENS: My work is at the intersection of new media and technology and public health. That really informs a lot of the way I think about our conversations about social media. I did not come to social media first. First, I was working with adolescents. Typically, I work with black and brown adolescents in urban spaces and think about their sexual behavior, drug use, resilience, and violence. One thing that I can impart to you, which I would really like you to take away, is that their voices have been largely rendered not invisible, but they have been muted. They are invisible in conversations about science, technology and society. Articles and communication studies and research in STS rarely privilege or acknowledge their experiences or voices.

When those are absent, and there is critique of the platforms, it is usually not related to the critiques that young people in vulnerable situations have. When we talk about how Facebook should change, we are not thinking about how it is impacting young people of color. We are not thinking about how it is impacting poor people. We are thinking about how bullying is impacting kids in the suburbs or how much screen time you should allow your kid to have on the iPad while you are cooking dinner.

Those are absolutely valid things to be concerned about with privacy, but they miss what is happening in a huge part of the population. I am making the argument, everywhere I go, that black and Latino youth are invisible and visible at the same time in this space. What do I mean by that? Let me give you some examples. One, if no one else here will tell you, black people have made the internet wonderful with content, videos, community activism, culture, and trends. It is fabulous. What you are seeing now was probably created two years ago by a black LGBT youth. It is not monetized for them. Other people make money off of it, but they are winning at creation on the Internet. We know this.

Over and over, there is virtually little representation of black and brown people in platform development, in the actual digital tech space—which means the money is not ever flowing to the communities who made Vine happen, who made "on fleek" happen, who make every single Fortnite dance that your children are doing. That is one way they are extremely visible, but largely invisible. Another way that black youth are visible, but invisible, is that they have one of the biggest uptakes of social media of any demographic. But again, they are underrepresented in scholarship, and that is on us. This is our world. We do the research, but we are not acknowledging or studying what is happening in their communities. What that means is it is invisible. The ways that this invisibility manifests are, one, in my work, the risks that young people of color face online are not talked about. You sort of spoke to this. For example, my children play NBA 2K on PS4. I ran past a meme that said someone was selling a PS4 box or the box that NBA 2K was played on. It said, "You can fit hundreds of racist 13-year-olds into this box." My kid thought that it was so funny. I was like, wait a minute. I asked, when you play NBA 2K, are you experiencing racism? He said all the time. People call him the N-word all the time because, in this digital space, it is just normative. Everyone is anonymous. I did not even realize that my children were facing this and considered it typical. Obviously, if you are on PS4, this is what happens. I have seen very little public scrutiny or outcry about this. Number two, we have young people who are being very strategic about what they post, and in terms of where they are going online, because people use check-ins to set up fights. There are some risks that we talk about.

The other two things that I think are more than interpersonal are that the young people I work with are framed as at-risk and problematic, and they are very aware of that. When we enter these spaces, we do it to try to treat or intervene to solve problems. We miss how much innovation, creativity, resilience, and strategy young people are using. They use tech in their world in a way that keeps them safe. We do not necessarily need to tell them what to do. We need to ask them what they are doing to navigate their environments.

Finally, I do not think it is trickling down to the kids that I work with that their greatest threats with social media are not that someone in their school is going to find out that they are posting. It is that they are being surveilled by the criminal justice system, and it will be used against them in a court of law. Over and over, we have evidence that blackness is policed in a way, on tech, that is dangerous and problematic. I do not think that is fully clear as people are using Snapchat, facial recognition, and Instagram.

**DAVIE:** Thank you, Robin. Our final speaker is Rob Pegoraro, who describes himself as a free-lance tech journalist.

ROB PEGORARO: Yahoo Finance, USA Today, Wire Cutter—if any of you have a freelance budget, talk to me. If any of you were around here about 62 years ago, you might have run into my dad at Columbia back then. I want to tell a story about experiencing the reality that many social networks are designed without much attention to harm reduction—with the assumption that everyone will have the same experiences as the creators.

