

Panel 2: Rendering Visible, Understanding, and Reducing Historical Disparities

Moderators: Elizabeth Mynatt (Georgia Tech) and Alondra Nelson (SSRC & Institute for Advanced Study)

Speakers: David Grusky (Stanford University), Jennifer Richeson (Yale University), Tiffany Veinot (University of Michigan), Suresh Venkatasubramanian (University of Utah)

1

00:03:33.450 --> 00:03:39.630

Beth Mynatt: Good afternoon. I hope everyone had a great 30 minute break and I'm just thrilled to see so many folks

2

00:03:40.500 --> 00:03:47.100

Beth Mynatt: In our virtual audience. We're going to pick up on a number of our discussions from this morning's the first panel.

3

00:03:47.790 --> 00:03:55.230

Beth Mynatt: As we saw folks beginning to grapple with relationships of the information ecosystem and ethics and it's

4

00:03:55.770 --> 00:04:09.120

Beth Mynatt: The implications, especially for long standing questions of trust, long standing questions of disparities as often times the most vulnerable populations are the ones that are exposed

5

00:04:09.540 --> 00:04:23.970

Beth Mynatt: I in these complex interactions between information infrastructure and society and trust and other aspects of it. In fact, that's one of the things that we're going to see in our panel today is we're going to connect to.

6

00:04:24.780 --> 00:04:28.860

Beth Mynatt: The thread around computational social science, but you're going to hear from our other

7

00:04:30.150 --> 00:04:41.430

Beth Mynatt: Our other panelists relationships to other parts of the IT infrastructure in particularly, we'll look at health informatics as well. So enough from me. Good to see folks here.

8

00:04:42.000 --> 00:04:50.880

Beth Mynatt: As before, I'll ask my panelists to please introduce yourself, share your screen and you'll hear the chime as we need to move to the next.

9

00:04:51.480 --> 00:04:58.590

Beth Mynatt: Presentation and reminder to everyone else to please use the zoom chat channel as well as our slack hallway chatter

10

00:04:59.100 --> 00:05:12.900

Beth Mynatt: Channel as a way of posting questions. Commenting to each other and getting us ready for our 30 minute discussion period. So with that, David, I see you and David Gretzky if you would please lead off.

11

00:05:14.070 --> 00:05:20.460

David Grusky: Great, thank you very much. It's a, it's a pleasure to be here. I'll, I'll get right to it by sharing, sharing my my screen.

12

00:05:27.330 --> 00:05:27.630

And

13

00:05:29.940 --> 00:05:32.520

David Grusky: I'm going to be talking about data systems.

14

00:05:34.470 --> 00:05:37.110

David Grusky: And there are two two types of

15

00:05:39.180 --> 00:05:42.900

David Grusky: Data sub questions that are relevant when you talk about data systems.

16

00:05:46.020 --> 00:05:48.630

David Grusky: The first type of question is all about.

17

00:05:52.170 --> 00:06:02.550

David Grusky: What types of data systems are needed for rendering visible disparities? And the second question is, what types of data systems are needed for reducing disparities? And I'm going to address each in turn.

18

00:06:04.110 --> 00:06:11.520

David Grusky: So first off, what types of data systems do we need for the 21st century when it comes to rendering visible disparities and

19

00:06:11.700 --> 00:06:12.150

And if

20

00:06:13.380 --> 00:06:14.640

Beth Mynatt: We're not seeing your slides.

21

00:06:15.540 --> 00:06:17.190

David Grusky: You're not seeing my slides.

22

00:06:18.090 --> 00:06:19.890

Beth Mynatt: We're seeing a beautiful image of you.

23

00:06:20.820 --> 00:06:22.230

David Grusky: Excellent. Now,

24

00:06:24.270 --> 00:06:24.750

David Grusky: Okay.

25

00:06:37.650 --> 00:06:39.750

Beth Mynatt: So we need you to use the share screen.

26

00:06:41.040 --> 00:06:41.700

Beth Mynatt: There we go.

27

00:06:43.140 --> 00:06:45.630

Beth Mynatt: And now in presentation mode.

28

00:06:47.880 --> 00:06:48.240

David Grusky: Good.

29

00:06:48.870 --> 00:06:59.100

David Grusky: Perfect. My apologies. Um, so two types of variability that we would want our data systems to capture

30

00:07:00.660 --> 00:07:05.190

David Grusky: With respect to rendering visible disparities and the first geographic variability

31

00:07:07.860 --> 00:07:16.380

David Grusky: We know that there's immense geographic variability and we know, furthermore, that that it refracts institutionalized disparities in all sorts of ways.

32

00:07:17.340 --> 00:07:24.780

David Grusky: So, for example, most famously Raj Chetty has shown that, that there's much geographic variability in upward mobility.

33

00:07:25.230 --> 00:07:35.130

David Grusky: Across across the neighborhoods with the US and in fact that that that variability swamps the amount of variability that you see across, across rich countries and the amount of upward mobility.

34

00:07:36.540 --> 00:07:40.530

David Grusky: The second key dimension that you'd want your data system to capture is temporal variability

35

00:07:41.190 --> 00:07:50.040

David Grusky: If there's anything we've learned about the 21st century, it's that we're going to have the likely never ending sequence of crises that again refract disparities and important ways.

36

00:07:50.550 --> 00:08:02.430

David Grusky: All we're going to see in all likelihood, many more environmental disasters, many more health disasters, many more political disasters, many more economic disasters and we want our data systems to be able to

37

00:08:02.880 --> 00:08:07.410

David Grusky: Understand what's happening to these disparities as these as these disasters, unfortunately, unfold.

38

00:08:08.730 --> 00:08:18.210

David Grusky: So here's my thesis. It's that the set the country's qualitative infrastructure needs needs a fair amount of help and meeting these two challenges.

39

00:08:18.780 --> 00:08:31.200

David Grusky: But let me talk about the quantitative infrastructure. It's hardly perfect and takes lots of work as well to bring it up to up to up to speed. But, but, nonetheless, one might say it has done a decent job on the rendering physical challenge.

40

00:08:32.400 --> 00:08:32.820

David Grusky: We have

41

00:08:35.250 --> 00:08:45.270

David Grusky: Big Data various types like tax data that allows to capture geographic variability and, in particular, capture disparities reasonably well when linked to other other sources like like census data.

42

00:08:46.290 --> 00:08:56.460

David Grusky: On the temporal variability side we have flash surveys, we have real time, big data that do a decent job hardly perfect but decent, but I want to focus on a zone in which I think

43

00:08:57.510 --> 00:09:10.020

David Grusky: We haven't yet to the same extent risen to the challenge. And that's on the qualitative side and the first point that I want to make here is that it's obviously been a critical part of the country's data infrastructure.

44

00:09:12.540 --> 00:09:16.590

David Grusky: When it comes to exposing and rendering visible disparities to just think about

45

00:09:17.880 --> 00:09:29.160

David Grusky: Evicted by Matt Desmond or Unequal City by Carla Shedd or \$2 a Day by Kathryn Edin. These these these pieces change the conversation by rendering disparities visible.

46

00:09:30.630 --> 00:09:43.560

David Grusky: But I worry about whether the qualitative form is well positioned to exploit all that's extraordinary capacity in the 21st century and there are two problems that I want to, I want to point out here. One is the geographic variability problem.

47

00:09:44.790 --> 00:09:51.060

David Grusky: We typically have one off studies of iconic sites--very, very important, but that makes comparison accumulation difficult

48

00:09:52.410 --> 00:10:03.480

David Grusky: And secondly, when it comes to real time monitoring of crises we typically rely on journalists-- we see to journalists when it comes to crisis monitoring. I'm an avid consumer of qualitative research that journalists carry out

49

00:10:04.200 --> 00:10:13.950

David Grusky: But I think we have some value at that that uh is left on the table because journalists are forced to rely on self selected samples.