That experience was while covering Gamergate, which, for those of you who do not have the displeasure of following this, was basically a made-up controversy over ethics in game journalism. It largely manifested itself as a lot of misogynistic word vomit on Twitter towards people who dared take to task the video game industry's portrayal of various tropes. I wrote a piece unpacking this and explaining how awful Twitter's mechanisms were for avoiding abuse and reporting it. I thought, if I am going to stick myself into this conversation, bad things could happen. I could have a really lousy day on Twitter. I might have my accounts hacked. I spent the day before this post was going to go up on Yahoo setting up two-step verifications on various things and making sure I had strong passwords. What happened the next day was nothing.

If you are a white guy, who appears straight, who writes about Gamergate, the problem you encounter is that people will not shut up about it. Gamergaters will talk endlessly, but there were no insults about my gender, my ethnic background, or my sexual orientation. I thought, wow, this was really different. Perhaps the people who designed Twitter just expected that is how everyone would be treated because, on every social network they had been on before, they were not getting swarmed by people insulting and degrading who they are.

The second story involves something that may be on many of your phones. How many people here have iPhones? I thought so. Can you all check to see if you have AirDrop set to Everyone? That is the wireless file transfer option. It is somewhere in the settings under General. It seems like a great feature. You are at a conference. You want to share your deck with somebody. You beam it over to their phone. Unless they have an Android phone, like me, in which case we are just cut out of it.

I never really thought that it could be exploited badly, until a few years ago. A friend of mine experienced what is called cyber flashing, which is where someone uses AirDrop to send a picture of a tiny part of their anatomy, not their fingertips, and the preview is shown to you automatically. The really creepy part is that this happened to my friend on an airplane, over the Wi-Fi. The flight attendants were unable to find the offender and put him in the cargo hold. Afterwards, I thought, I am going to bet the AirDrop team was a lot of white guys. So, this was not something they had designed for. The flip side of this is, if you look at how social networks built things like login verification and two-step verification to make sure that it is only you using your account, they are very good at that. They hire red teams to try to break the systems they are going to put in place. How can someone attempt to make sure it is you logging into your account and not some hacker in St. Petersburg, Russia?

There does not seem to be red teaming for social network features. They build things with an eye towards their precious engagements, not thinking about how this is going to be exploited. When the people who never bother us online use this, what are they going to do with it? Who are they going to do that to? I spent a lot of time over the last couple of years, after having been asleep about this stuff, trying to bring attention to this and hoping that somebody does something about it.

DAVIE: Thank you. I do actually have a question for you, Todd, to get this started. You talked about disruptions and used the analogy of emotions. Then you talked about binding agents, and you listed several. Given what you have heard about bias in technologies—platforms, apps, etc.—in the potential damage for all of that, what is the relevance to your theories about binding agents to what you have heard? How might that help us address some of these issues that the other panelists have raised?

RICHMOND: First, let me say that it is going to get worse before it gets better. If it does get better. Hopefully, by shining a light on the dark places, it will get better. Normally, how society solves problems is sort of by ferreting out the evil. The reason I say it is going to get worse is augmented and virtual reality. It is coming.

There are those who proclaim that it is an empathy machine. I actually believe the opposite, that it is a false empathy machine. Just because you put on a VR goggle for ten minutes and go hang out with Syrian refugees does not mean that you magically understand their plight, because you can take off the goggles. They cannot. Empathy is something much deeper than what VR and AR can provide. This is, in part, because of my theory that it is still virtual. It is not human and it is not a human interaction. It is an interaction with virtual. That does not mean it cannot be used for good. A colleague of mine, Skip Rizzo, has been using VR in a clinical setting for eight years now to treat post-traumatic stress in returning veterans. It is phenomenal. Technology is agnostic.

You can use it for good, or you can use it for evil. I think anonymity is probably the biggest problem that we have. We have this gold standard of asking if you would say that to somebody in a bar. If the answer is no, then you should not type it in a comment on YouTube. But because of anonymity, we get away with that. We live in a surveillance economy. How many people in here have Alexa or use another voice agent?