50

00:10:14.490 --> 00:10:21.930

David Grusky: they're forced to rely on their hunches about the story that needs to be told, and hence the discovery mission, which is the fundament of the qualitative form

51

00:10:22.410 --> 00:10:28.710

David Grusky: Is to some extent, not fully realized. So I want to talk a bit about the American Voices Project because it, which is an attempt to

52

00:10:29.010 --> 00:10:38.100

David Grusky: To overcome some of these problems. It's currently in the field. And there are five commandments behind the American Voices project that tries to address some of these problems.

53

00:10:39.510 --> 00:10:47.610

David Grusky: The first commandment is that of discovery. Don't just visit iconic sites as important as they are, but instead draw

54

00:10:48.480 --> 00:10:58.140

David Grusky: A sample of all types of neighborhoods in the US, in this case 200 neighborhoods and then draw representative samples of households within those neighborhoods. The second commandment is that of comparison.

55

00:10:59.760 --> 00:11:10.980

David Grusky: So go beyond the usual one off study and you do so by delivering the same protocol across all 200 sites that's making, making comparison accumulation possible

56

00:11:12.120 --> 00:11:14.190

David Grusky: The third commandment is all about inference

57

00:11:14.520 --> 00:11:27.330

David Grusky: Don't assume that the law of large numbers is just something that works for for for quantitative data, it's also relevant for qualitative data and hence you need large sample sizes as expensive as that is that's critical. And so the AVP as a PSID-sized sample.

58

00:11:29.100 --> 00:11:41.400

David Grusky: The Fourth Commandment is about cumulation. Don't allow the data to be used just once, and then and then destroyed instead allow for open access, while at the same time, of course, protecting confidentiality.

59

00:11:42.480 --> 00:11:54.540

David Grusky: And then the fifth the Fifth Commandment is all about real time monitoring. Don't cede that to journalists as important as they are, Ah, but also allow allow for for for qualitative research that is based on a representative samples in real time.

60

00:11:56.070 --> 00:12:03.960

David Grusky: So we're collaborating with Federal Reserve Bank of Boston to deliver real time reports on what's happening in the current crisis, all with a focus on disparities.

61

00:12:04.860 --> 00:12:12.330

David Grusky: So on the rendering visible challenge, my conclusion is the quantitative infrastructure, obviously flawed, needs some work.

62

00:12:13.200 --> 00:12:25.680

David Grusky: Um, but what I really wanted to focus on was the problems that are in play with respect to our qualitative infrastructure. It's lucky that the American Voices project happened to be in the field when the current crisis unfolded.

63

00:12:26.310 --> 00:12:37.680

David Grusky: But we need a standing immersive interviewing panel that allows us to monitor future crises, as they play out. And as they refract and change the way in which disparities

64

00:12:40.050 --> 00:12:41.190

David Grusky: Are in play in the US.

65

00:12:42.330 --> 00:12:44.970

David Grusky: Okay, let me turn now to the second

66

00:12:47.880 --> 00:12:50.520

David Grusky: type of question that's embedded in today's panel and that's

67

00:12:51.060 --> 00:13:06.300

David Grusky: What type of data infrastructure do we need when it comes to reducing disparities, not just rendering them visible but reducing them? And the obvious point with which I want to begin is that this is obviously a center a century of pretty daunting distributional problems--

68

00:13:08.580 --> 00:13:18.720

David Grusky: rising income inequality and transmitted poverty and homelessness persistent racial and gender inequality rising immigration status discrimination declining absolute mobility and on and on.

69

00:13:20.100 --> 00:13:34.050

David Grusky: So I would say this is our Do or Die century. As important as basic science is and needs to continue, we also have to make sure that our data systems are up to the task of taking on these big problems that almost always are about disparities.

70

00:13:35.880 --> 00:13:50.010

David Grusky: So how do you build a problem solving social science with respect to our data systems? Here I think we really need massive upgrades to both our quantitative and qualitative infrastructures and I'll just lay out a bit about what what what I mean here. On the quantitative side,

71

00:13:52.710 --> 00:13:56.130

David Grusky: If you want authentic evidence based policy

72

00:13:57.480 --> 00:14:10.140

David Grusky: That can speak to how to reduce disparities, then you need a big panel data system. Other countries have this and they built their public policy around the evidence because they had big panel data.

73

00:14:11.010 --> 00:14:29.820

David Grusky: We don't have big panel data and yet we have the capacity to build big panels and, indeed, there's an opportunity in play-- The American Op-- There's an effort in play: The American Opportunity study that that seizes that that that capacity by by linking cross sectional data.

74

00:14:32.040 --> 00:14:35.820

David Grusky: And building a panel there by and this is a joint effort between the Census Bureau,

75

00:14:36.840 --> 00:14:47.340

David Grusky: Opportunity insights, and research with a variety of other institutions. The basic idea is that you can link decennial censuses with the households and individuals and decennial censuses and thereby convert

76

00:14:48.540 --> 00:14:54.630

David Grusky: cross-sectional data into battle data and and then and then allow those data to be analyzed in secure facilities.

77

00:14:55.770 --> 00:15:05.520

David Grusky: Once you have that it's a big project and it will take some time, but once you have that, you can use that big panel data to evaluate thousands of programs and interventions.

78

00:15:07.560 --> 00:15:12.090

David Grusky: And lots of social scientists, quantitative social scientists who want to do nothing but figure out

79

00:15:12.540 --> 00:15:18.630

David Grusky: How best to reduce disparities. That's our commitment but they haven't been able to realize that commitment because they don't have access

80

00:15:18.990 --> 00:15:28.650

David Grusky: To big panel data. Only only a small number of social scientists have that kind of access, and we need to open it up, live up to the Open Science promise and allowed the

81

00:15:29.010 --> 00:15:36.210

David Grusky: These interests to be realized. Unleash the interests of thousands of social scientists who want to understand how best to reduce disparities.

82

00:15:37.830 --> 00:15:38.280

David Grusky: So,

83

00:15:40.980 --> 00:15:54.690

David Grusky: Is that enough? I think it's important, but I think there's another side to the equation. I want to convince you that we also have to ramp up our qualitative infrastructure, if we want to have a problem solving social science and social science, they can take on disparities and and

84

00:15:56.040 --> 00:16:02.940

David Grusky: The point here is that the the quantitative infrastructure is really good when it comes to a variable based approach.

85

00:16:03.720 --> 00:16:09.930

David Grusky: What's the drill here? You all know it, but I'll just rehearse it quickly we characterize individuals and social systems as a string of variables.

86

00:16:10.650 --> 00:16:15.810

David Grusky: We determine which variables have causal effects on outcomes like say EITC reduces disparities.

87

00:16:16.230 --> 00:16:23.790

David Grusky: And then once we decide we determine which variables have those causal effects or treatments are all about- are all about manipulating those variables

88

00:16:24.240 --> 00:16:35.580

David Grusky: To generate the desired outcomes. A powerful approach, but would you want to rest your entire bet on on how to how to reduce disparities on that approach alone? Let me try to convince you that you should.

89

00:16:36.900 --> 00:16:41.160

David Grusky: Think about what we do with medical interventions. Do we proceed this way exclusively?

90

00:16:43.770 --> 00:16:46.320

David Grusky: We know when someone presents in say

91

00:16:47.220 --> 00:17:01.770

David Grusky: At a hospital, we don't take the patient's blood pressure, heart rate, body temperature, and then treat each of those separately, you know administer some norepinephrine for blood pressure, a beta blocker for heart rate, and so forth. We don't do it that way, unless it's a true dire emergency

92

00:17:03.000 --> 00:17:13.200

David Grusky: Instead, we proceed holistically. We identify the underlying condition, it might be coronary artery disease. We identify the mechanism behind the condition, maybe inadequate exercise and we intercede at the mechanism.

93

00:17:13.620 --> 00:17:19.380

David Grusky: And the presumption is that when we do that, the correct levels of each of the individual level variables will be restored.

94

00:17:23.280 --> 00:17:27.450

David Grusky: Okay, we're almost done. I just want to say we've done the same thing with social science.

95

00:17:28.080 --> 00:17:39.780

David Grusky: Flexicurity is a holistic, you might not like it, I happen not to, but that's not the point. Flexicurity is a holistic diagnosis of the problem of swift product cycles.

96

00:17:40.770 --> 00:17:55.290

David Grusky: It's that type of approach the AVP makes it possible to to see systems holistically and can be coupled with with quantitative big panel data to deliver a powerful science for solving problems. And I'll leave it at that. Thank you.

97

00:17:57.810 --> 00:18:09.420

Beth Mynatt: Thank you, David. That was terrific and a great way for us to start and I'm glad to see the discussions are going and to the chat channels and I'll ask Jennifer she can pick us up from here.

98

00:18:10.590 --> 00:18:15.240

Jennifer Richeson: Happy to. I can't unmute my video. However, so I need someone on your end to do it.

99

00:18:18.690 --> 00:18:21.630

Beth Mynatt: Let's see. Alexis, you got us

100

00:18:23.160 --> 00:18:23.640

Beth Mynatt: There we go.

101

00:18:26.700 --> 00:18:27.120

Beth Mynatt: Perfect.

102

00:18:27.690 --> 00:18:28.110

Beth Mynatt: Excellent.

103

00:18:28.170 --> 00:18:34.350

Jennifer Richeson: Good morning to those on the West Coast, good afternoon to those of us in the East Coast and everyone in between.

104

00:18:37.980 --> 00:18:49.680

Jennifer Richeson: I am. I'm a social psychologist by training and I guess still have that job. They haven't kicked me out yet. And I want to present some work, arguing that

105

00:18:50.310 --> 00:19:05.310

Jennifer Richeson: In order to render inequality more visible, we need to do more than have more data or different types of data. In fact, I think it's more, it's an addition to a data problem and a technology problem. It's also a psychological problem.

106

00:19:05.730 --> 00:19:14.850

Jennifer Richeson: And just to as a kind of way to think about it. I want to talk a little bit about some work we've been doing theoretical work on what I call what we call the mythology of racial progress.

107

00:19:20.490 --> 00:19:23.100

Jennifer Richeson: And it goes something like this, right, we

108

00:19:24.210 --> 00:19:39.180

Jennifer Richeson: Are off our, our American narrative of racial progress are basically rooted in this sort of general storyline that you know racial equality or tolerance discrimination if we plot that on the Y axis.

109

00:19:39.630 --> 00:19:47.070

Jennifer Richeson: It's a higher numbers are are are less of it. Okay, so more equality, more tolerance, less discrimination.

110

00:19:48.270 --> 00:19:53.430

Jennifer Richeson: What we say we tend to say, is you think that things are certainly better than they were in the past.

111

00:19:53.670 --> 00:20:02.220

Jennifer Richeson: And they're certainly getting better. They're better now and getting there in the future, it's often a narrative, like, well, the past was really bad maybe starts in slavery.

112

00:20:02.610 --> 00:20:20.850

Jennifer Richeson: But then we had the civil rights movement and you know there are these often points of inflection, like the election of Barack Obama and we tend to think of it as something that's achieved at least all of the guardrails are in place so progress is happening naturally and automatically

113

00:20:22.260 --> 00:20:28.050

Jennifer Richeson: And so what we've been arguing is that this mythology around our progress toward racial equality

114

00:20:28.410 --> 00:20:42.540

Jennifer Richeson: Is something that itself shapes our perceptions and misperceptions of the actual current state of racial equality in the nation and those perceptions and misperceptions also shape what we believe is both necessary

115

00:20:43.080 --> 00:20:56.310

Jennifer Richeson: and required to actually achieve equality. And that's true for any number of programs and certainly I want to argue true in this new movement of thinking about technology and its possibilities for increasing equality.

116

00:20:57.420 --> 00:21:15.570

Jennifer Richeson: But first, let me just say a little bit about the this narrative of racial progress and how it might be revealed in our perceptions of racial equality. This is just data from a study I did with

Michael Krauss and others where we just ask people, Americans nationally representative sample,

117

00:21:16.620 --> 00:21:28.440

Jennifer Richeson: Questions about their perceptions of the racial wealth gap at different years. So they would ask something- we'd ask something like for every hundred dollars of wealth accumulated by the average white family,

118

00:21:28.920 --> 00:21:40.920

Jennifer Richeson: How much wealth as the average black family accumulated? And so we'd say okay in 2016? What about 1985? What about 2000? Okay so across 11 different time points.

119

00:21:41.940 --> 00:21:58.650

Jennifer Richeson: And what we saw was something like this. Okay. So on the Y axis is the per- the perceptions of the quality. Right. So again, higher numbers mean perceptions that the the racial wealth gap is basically closed. Okay.

120

00:21:59.760 --> 00:22:16.560

Jennifer Richeson: And what you see is this general linear increasing perception that the ratio wealth gap is all but closed from 1960s to 2016. Of course you would compare this to data on the actual

121

00:22:17.610 --> 00:22:20.790

Jennifer Richeson: wealth gap from federal estimates, and you see this.

122

00:22:22.290 --> 00:22:26.040

Jennifer Richeson: And so we can see from these data is that, you know, people are generally wrong.

123

00:22:26.880 --> 00:22:44.490

Jennifer Richeson: And they're more wrong now right about the current racial wealth gap than they were in the past and revealing this sense that things must have gotten better. So things, we must be in a better position now than we thought we were that we used to be.

124

00:22:46.260 --> 00:22:58.050

Jennifer Richeson: So of course, this is not true. So this misperception these false beliefs of course make it impossible really to do anything about these racial wealth gaps.

125

00:22:58.710 --> 00:23:06.360

Jennifer Richeson: And this, we think, is in part because of our mythology of racial progress. So just to, you know, to turn a little bit. I'm going to skip through

126

00:23:07.560 --> 00:23:17.310

Jennifer Richeson: A lot of that what we call sustaining Miss or the our ideas, our psychology that really allow us to believe in this, despite lots of evidence to the contrary.

127

00:23:18.420 --> 00:23:24.780

Jennifer Richeson: But one important one is our beliefs about the nature of practice. So let me just say a little bit about this.

128

00:23:25.470 --> 00:23:38.730

Jennifer Richeson: So in this mythology, right. So, so one of the myths is that, you know, structural racism is also is a thing of the past. Right, and has now largely been replaced with interpersonal racism.

129

00:23:40.410 --> 00:23:54.120

Jennifer Richeson: And what happens when we think that structural racism is not no longer a problem is that we fail to believe the evidence of disparate impact from policy, even without intent.

130

00:23:54.570 --> 00:24:06.810

Jennifer Richeson: In, you know, we believe we fail to believe that exists right and we allow for we tolerate policies, despite their obvious disparate impact. This is just one voter ID laws, for instance, okay.

131

00:24:07.560 --> 00:24:14.700

Jennifer Richeson: And there's you know quite a bit of evidence. Now this is just data from CNN KFF poll. But actually there's Pew data on this.

132

00:24:15.060 --> 00:24:30.150

Jennifer Richeson: That on average Americans believe, indeed, when asked what is the bigger problem today in the US: structural forms of racism or interpersonal forms, you know, two thirds of Americans of the sample will say interpersonal

133

00:24:32.160 --> 00:24:42.540

Jennifer Richeson: And again, our the extent to which we believe this predicts the extent to which we believe that specific systems, whether it's the criminal justice system,

134

00:24:43.620 --> 00:24:50.010

Jennifer Richeson: Health Systems, education systems, whether we believe they also have specific racial disparities.