You are the product. What we find is that humans are willing to subvert their privacy and their safety for the sake of convenience, and also for the sake of addiction and play. My son is a senior at USC. He is in game programming. He is either writing code or he is playing games for 18 hours a day. That is what he does. Now, thankfully, I forced him to study music and do some other things. So, he has some interpersonal skills. But as we move further and further into the digital epoch, you will have people who can have perfectly 'normal' relationships and never have a face-to-face conversation. Everything gets delivered, and whatnot. I think how we move towards trying to avoid some of the horrific acts is by people becoming hacktivists and becoming active.

The voices have to shout out or at least respond and not remain silent when somebody does something that abhorrent. I think the problem is that, right now, that does not have very much reach because of the anonymity and because it is in the companies' best interest to keep subscribers. If you ban somebody for hate speech or for misogynist behavior, that is hurting the company's bottom line. I think it is some combination, as was noted before. The technologists have to be in the room for the conversation, because the politicians are largely ignorant about technology. The people who are in the public health sector and who are in these areas that provide support to people who run into these problems have to be part of the conversation. I do not have a silver bullet.

Technology is going to solve problems, and it is going to cause more problems, just like it always has. It really is about humans stepping up and doing something about it, even if it is just calling out one person. Maybe people put their phone away for a week. You do not have to be on Twitter. You do not have to be on Facebook. I have been lucky enough to study bass with Victor Wooten, who is with Béla Fleck and the Flecktones. He runs a bass nature camp outside of Nashville. It is bass in nature because part of what we learn is actually getting in touch with the earth, because if you understand nature, you become a better musician, and you become a better human. Maybe it is finding this balance of, how do we keep the parts of technology that work for us and also get rid of the parts that do not? I have stopped reading YouTube comments. I just will not read them anymore because it was making me physically ill. You have a choice.

**DAVIE:** Soraya, let me go back to the dating apps and black women, in particular. We see the issues related to the potential violence and bias that you have outlined. Where are the positives of those dating apps for black women, in particular, but other marginalized populations as well? We can ask Robin the same question when it comes to a black and brown youth.

CHEMALY: Personally, I do not see a whole lot of positives. I want to go back, though, to this idea that the dating apps are a model for this bigger environment. Todd talked about the profitability of harassment. It is really profitable because we are the product. It is not just our images, but our effective engagement. When you harass someone and engage in hate speech or misogynistic bullying, it makes a lot of money. When Leslie Jones was harassed on Twitter, it is possible to turn that harassment into a marketable Twitter moment that says, "Twitter response to Leslie Jones's racist harassment." It just becomes part of the profit machine. That does have to do with regulation. It does have to do with who gets to assess risk. I think we have a lot of assumptions.

Yesterday we talked about democracy, as though democracy had functioned and is now broken, but democracy has never really functioned in the country. It has always been aspirational. For most of our history, most people could not vote. We are still dealing with that issue. I feel the same way about some of the ideals that we have right now, in terms of values and the common good. I do not go to a lot of conferences that are not attended purely by women, where the goal of the common good is to ensure that maybe we can walk around without fear of being

attacked. Maybe we could go for a walk at night. That would be a common good, but we do not have a lot of meetings about that kind of common good.

This issue of anonymity, again, I think speaks very deeply to the difference in our experiences. In fact, most women are attacked online by people they know, not by anonymous malefactors. That is true offline too. Most of the harassment, stalking, and assaults that women suffer come from people they know. Online, when we are harassed, it is much more likely to come from a classmate, a neighbor, the bus driver that we see every day, or an ex-spouse. If your chances of being raped are 1-in-3 to 1-in-5, instead of 1-in-77, then a threat of rape online is perceived differently. One of the issues for me is this quality of emotional resonance. The people making decisions in these organizations are not having the same types of emotionally resonant experiences as the most vulnerable people on their platforms.

So, we have created systems in which we privilege the experiences of the least vulnerable. They established the rules for what is free speech, what is safety, what is threat, and what is reasonable conduct. And the rest of us have to dance around those rules at great cost. That comes to money. Today only 2 percent of venture capital money goes to organizations led by women and less than 10 percent of organizations that have people of color. The really horrific fact, to me, is that most of the people surveyed in venture capital or in Wall Street look at those numbers and pat themselves on the back. They are on the record saying that they are doing a really good job. That is just bizarre. You really have to get to the issue of cognition. Why would someone, who is intelligent and theoretically motivated, make an assumption or a decision like that when we are not doing a good job at all?