135

00:24:51.720 --> 00:25:01.170

Jennifer Richeson: So another version of this or belief about racism that underlies or I think sustains our mythology is that

136

00:25:01.710 --> 00:25:10.350

Jennifer Richeson: Explicit or more overt forms of racism are in the past and have now changed and been replaced by more implicit

137

00:25:10.950 --> 00:25:20.430

Jennifer Richeson: In subtle forms of bias. And it's not that of course implicit bias and subtle biases don't exist and aren't really important to understand and my field has obviously

138

00:25:20.670 --> 00:25:31.800

Jennifer Richeson: Done a lot to promote the role of implicit bias, but it does not suggest that we don't have explicit problems due to explicit and overt forms of bias anymore.

139

00:25:32.490 --> 00:25:44.940

Jennifer Richeson: So this overt racism thing is a thing of the past, this myth sustains our belief in racial progress. And of course, when you look at studies even more recent studies examining

140

00:25:45.570 --> 00:26:05.940

Jennifer Richeson: Evidence of overt racial prejudice. So for instance, searches for the N word studies find that this type of bias actually predicts any number of health outcomes, disparate health outcomes, perhaps even more than the implicit biases of the people who happen to live in those spaces.

141

00:26:07.470 --> 00:26:14.610

Jennifer Richeson: So now that we- we see more and more attention to implicit bias, It's also important to remember that

142

00:26:14.910 --> 00:26:25.200

Jennifer Richeson: it- belief in this as the most prevalent and important form of bias right now leads to outcomes like this when you have an incident in this case,

143

00:26:25.830 --> 00:26:32.280

Jennifer Richeson: The police being called on two young black men sitting in a Starbucks waiting for their friend to show up before ordering anything

144

00:26:32.760 --> 00:26:38.160

Jennifer Richeson: It gets automatically often but certainly readily attributed to implicit bias.

145

00:26:38.640 --> 00:26:47.580

Jennifer Richeson: Even when there's little evidence that it was necessarily due to implicit bias. So in our lab, we've been trying to examine this question of, okay, well,

146

00:26:47.850 --> 00:26:58.320

Jennifer Richeson: These attributions are happening, what are some of the consequences of them? Because, of course, if we're not holding people accountable or institutions accountable for implicit forms of bias,

147

00:26:59.190 --> 00:27:10.320

Jennifer Richeson: Then we certainly aren't going to make any, you know, progress in dismantling it. So here I'm just going to briefly talk about one study, but it's in the paper, where we're examining

148

00:27:11.400 --> 00:27:31.740

Jennifer Richeson: Where we provide information about cases of discrimination, for instance, this one, it's, it's about police-differential behavior of police officers with racial minority versus white citizens and, you know, regular if- there are all these accounts that we use in our studies are based on actual

149

00:27:33.930 --> 00:27:47.580

Jennifer Richeson: Incidents or even studies and it basically shows. So we basically provide this description and then we attribute the disparate behavior. So in this case, treating citizens kind of more harshly with more violence

150

00:27:48.870 --> 00:28:01.860

Jennifer Richeson: To explicit bias on the officers part, implicit bias on their part. And we asked participants then, you know, how accountable, for instance, should the police officers be?

151

00:28:04.680 --> 00:28:17.310

Jennifer Richeson: And so we find in this case is a general reduction of accountability. Right. So the police officer held less accountable if their discrimination is said to be born of implicit bias.

152

00:28:17.730 --> 00:28:35.970

Jennifer Richeson: Okay, so these more automatic forms of bias than explicit, and we replicated this finding across other types of bias, other types of actors. With this case, it's medical doctors demonstrating more negative treatment with patients based on their political affiliations based on age.

153

00:28:37.740 --> 00:28:48.030

Jennifer Richeson: And if you look across these studies, you just do a meta, a mini meta analysis- what you find is that this accountability effect is small but it's actually quite robust

154

00:28:48.780 --> 00:29:04.050

Jennifer Richeson: And the somewhat smaller but still robust significant effect on punishment, meaning people punish the those less severely when they're discrimination is said to be due to implicit versus explicit bias.

155

00:29:05.970 --> 00:29:14.040

Jennifer Richeson: So unconscious bias is actually often a really feeble excuse for the discrimination we see. There's lots of evidence in the accounts of

156

00:29:14.310 --> 00:29:27.870

Jennifer Richeson: Explicit bias, but it's the one that we go to, we think in part, because of this story we have about the causes and meanings of discrimination in our current moment. Okay, but it seems to be an effective excuse

157

00:29:29.550 --> 00:29:37.470

Jennifer Richeson: So the last one I want to talk about is one that we've been considering more recently, and that is this belief that sort of decisions are- be better

158

00:29:37.830 --> 00:29:50.010

Jennifer Richeson: Made by technology, especially decisions will be less biased if it's made by, you know, technology or AI are than humans. OK, so the technology will save us as our new sustaining myth.

159

00:29:51.060 --> 00:29:56.460

Jennifer Richeson: And obviously there's awesome evidence that this is not true, even by people on this call.

160

00:29:57.330 --> 00:30:11.970

Jennifer Richeson: And we started to ask, Well, you know, who's to blame for when algorithms discriminate? Right, we see that there are these discounts of attribute of accountability for implicit versus explicit bias. Do we see something similar for automated discrimination?

161

00:30:12.480 --> 00:30:23.790

Jennifer Richeson: So here, we did a very similar set of studies, I'll just present one, where we talk about a case of mortgage lending, discrimination in the mortgage lending enterprise which is attributed to one

162

00:30:24.870 --> 00:30:25.320

Jennifer Richeson: Bank.

163

00:30:26.790 --> 00:30:27.210

Jennifer Richeson: In this

164

00:30:29.640 --> 00:30:39.390

Jennifer Richeson: And just to skip ahead either explicit bias, implicit bias, or algorithmic bias. And what we find is that replicating our past work, you see

165

00:30:40.080 --> 00:30:54.990

Jennifer Richeson: Less perceived accountability for implicit bias versus explicit bias, okay, when the bank manager was said to discriminate based on his explicit versus implicit bias. But what about when there's an algorithm, and the bank manager just uses the algorithm?

166

00:30:56.400 --> 00:31:00.690

Jennifer Richeson: You see there's even less accountability attributed to him. Okay.

167

00:31:02.370 --> 00:31:09.630

Jennifer Richeson: So just to close, I just want us to think carefully about, you know what, not just what data we're producing

168

00:31:09.930 --> 00:31:18.450

Jennifer Richeson: But what are people doing with the data? How are they thinking about it? Because I think we're going to need both to consider both of these facets, in order to actually render

169

00:31:18.780 --> 00:31:29.550

Jennifer Richeson: The, the inequality, the disparities visible and to usher in any type of efforts to dismantle the systems that put them in place or to readdress them. Thank you.

170

00:31:31.110 --> 00:31:47.640

Beth Mynatt: Thank you, Jennifer. That was terrific. And I think at least certainly by the volume of conversation we've got going on a lot of interesting questions are being raised. So I think Tiffany, you're also going to pick up on a number of these seems so I'm going to pass it straight to you.

171

00:32:03.150 --> 00:32:04.470

Tiffany Veinot: Making it difficult for me to change.

172

00:32:07.980 --> 00:32:09.300

Tiffany Veinot: Can you see my slides right now.

173

00:32:09.660 --> 00:32:10.710

Beth Mynatt: Yep, perfect.

174

00:32:11.130 --> 00:32:20.820

Tiffany Veinot: Wonderful. Hi everybody, my name is Tiffany Veinot, and I'm a professor and associate dean at the School of Information and School of Public Health at the University of Michigan.

175

00:32:21.210 --> 00:32:30.660

Tiffany Veinot: And I'm also a director of our community health informatics lab and a founding member of our Masters of Health Informatics Program, which is, in its core, interdisciplinary

176

00:32:31.920 --> 00:32:38.040

Tiffany Veinot: So I'm going to talk to you today about health disparities. I think it's a phenomenon that many of you will be familiar with, if not most of you.

177

00:32:38.400 --> 00:32:48.510

Tiffany Veinot: But essentially, it can be measured by looking at various forms of inequity with regards to health, ranging from disease prevalence to mortality and survival rates.

178

00:32:53.580 --> 00:32:54.780

Tiffany Veinot: This is not advancing

179

00:32:57.330 --> 00:33:07.410

Tiffany Veinot: Okay, so we know that there are a number of health disparity populations. And it really depends on the indicator, but we do know that people's health is highly correlated

180

00:33:07.740 --> 00:33:24.780

Tiffany Veinot: With their socioeconomic status, their race or ethnic status, whether they're women or men, depending on the indicator rural and urban residents, LGBTQ people, and people with disabilities are all disparity populations, depending on the health indicator in question.

181

00:33:26.400 --> 00:33:37.470

Tiffany Veinot: And we know that a lot of the things that we have done historically to try to address health disparities or health issues in general have actually been characterized by what we

182

00:33:37.800 --> 00:33:46.470

Tiffany Veinot: Call intervention generated inequality. And this is when interventions disproportionately benefit advantaged groups and one of the most

183

00:33:47.190 --> 00:33:54.030

Tiffany Veinot: obvious examples of this are all the various anti-smoking campaigns which have taken place since the 1950s

184

00:33:54.810 --> 00:34:08.400

Tiffany Veinot: In which we've basically seen that people with higher levels of education are quitting smoking at a much faster rate, creating a- an education-related disparity in smoking where none existed before.

185

00:34:10.470 --> 00:34:28.770

Tiffany Veinot: I'm arguing today that health inequalities related to intervention so IGI or intervention-generated inequalities can emerge at any of four stages of an intervention cycle. And we can see that in each of these stages we might see a- how baseline health inequality can be worsened

186

00:34:30.360 --> 00:34:36.480

Tiffany Veinot: So one of them-- the beginning stage would be access to technology. And this is something that I think we're seeing

187

00:34:37.140 --> 00:34:48.660

Tiffany Veinot: very acutely now in the COVID-19 pandemic era where we see that so many of our-- so much of our lives have moved online but technology access is differential so

188

00:34:49.290 --> 00:34:59.190

Tiffany Veinot: The Pew data that I've shared here shares different information, information about socioeconomic status specifically income and technology ownership and we see that

189

00:34:59.610 --> 00:35:06.420

Tiffany Veinot: There's more use with regards to mobile only access to the Internet in lower income populations.

190

00:35:06.960 --> 00:35:20.160

Tiffany Veinot: And we also see that not only do-- are there particularly issues with regards to having devices to begin with, but also quality of Internet access and the kinds of technologies that people have might vary.

191

00:35:20.550 --> 00:35:29.970

Tiffany Veinot: And as a result, there may be a need for us to be looking at technologies that function on older devices if we're thinking about disparities.

192

00:35:30.480 --> 00:35:43.590

Tiffany Veinot: And one of the areas in which we, I think, we see this very acutely now is in the massive transition to online virtual care as a part of the COVID-19 pandemic. Many of these implementations have rolled out overnight.

193

00:35:44.550 --> 00:35:50.760

Tiffany Veinot: And I've had difficulty with regards to access for low SES and other populations.

194

00:35:52.500 --> 00:36:02.880

Tiffany Veinot: We also see that, historically, there's been major disparities, with regards to uptake when we're looking at technology. So in the area of patient portals, which are

195

00:36:03.720 --> 00:36:15.570

Tiffany Veinot: Patient facing electronic health records that are a part of healthcare organizations, at this point, there have been over 100 studies now that have shown disparities in uptake of these technologies

196

00:36:16.140 --> 00:36:25.590

Tiffany Veinot: Related to rural residents' race and socioeconomic status, age, and number chronic conditions. So this is a

197

00:36:25.920 --> 00:36:34.050

Tiffany Veinot: pervasive problem. And this particular study that I'm sharing the results from here is based on a national survey (HINTS) that looks at

198

00:36:34.500 --> 00:36:46.230

Tiffany Veinot: uptake of a patient portal in the previous year. And we see those significant relationships in this particular study, but again this has been reproduced over 100 times now.

199

00:36:48.840 --> 00:37:06.600

Tiffany Veinot: We also see that technologies are can might be used differently depending on people's socio demographics. So one of the more enduring findings across multiple studies now is that when we're looking at patient facing consumer health technologies we very often see

200

00:37:07.710 --> 00:37:13.410

Tiffany Veinot: A type of persistence that is greater in people with higher levels of education.

201

00:37:14.100 --> 00:37:26.310

Tiffany Veinot: So this has been found in interventions related to mental health, smoking, alcohol consumption, pediatric care, physical activity, and nutrition, so

202

00:37:26.820 --> 00:37:38.880

Tiffany Veinot: All of these that I presented here are studies in which they found that people with lower levels of formal education dropped out earlier, and therefore did not persist in the intervention.

203

00:37:39.660 --> 00:37:47.550

Tiffany Veinot: There might be a number of reasons for this, ranging from people having many competing demands in their lives to usability challenges

204

00:37:48.060 --> 00:38:02.040

Tiffany Veinot: With technologies which are exacerbated when there are health literacy challenges, but this is, I think, something that is really important because it's very difficult to benefit from a digital intervention if you don't persist in using it.

205

00:38:04.500 --> 00:38:13.680

Tiffany Veinot: And the last stage of the intervention cycle and which we might see that this kind of inequality emerge (interventions inequality) is

206

00:38:14.010 --> 00:38:20.010

Tiffany Veinot: Related to effectiveness. So effectiveness differences might be found because of those earlier

207

00:38:20.460 --> 00:38:34.680

Tiffany Veinot: differentials that I talked about in terms of access, uptake, and adherence. But then we also see that depending on the technology and it- the way it's designed and the way that it's implemented, we do see differential

208

00:38:35.160 --> 00:38:47.730

Tiffany Veinot: Impacts with regards to health equity. So in the area of clinical technology, so we're thinking about clinical informatics the areas of things like electronic health records decision support systems, etc.,

209

00:38:48.360 --> 00:38:55.950

Tiffany Veinot: Theoretically speaking, one of the ways in which we might try to address disparities, a way that technology could theoretically help us would be

210

00:38:57.000 --> 00:39:09.870

Tiffany Veinot: harkening back to the earlier talk. We could try to reduce bias. So we could, for example, try to make more things default. We could try to prompt actions in particular situations we could try to

211

00:39:10.200 --> 00:39:20.190

Tiffany Veinot: Prompt providers to use self regulation capabilities in order to improve outcomes. So these are different ways that we could try to achieve,

212

00:39:21.090 --> 00:39:31.500

Tiffany Veinot: To reduce disparities with regards to the technology. And looking at the example of diabetes care, which is a condition in which there are significant disparities

213

00:39:31.890 --> 00:39:38.670

Tiffany Veinot: already, we look at some of the work related to clinical reminders with regards to diabetes care.

214

00:39:39.150 --> 00:39:50.040

Tiffany Veinot: We see that in studies that have looked at race and gender related equity effects, there have been three studies that have looked at equity related issues in these areas, and we see that

215

00:39:50.460 --> 00:39:58.890

Tiffany Veinot: There have been mixed effects. So one study found it to favor disparity groups. There are also studies have found that there was no effect.

216

00:39:59.610 --> 00:40:10.200

Tiffany Veinot: We also saw that- see that with regards to prompting treatment actions, the results have been neutral or mixed. And there's been no impact on intermediate health outcomes in that they've only been looking at process outcomes.

217

00:40:12.660 --> 00:40:28.020

Tiffany Veinot: If we look at the idea of default actions as a potential way to try to reduce disparities in healthcare, we could look at things like order sets or care pathways as a way to try to reduce bias. So

218

00:40:28.860 --> 00:40:35.550

Tiffany Veinot: Here we see a bit more of a positive story. We see positive intervention effects for targeted interventions

219

00:40:35.850 --> 00:40:46.680

Tiffany Veinot: In which providers are asked to put more energy into working with disparity groups. So in one case, this was South Asian immigrants and another was Cambodian immigrants and refugees.