We could have really inclusive spaces, where more people are sharing their experiences. The whole industry works on a fast-thinking model, which means experience becomes much more important. If you only have a very narrow band of experience, you are going to be really poor at risk assessment, which is how we ended up with the election. It is entirely possible to have been shocked by Trump's election, but not really surprised. There were people who were shocked and surprised because they just did not see it coming. Do you know who saw it coming? Black women saw it coming. Ninety-nine percent of them did not vote for Trump. The question is, why are our spaces not inclusive? It is because, as everyone has been saying, people have to give up their privilege, and nobody likes doing that.

**DAVIE:** Robin, any positives, in terms of even your own children and how they use technology and social media platforms?

STEVENS: For me, it helps me to think about the digital world as digital neighborhoods. In our digital neighborhoods, we each exist in them. They are different. Some of us have great ones and some of us have really problematic digital neighborhoods. The young people are in them as well. If you have ever spent any time in a neighborhood that has ever been called under-resourced, marginalized, or low-income, and if you ever do any work in those neighborhoods, you know the people who live there will often say they love their neighborhood. The neighborhood is great, but . . .

There is beauty and wonderful community support, often in places that seem like there would be none. In the same way, in the digital space, the digital neighborhoods of the black youth that I have worked with have some amazing assets that we should all be so lucky to have in our neighborhoods—in terms of support, content creation, humor and activism. However, there are also real threats in their neighborhood that they may not create on their own, but have to navigate. Some of the positive things, clearly still come at a cost, though. There are people who are able to connect with each other, who may not have been able to connect in their neighborhood because their neighborhood was not safe. But we also see that that connection comes

at a cost. Typically, when I ask young people how they feel about digital media, they respond that it is a necessary evil. Sometimes they walk away feeling worse but cannot let go of it, even though they do not always feel good after engaging in it. So, it is bitter sweet, I guess.

RICHMOND: If I could just add one thing to keep in mind, though, is that even in the analog world, things have a cost. There is no free lunch. I have seen the same thing with digital communities, where I have met people all over the world. We join on these various online sites around communities of practice or communities of interest. A member died, and I had \$7,000 in PayPal sent to me so that I could give it to the family, from people that I did not even know.

I think that we have to just keep in mind that there is a cost, whether we are analog or digital. How do we keep it in balance? I think we are wildly unchecked, on the digital side, towards the misogynist and the abusive. We are out of whack. Again, it comes down to that, 'would I say this in a bar,' sort of mnemonic that is a little bit easier and a little bit more balanced in the analog.

STEVENS: I want to challenge you a little bit. I think the costs of me in the digital neighborhood are much lower than they are for young people whom, if they say the wrong thing, they might get beat up at school.

RICHMOND: I totally agree. I absolutely agree. There is a generational spectrum, where, as somebody who is a white male, who is 57, I am pretty okay in the digital world. I will just get annoyed, but that is about it. My son, who is 22, I worry a lot more about. The ones that I really worry about are the ones who are teens and even younger—especially the ones whose parents do not play games and are not active in those communities, so they do not know.

Thirty years ago, would you let your eight-year-old kid say: "Hey, I am going to go downtown. I am going to hitchhike. Then I will be back maybe around 4:00 or 5:00 in the morning." We would have said no, but that is exactly what my son was doing in his teen years. Now, I am active in the games. I build games and whatnot. I kind of knew what was going on, but a lot of people do not. That is the real danger, I think.

**DAVIE:** Rob, any signs of hope, from your perspective? Then we will open it up to questions and comments from the audience.

**PEGORARO:** I still do not think that we are doomed. Although, as a journalist, I have to be optimistic at some level. I would say, on Twitter, one thing they have done better is to stop focusing on identifying the bad actor and blocking them, which has been the response of every social network, ever. I am old enough to remember what Usenet newsgroups were like in the 1990s.