220

00:40:47.040 --> 00:41:00.030

Tiffany Veinot: And both of these studies which were created at the practice level, there was a positive effect with regards to healthcare process related, as well as in the second one, there were effects related to

221

00:41:01.380 --> 00:41:03.840

Tiffany Veinot: More diagnosis of depression and PTSD.

222

00:41:06.690 --> 00:41:17.010

Tiffany Veinot: And then if we look at interventions related to audit and feedback, which is a major class of interventions with regards to healthcare as a way to try to prompt quality improvement,

223

00:41:17.580 --> 00:41:24.480

Tiffany Veinot: Very, very few studies have ever looked at any equity issues and the one that I was able to locate that did

224

00:41:24.990 --> 00:41:35.880

Tiffany Veinot: Was one which favored advantage groups so it was found that whites benefited more than blacks, white non-Hispanics benefited more than Hispanics and low SES people

225

00:41:36.480 --> 00:41:53.580

Tiffany Veinot: Benefited less than high SES people. Now this one is a descriptive study at 198 primary care practices, looking at health outcomes. And I think that this makes it clear that it's quite possible for there to be unintended outcomes with regards to clinical interventions.

226

00:41:55.380 --> 00:41:59.910

Tiffany Veinot: So in conclusion, I want to argue and assert strongly that

227

00:42:00.240 --> 00:42:12.180

Tiffany Veinot: Health technologies do pose a risk of intervention-generated inequality and I've outlined how they might emerge at four different stages and shared some examples with you related to internet access,

228

00:42:12.690 --> 00:42:20.370

Tiffany Veinot: related technologies, internet quality, patient portals, consumer facing interventions and clinical informatics interventions.

229

00:42:20.910 --> 00:42:28.650

Tiffany Veinot: And we see that it is possible for there to be positive equity effects. We saw that in relation to the targeted interventions for immigrant populations.

230

00:42:29.070 --> 00:42:43.950

Tiffany Veinot: But we also very often see some form of inequity. And I would argue that we don't always understand why this emerges or how to effectively prevented and we don't know enough about how to use technology to enhance health equity.

231

00:42:45.630 --> 00:42:55.230

Tiffany Veinot: So my recommendations would be that I believe we need more collaborative research and I think that we need to involve health disparity communities themselves more

232

00:42:55.560 --> 00:43:04.350

Tiffany Veinot: And in particular, I think we need funding mechanisms that permit the meaningful engagement of nonprofits and marginalized communities in research.

233

00:43:04.770 --> 00:43:11.520

Tiffany Veinot: And I think the community based participatory research model offers a really excellent model and i- i think i would say that

234

00:43:11.910 --> 00:43:19.260

Tiffany Veinot: We probably need to change some of our funding mechanisms. I can point to an NSF grant that I have in which it was actually impossible

235

00:43:19.530 --> 00:43:27.840

Tiffany Veinot: To find community based involvement as well as fund everything else that we needed to do in the project. So we need some mechanism for that.

236

00:43:28.470 --> 00:43:34.290

Tiffany Veinot: I think we also need more joint efforts with regards to technology design and implementation.

237

00:43:34.890 --> 00:43:41.400

Tiffany Veinot: And systematic study of equity effects at each of these four stages with some comparisons of approaches. So, for example,

238

00:43:42.090 --> 00:43:53.610

Tiffany Veinot: Do we find that universal interventions that focus on removing barriers are better or worse than those that target disparity populations? I don't think we know about what general strategies work.

239

00:43:54.240 --> 00:43:58.440

Tiffany Veinot: And I think we need to understand it- differential impacts looking at different groups.

240

00:43:59.130 --> 00:44:06.840

Tiffany Veinot: And specifically, I think this is all the more important when we're looking at the COVID-19 pandemic. When we have so many health technologies

241

00:44:07.110 --> 00:44:15.360

Tiffany Veinot: That are increasingly playing a role in virtual care and many of the face to face services upon which people have historically relied have been withdrawn,

242

00:44:15.690 --> 00:44:32.610

Tiffany Veinot: And that makes the access to these technologies and effective use of them all the more important. And with regards to some

specific recommendations I want to highlight a workshop report that came out of a Computing Community Consortium Workshop

243

00:44:33.720 --> 00:44:42.600

Tiffany Veinot: That took place in 2017. This was a workshop involving more than 50 individuals from the fields of behavioral medicine,

244

00:44:43.350 --> 00:44:47.400

Tiffany Veinot: Health Disparities, Health- Health Informatics, and Computing.

245

00:44:47.880 --> 00:45:01.350

Tiffany Veinot: And this lists a number of recommendations with regards to funding research to try to address disparities. I'll also highlight that Katie Siek who is on this, at this meeting as well, co-chaired this meeting as did

246

00:45:01.980 --> 00:45:12.780

Tiffany Veinot: Beth Mynatt who is facilitating our work today. Also, I just wanted to share with you this particular screen. I think that this is a very nice summary of some of the

247

00:45:13.470 --> 00:45:28.230

Tiffany Veinot: ongoing challenges that we face in trying to conduct research with marginalized populations in the health domain and some suggested solutions that we could try to address with regards to funding opportunities and mechanisms and I will leave this on the screen.

248

00:45:29.670 --> 00:45:32.040

Tiffany Veinot: If you, if we have questions. Thank you.

249

00:45:33.570 --> 00:45:44.760

Beth Mynatt: Thank you, Tiffany. And for those of you who are screen capturing as quickly as you can. This is a reminder that our- that the speakers presentation slides are also available to you on the website in PDF form.

250

00:45:46.230 --> 00:45:53.520

Beth Mynatt: Again, fantastic presentation. Really love the questions that are being raised, and I'm going to ask

251

00:45:54.990 --> 00:46:00.390

Beth Mynatt: If Tiffany stop sharing the screen because Suresh is going to come in and be our closing panelist.

252

00:46:11.460 --> 00:46:12.720

Suresh Venkatasubramanian: All right. Can you all hear me?

253

00:46:13.260 --> 00:46:13.620

Yep.

254

00:46:14.670 --> 00:46:14.790

I'm

255

00:46:17.550 --> 00:46:20.760

Suresh Venkatasubramanian: Trying to get into full screen mode and my laptop is thinking about it.

256

00:46:21.930 --> 00:46:24.420

Beth Mynatt: It's considering it. You're in Presenter view just

257

00:46:24.420 --> 00:46:25.140

Beth Mynatt: flip the views.

258

00:46:26.070 --> 00:46:30.450

Suresh Venkatasubramanian: Yeah, actually don't know how to do that. Let me hold on a sec. Oh, I think I

259

00:46:35.490 --> 00:46:35.850

Suresh Venkatasubramanian: Can

260

00:46:36.060 --> 00:46:39.150

Suresh Venkatasubramanian: Do. There you go. Well, thank you all for having me here.

261

00:46:40.350 --> 00:46:47.730

Suresh Venkatasubramanian: I appreciate the chance to talk with you all. This is a topic that's near and dear to my heart because of the work I've been doing and my attempts to sort of

262

00:46:48.450 --> 00:46:57.030

Suresh Venkatasubramanian: Learn about, from a CSI, all the ways in which social scientists think about the world and society at large. I'm going to

263

00:46:57.930 --> 00:47:10.560

Suresh Venkatasubramanian: Rather than give a broad overview of some of the thoughts I've had on this matter, we're actually going to go deep into two specific case studies, if you wish, of work that I've done and try to draw some sort of larger insights from it.

264

00:47:13.500 --> 00:47:18.750

Suresh Venkatasubramanian: I don't know if I would call this a qualitative analysis of my research on what I'll do, I'll let others decide that

265

00:47:19.050 --> 00:47:31.920

Suresh Venkatasubramanian: But I will let me start with this. So I want to talk about two kinds of disparities and the first kind of disparity I want to talk about is disparities in representation. So this was inspired by a wonderful talk that Kate Crawford had given at the NeurIPS machine learning conferences.

266

00:47:34.530 --> 00:47:43.920

Suresh Venkatasubramanian: Oops, sorry. Yeah, a few years ago where she was trying to compare and contrast the work in algorithmic fairness around what she called harms of allocation.

267

00:47:44.550 --> 00:47:48.150

Suresh Venkatasubramanian: The idea of looking at how decisions might affect different groups differently.

268

00:47:48.570 --> 00:47:54.870

Suresh Venkatasubramanian: And all the research that has been done on coming up with metrics for unfairness and skew in decision making.

269

00:47:55.200 --> 00:48:01.740

Suresh Venkatasubramanian: And then she made this very important point that none of this research really speaks to another important problem, namely harms of representation

270

00:48:02.310 --> 00:48:11.790

Suresh Venkatasubramanian: This is important because from a, from a technology point of view, we often sort of take data of people and represent it in some way and the representations themselves are learned representations

271

00:48:12.270 --> 00:48:18.540

Suresh Venkatasubramanian: And how we learn those representations itself can cause harm in a way that is hard to quantify because there is no actual decision being made.

272

00:48:18.930 --> 00:48:28.920

Suresh Venkatasubramanian: So, for example, she brought up the idea that notions like stereotyping of groups, ex-nomination, under-representation, and denigration are examples of things that can happen when you represent people

273

00:48:29.400 --> 00:48:40.290

Suresh Venkatasubramanian: For downstream analysis by a system in a way that is skewed. And so this sort of inspired the question that I've been pondering since then, how do you identify and measure disparities in representation?

274

00:48:41.580 --> 00:48:43.830

Suresh Venkatasubramanian: So there's been some work on this in the sort of

275

00:48:44.250 --> 00:48:54.690

Suresh Venkatasubramanian: Mostly in the natural language processing field. The idea of looking at bias in learned representations and how we might correct it. So one of the classic examples of many of you heard of series of papers that developed this

276

00:48:55.080 --> 00:49:02.220

Suresh Venkatasubramanian: Was this idea that if we take words in a corpus- text corpus and you embed them as we do in sort of some high dimensional space.

277

00:49:02.610 --> 00:49:15.750

Suresh Venkatasubramanian: Then by looking at where the points are looking at in the space, you can infer some sense of bias, in this case a bias towards assuming that a doctor must be male and a nurse must be female by looking at the way the words are embedded

278

00:49:16.410 --> 00:49:25.440

Suresh Venkatasubramanian: And so there's been a lot of work and trying to understand the way in which the geometry of the representation encodes some kind of bias, unstated unclear bias.

279

00:49:26.430 --> 00:49:33.420

Suresh Venkatasubramanian: But there's been also follow up work that shows that geometry as a definition of bias isn't quite enough because

280

00:49:33.810 --> 00:49:42.420

Suresh Venkatasubramanian: Merely looking at the representations in the in the sort of learn space doesn't really give you a full indication. And in fact, they often hide our true forms of bias.

281

00:49:43.050 --> 00:49:49.050

Suresh Venkatasubramanian: And in a sense of what you need to do is go back to the original sources of the way people are

282

00:49:49.890 --> 00:49:56.760

Suresh Venkatasubramanian: Represented in biased ways in, in sort of the source material in text or in media in general. And if you take one example of this

283

00:49:57.270 --> 00:50:05.160

Suresh Venkatasubramanian: so stereotyping, which came up earlier in Tiffany's talk as well, there are many different ways one can define stereotyping. One definition that we are looking at from the

284

00:50:06.030 --> 00:50:12.810

Suresh Venkatasubramanian: Handbook talks about associations and beliefs about the characteristics and attributes of a group of its members that shape how people think about and respond to the group.

285

00:50:13.590 --> 00:50:20.940

Suresh Venkatasubramanian: And then you can think about what a mechanism for stereotyping might be. It's a tendency to assign characteristics to all members of group based on stereotypical features shared by a few

286

00:50:21.990 --> 00:50:31.560

Suresh Venkatasubramanian: So now if you say, well, if this is a way in which you can think of an essentially a cultural attack on representation in a way that people's representations are modified or distorted

287

00:50:32.010 --> 00:50:38.640

Suresh Venkatasubramanian: in, in media in text and video and film, how would you try to capture this? So, this is so in

288

00:50:39.090 --> 00:50:50.310

Suresh Venkatasubramanian: This has also been looked at in the psychology literature. There's been some interesting work asking how people tend to absorb stereotypes of what other groups and that tends to be in the same way as described that essentially

289

00:50:51.060 --> 00:50:59.550

Suresh Venkatasubramanian: When we're thinking about this is that stereotyping is a process by which groups experience non-uniform variance reduction. Now this seems, maybe, maybe a little bit too mathy,

290

00:50:59.910 --> 00:51:09.990

Suresh Venkatasubramanian: But what you're basically saying is that you can imagine stereotyping as a way in which you don't allow one group to express its full variation, whereas another group is allowed to do so.

291

00:51:10.800 --> 00:51:19.470

Suresh Venkatasubramanian: And once you have that formalism, you can start trying to ask questions like, is there, can you look at unusual patterns and data that may be a result of stereotyping?

292

00:51:19.950 --> 00:51:31.320

Suresh Venkatasubramanian: And even if there are ways to correct for it and you can show that this kind of effect, this attack on the data, will itself cause problems and downstream costs, things like classification or clustering, or what have you. So in other words, distortions,

293

00:51:32.070 --> 00:51:45.390

Suresh Venkatasubramanian: Understood sort of in a social context, can once formalized in some way actually have a measurable effect on decisions in a way that you would not be able to appreciate if you weren't actually looking for the way representations are distorted.

294

00:51:46.830 --> 00:51:54.180

Suresh Venkatasubramanian: So that's one example, and the sort of the broader research effort here is to understand our different forms of representation attacks on

295

00:51:54.600 --> 00:52:06.690

Suresh Venkatasubramanian: The source media, the source data used to build learned representations can actually distort the representation themselves. So this is one example of a disparity in representations. Let me search for another small case study

296

00:52:08.580 --> 00:52:13.200

Suresh Venkatasubramanian: Of disparity in access and we talked about, again, Tiffany was talking about this a lot in the context of health disparities.

297

00:52:13.800 --> 00:52:22.860

Suresh Venkatasubramanian: So you know we understood for a long time that social standing within some kind of network. And I'm very ashamed to give this talk in the presence of Duncan Watts, and I'm also, you know, hope,

298

00:52:23.220 --> 00:52:33.000

Suresh Venkatasubramanian: Hoping that this will, you know, this will be of interest to to to his work as well. So social selling in the network confers utility on an individual and social position is a class marker

299

00:52:33.600 --> 00:52:41.190

Suresh Venkatasubramanian: defined by the network and not the individual. And this is interesting because of a question that Boyd, Marwick, and Levy asked some years ago saying

300

00:52:41.670 --> 00:52:52.440

Suresh Venkatasubramanian: Should we be worried about discrimination based on social position? And this is interesting because it's a marker that is not associated with an individual, but is sort of emergent out of a network itself.

301

00:52:53.160 --> 00:52:57.030

Suresh Venkatasubramanian: And to do this we need to understand what it means to even think about social "position" in a network.

302

00:52:57.900 --> 00:53:02.430

Suresh Venkatasubramanian: So we were trying to look at a much simpler version of this problem, namely disparity in access

303

00:53:02.880 --> 00:53:10.260

Suresh Venkatasubramanian: To think about the idea how information flows through network. This is, in fact, particularly important right now in the context of COVID and the way we're trying to spread information about

304

00:53:10.680 --> 00:53:15.510

Suresh Venkatasubramanian: Care and about access to testing and so on in the context of the, of the, of the pandemic.

305

00:53:16.320 --> 00:53:23.820

Suresh Venkatasubramanian: We know that because that network position confers advantage and access to information that improves your position relies on your position itself.