It cracks me up when twenty-something tech bros from Silicon Valley repeat every mistake we have made back then. Now it is easier to just say that you can't be replied to by accounts that are new, that just have the default avatar, and that haven't been verified with a phone number, and go after mechanisms than make it easy for bots, trolls, and otherwise useless people to go after you. I think that is a positive step. I guess the quality filter was once only available to verified users. Now everyone has it. I should note one funny detail about this Gamergate piece. I think Twitter verified my account the day that came out. I very much enjoyed biting the hand that fed me.

There are a lot of little changes that you could make. With AirDrop, the fix for that is when you make your phone discoverable via Bluetooth, it is not for all time. It is for the next two minutes. Have AirDrop be 'Everyone' only for the next two minutes. So, you can exchange that

slide deck at the conference. Then it goes back to Contacts Only, or it is off. There is no use for that being open all the time. For the people who use Venmo, having that be public by default is idiotic and abusive. They need to change it, but they still have not.

DAVIE: Thank you all. Let us hear from the audience. Then, as with the last panel, you can respond and react to things that we hear. Are there any comments or questions from anyone in the audience?

QUESTION 1: My question is regarding something that you mentioned earlier about who perceives risk and who decides what is normative. My question is, who is typically in the room when these decisions are being made? On top of that, who should be in that room? We can say women and people of color need to be in that room, but beyond race and gender, what kind of professionals need to be in the room to speak to these issues on a deeper level? Is it people who work in psychological fields? Who are the people who are usually brought in to even start to tackle these questions? In your opinion, who else needs to be in that room?

RICHMOND: Lawyers are in the room. Essentially to assess the company's risk. That is first. In the old days of technology, there were not even the lawyers. It was just the programmers.

CHEMALY: I think it is programmers. I have worked with Facebook, Twitter, and Google. The issue is not even a digital issue, because 93 percent of Twitter's engineers are men. Forty percent to 90 percent of the industry is young men who are either white or Asian. They are doing the programming. They are doing the product design. The industry is not only male dominated in that way, but it is also sex segregated, functionally.

In these companies, a lot, it is the case that products are being built really fast. They are going really, really fast, and they do not have multidisciplinary input from ethicists, philosophers, or just a wide range of people who might be considering harm. Then problems happen, and cleanup squads come in. The cleanup squads are heavily women. They are doing security, customer service, and privacy. There are some great notions of digital housewives and what that means. Facebook reorganized last fall. "Recode" put out an org chart, and there were 15 or 16 men. They were in all these new product roles. There was one woman. I kid you not, her title was Vice President of Integrity.

You see, over and over and over again, that the women are tasked with the trust, the safety, the care and the emotional labor, after the risk has been taken and harm has been shown. That does not have anything to do with the tech. That has to do with the fundamental separate sphere theories of our society. Who do we think can do math in our society? Boys do math. Boys do better at math here. But in Japan, girls do better than American boys do. So, it is clearly not a gender thing.

DAVIE: Should be training people in things other than just doing math? If these are the people who are going to be designing and developing, then there's an obligation on the part of the institutions that are developing them to do it.

RICHMOND: This is part of why we are completely revamping the curriculum at Pardee RAND—acknowledging that technology is changing everything. Our gender balance, in our Ph.D. program, is actually more women than men in the program. I am starting to see that in the sciences as well. So, there is some slow sort of evolution. It will take time for that to build up through the system. The other problem you have is that when things do go wrong, then the companies look to greenwash themselves. Facebook will now have an ethicist in residence, and

they will have an artist in residence. They will basically pay lip service to being multicultural and interdisciplinary. My argument has always been that, in order to solve these problems, you cannot leave the technologist to their own devices, in part, because they are driven by profit.

That is okay. That is what capitalism runs on, but also, a lot of them are not broadly trained. That is why I always argue that artists, musicians, and social scientists actually believe in a liberal arts education, even for engineers, God forbid. The mantra of our lab is "applications and implications." If anybody builds an application in our Tech and Narrative Lab, they have to do a deep dive into the implications, in second and third order effects, of what that application is going to do. We are trying to change it one set of people and students at a time, and make that viral as it goes out. Again, we have a choice in this, but the choice should not just be to bury yourself in your phone and assume it will all get better and that the companies will solve it. The companies exist to make money, they do not exist to make your life better.

QUESTION 2: I have a question, for anyone who wants to tackle it, about this promissory rhetoric around regulation. The fundamental premise is that you can regulate a corporation to do the right thing and that it would be a state that would govern regulation and change how corporations act. That is not the purpose of states, in my understanding. The purpose of the state is to facilitate the capitalist exchange. I worry about that. Can anyone speak to that kind of promissory rhetoric of regulation?

PEGORARO: Just because I write about technology, it does not mean I know how to use it. One thing to watch out for is that a lot of the calls for regulation of social networks these days are coming from, I would not say conservatives, but I would say right-wingers, because the government telling companies how to run their own affairs is not usually a doctrine of conservative economic thought. The problem they seek to solve is that companies, like Facebook and Twitter, are too mean to right-wingers, which seems somewhat silly, given—who is the president again? What does he do on Twitter? That is already politically loaded. So, calls for regulation are liable to get pushed into the direction of ensuring that there is fairness and balance in social networks. A) How are you going to do that? B) Is it going to become a way for whoever is in charge of the government to start controlling what gets amplified on social media? It is a problem, but I do not think, as the token D.C. guy here, that the government is well-positioned to solve it, or maybe should even try to solve it.

RICHMOND: I think the government, though, has a history of trying to regulate technology. It did with automation. You can argue whether it was a success or a failure. I think the problem that we have here is not so much that they are going to have a tough time regulating technology, because they have always had a tough time regulating technology. It is the fact that digital is fundamentally different. What digital does is it scales in a way that we have never seen before.

When you build a factory, there are only so many factories that you can build. When I make an app, I can make an infinite number of copies of that app. That—combined with AI, machine learning, virtual humans, right now—I have the ability in my lab and soon it will be on your desktop, to create a virtual version of any human, living or dead. I can make them do and say anything I want them to, and it will be imperceptible to most people. Humanity has never seen that technological capability before. We need to figure out how to get ahead of that. If you leave it to the companies to decide how to do that, I do not think that is our best approach because, again, it comes down to money, as was said before. It is in their financial interest to do those capabilities.

Government is going to have to regulate this, one way or another. We will do as we did with drones. Drones had no regulation. Then, all of a sudden, drones are flying near airports.

They swung the pendulum to no drones anymore. Then there was a cry from industry that the Russians are going to beat us in drone technology. So, now we have regulations about regulating FAA pilots and whatnot. These are really wicked-hard problems, but again, it is why those who are in the public policy space, at least some of the people, are having conversations like this and trying to move us forward in a thoughtful way. It is really hard.

CHEMALY: Can I just say one thing about that, too? A lot of the work that I do is international. This question of regulation is so tricky because of jurisdictional issues, but really, it speaks deeply to the fact that the technology does not respect borders. We have huge issues with migrants and refugees, but we do not really talk about the migration of ideas and what that means. I personally do not think that government is going to solve this. I really think it is multidisciplinary, multilevel human endeavor that we do not understand.

DAVIE: As a Presbyterian minister from across the street hearing these last two sets of comments, I have just a few concluding thoughts—probably very little to do with the hard stuff of technology. One is that we have to be careful not to make a golden calf of technology, if I can use that phrase, in the sense that this is not something we should be worshiping, but I think society does in all of its dimensions. That is what gets us in trouble in the first place. It is not a god, it is a thing, and we should remember that.

Secondly, I would say that we need the values people in the room. The values people need to be in the room, from the very beginning. The fundamental question that has to be asked is: "What use is this to enabling and enhancing people, and increasing people's value?" Not, "How can we manipulate folks and make a dollar off of people?" How can we make people better with this? If we fail at that, then this thing is going to kill us in its many dimensions, but if we struggle with, "How do we put some parameters around it and use it for good," then it just might, ultimately be used for good. I could do a benediction with that, but I will just say let us stop and move onto the next panel. Thank you.

## ABOUT THE PANELISTS

FREDERICK DAVIE joined Union Theological Seminary in the City of New York on August 15, 2011 as Executive Vice President, where he serves as the institution's chief administrative officer and serves as an advisor to the President for the structure and administration of the executive office, strategic planning, institutional advancement, and vision implementation. Mr. Davie served on President Barack Obama's transition team, performing agency reviews for faith-based and community initiatives, and accepted an appointment by President Obama to the White House Council on Faith-based and Neighborhood Partnerships. Mr. Davie was appointed as chair of the Civilian Complaint Review Board (CCRB) by Mayor Bill de Blasio in April 2017 and is a member of the Mayor's Clergy Advisory Council (CAC). Mr. Davie has also served in a number of leadership roles in public administration for the City of New York, including Deputy Borough President of Manhattan, and Chief of Staff to the Deputy Mayor for Community and Public Affairs, and Chief of Staff to the President of the NYC Board of Education.

SORAYA CHEMALY is an award-winning writer and activist whose work focuses on the role of gender in culture, politics, religion, and media. Her first book, *Rage Becomes Her: The Power of Women's Anger* was named a Best Book of 2018 selection by NPR, *The Washington Post, Book Riot* and *Psychology Today*. A prolific writer and speaker, her articles appear in *Time*, the *Verge, The Guardian, The Nation, HuffPost*, and *The Atlantic*. In 2017, she was the co-recipient

of the Newhouse Mirror Award for Best Single Feature of 2016 for an in-depth investigative report, *The Secrets of The Internet*, and a Wikipedia Distinguished Service Award, for exemplary contributions to the advancement of public knowledge. She is also the Director of the Women's Media Center Speech Project and an advocate for women's freedom of expression and expanded civic and political engagement. She currently serves on the national boards of the Women's Media Center and Women, Action and the Media, as well as on the advisory councils of the Center for Democracy and Technology, VIDA, and Common Sense Media.

ROB PEGORARO writes about computers, gadgets, telecom, the Internet, apps, and other things that beep or blink. You can find him covering policy issues at Yahoo Finance, answering consumer-tech questions at USA Today, offering telecom guidance at Wirecutter and showing up at various other online and (sometimes) print outlets. He has met most of the founders of the Internet and once received a single-word e-mail reply from Steve Jobs.

TODD RICHMOND is the Director of the Tech & Narrative Lab and a Professor at the Pardee RAND Graduate School, as well as research faculty member at the USC School for Cinematic Arts. Richmond is also a musician, visual artist, and self-described "conceptual troublemaker." Early in his career as a chemistry professor at The Claremont Colleges, he incorporated multimedia and web technologies into his teaching and research. That work led him to evolve from his specific focus on chemistry to instead pursue a broader understanding of technology and content at USC. At USC's Institute for Creative Technologies, Richmond led the Mixed Reality Lab and Advanced Prototypes group and has worked in a variety of areas: emerging disruptive technologies for training, learning, and operations; future environments for communication and collaboration; immersive technologies; interactive education; visualization and analytics. He has taught in the USC Marshall School of Business and USC School of Cinematic Arts. Richmond increasingly broadened his scope of interest and expertise, particularly around the unintended consequences of technology. His "applications and implications" mantra led him to move into the public policy realm.

ROBIN STEVENS, PhD, MPH is a health communication scholar focused on achieving health equity in African American and Latino communities. She examines youth risk and health behavior in the context of the digital neighborhood. Dr. Stevens uses digital epidemiology to investigate social media's effects on substance use, sexual risk behavior, and mental health. Her community-engaged research seeks ways to use data science to improve the health and well-being of youth. Dr. Stevens is an Assistant Professor of Nursing at the University of Pennsylvania School of Nursing and the Director of the Health Equity & Media Lab. She received her A.B. from Harvard College, MPH from University of Michigan, and Ph.D. from the Annenberg School for Communication, University of Pennsylvania. She is a Senior Fellow at the Penn Center for Public Health Initiatives and a proud Philadelphian.