306

00:53:24.450 --> 00:53:35.100

Suresh Venkatasubramanian: And you can think of edges in a social network as biased input data because of privileges in how the edges are created. How do we ensure that information is delivered to everyone who needs it?

307

00:53:36.120 --> 00:53:49.170

Suresh Venkatasubramanian: Now, in the world of sort of influence maximization, the way we talk about how it's- information is spread, in fact how epidemics are spread, this has been studied for a long time. You think of propagation from a node to other nodes' network. This is not an unusual thing.

308

00:53:50.280 --> 00:53:51.000

Suresh Venkatasubramanian: However,

309

00:53:52.230 --> 00:53:57.390

Suresh Venkatasubramanian: And you can have different models for how nodes and information on each edge. And there are different ways to think about this.

310

00:53:58.170 --> 00:54:05.730

Suresh Venkatasubramanian: But the way this has been talked about is in terms of what I call welfare functions, you think of the probability that a node gets a bit of information and don't worry too much about the notation here.

311

00:54:06.120 --> 00:54:16.380

Suresh Venkatasubramanian: The ideas that nodes get information from probability and you want to optimize some function of these properties and the typical optimization is some kind of average you want to maximize the number of people who get information.

312

00:54:17.730 --> 00:54:22.260

Suresh Venkatasubramanian: But that's not necessarily what you want if you want to make sure that everyone gets information. In fact,

313

00:54:22.740 --> 00:54:32.880

Suresh Venkatasubramanian: What we want- in this work, what you're trying to quantify is the idea of an access gap that there's one group of people who do not have access to information, compared to another group because of the structural properties of the network.

314

00:54:33.480 --> 00:54:38.430

Suresh Venkatasubramanian: And then we formulate an idea of the rich getting richer that even if you do some intervention, you provide information,

315

00:54:38.880 --> 00:54:45.330

Suresh Venkatasubramanian: The people who have access to information get more access to it and the people who don't get less and so the access gap increases.

316

00:54:45.960 --> 00:54:52.560

Suresh Venkatasubramanian: And one very surprising fact is that some of the metrics that are used to try and optimize the flow of information

317

00:54:53.220 --> 00:55:00.540

Suresh Venkatasubramanian: All have this property that the rich get richer. So a summary of this dilemma is saying that under any welfare function you might come up with, or any reasonable one

318

00:55:00.870 --> 00:55:11.460

Suresh Venkatasubramanian: the rich always get richer. So you actually don't really get the information access equity that you need. And so we tried to look at a more relaxed version notion, again, the notation and the

319

00:55:12.360 --> 00:55:20.340

Suresh Venkatasubramanian: Notion is a bit more complex, but in summary what you can show is that if you try to improve the minimaxes, make sure that the people who have the least access get better.

320

00:55:20.820 --> 00:55:28.980

Suresh Venkatasubramanian: Then you can actually show that this is in some sense the right thing to do. It prevents the rich from getting richer at the same level and no other measure would satisfy this.

321

00:55:30.120 --> 00:55:36.960

Suresh Venkatasubramanian: And this measure of improving minimum access isn't some kind of new measure. It hasn't been looked at an influence maximisation sort of community, broadly speaking,

322

00:55:37.440 --> 00:55:42.660

Suresh Venkatasubramanian: And it presents very different challenges for how to spread information, but also present interesting questions about how to do this.

323

00:55:44.280 --> 00:55:52.020

Suresh Venkatasubramanian: So I want to take a step back in the, in the time I have left and sort of I've spent a lot of time, sort of, again, working on problems of the sort of boundary of

324

00:55:52.290 --> 00:55:56.190

Suresh Venkatasubramanian: Computer Science and sort of where we need insight from the Social Sciences and

325

00:55:56.550 --> 00:56:07.350

Suresh Venkatasubramanian: One thing I think is very interesting to keep in mind about a lot of the basic computer science work is that we tend not to have a critical perspective on our work, we don't question the frame very much, but we are seeing more of it now.

326

00:56:08.460 --> 00:56:14.160

Suresh Venkatasubramanian: To- a paper that I wrote last year, this is also what I like to refer to this as a punch line to the joke.

327

00:56:14.580 --> 00:56:21.120

Suresh Venkatasubramanian: What happens if two computer scientists, a lawyer, and two social scientists walk into a bar or a conference room. This is a paper that ends up

328

00:56:21.750 --> 00:56:26.430

Suresh Venkatasubramanian: We looked at how, you know, some of the- some of the ways in which we implicitly make choices about

329

00:56:27.270 --> 00:56:37.350

Suresh Venkatasubramanian: Designing of systems even if they're quote unquote, fair machine learning systems have don't actually capture the or recognize the true complexity of a social tactical system.

330

00:56:37.830 --> 00:56:41.610

Suresh Venkatasubramanian: Other work from folks at Cornell argue for how

331

00:56:42.030 --> 00:56:49.080

Suresh Venkatasubramanian: Computer science with- through a more critical examination of its own work and actually play a role in social change. And that's something that's new that's happening now, which I think is an encouraging

332

00:56:49.560 --> 00:56:51.210

Suresh Venkatasubramanian: Effort on the side of computer science.

333

00:56:52.110 --> 00:57:02.880

Suresh Venkatasubramanian: And the other thing that's important to keep in mind is that a lot of the view of how computer science can work as a more of like a "have data, compute" kind of model where the CS contribution involved in doing quantitative work.

334

00:57:03.390 --> 00:57:09.330

Suresh Venkatasubramanian: But I'd like to argue that the computational lens itself is valuable in and of itself, it allows for certain kinds of precision,

335

00:57:10.500 --> 00:57:17.340

Suresh Venkatasubramanian: And it allows us to articulate limits on our system. So two examples of this, there's a, a paper that we wrote a couple of years ago that's

336

00:57:17.760 --> 00:57:24.120

Suresh Venkatasubramanian: going to be published soon. Talks about how when you input values, the value systems that you have

337

00:57:24.450 --> 00:57:32.370

Suresh Venkatasubramanian: Need to be stated explicitly in order to make sure the different mechanisms for fair decision making in fact achieve even some notion of fairness that you might want

338

00:57:32.670 --> 00:57:43.530

Suresh Venkatasubramanian: That without the right choice of value system, these notions are incompatible. And of course, you may have heard of a well known paper on how fairness notions themselves are mathematically incompatible with each other.

339

00:57:43.980 --> 00:57:50.820

Suresh Venkatasubramanian: And the point of these papers is not sort of, sort of say that you know all formalization are useless. It's to say that

340

00:57:51.090 --> 00:57:58.920

Suresh Venkatasubramanian: There are, there's an interface between how we formalize and what our values are. And we have to identify what that boundary is and that's what these precis, precise methods can do

341

00:58:00.480 --> 00:58:03.840

Suresh Venkatasubramanian: Finally, there was a lot of critique, valid critique of the idea

342

00:58:03.870 --> 00:58:09.600

Suresh Venkatasubramanian: Of technology and I'm almost done, that of technology being problematic and how we have to work around technology or replace it.

343

00:58:10.440 --> 00:58:16.410

Suresh Venkatasubramanian: This this, often I find, assumes a fixed formulation of technical questions like the examples I gave earlier show that

344

00:58:16.860 --> 00:58:26.370

Suresh Venkatasubramanian: You can actually change the questions you ask in a way that actually facilitates a more insightful and more sort of a valuable way to think about

345

00:58:26.880 --> 00:58:31.650

Suresh Venkatasubramanian: Helping people who are being harmed by technology, rather than sort of just assuming the technology itself was bad.

346

00:58:32.190 --> 00:58:41.160

Suresh Venkatasubramanian: And many folks have called this and I call this sort of decentering the technology and centering the people who are, may potentially be harmed by technology and that there are ways to formulate research questions

347

00:58:41.400 --> 00:58:44.220

Suresh Venkatasubramanian: In computer science that do the decentering for us.

348

00:58:44.790 --> 00:58:52.500

Suresh Venkatasubramanian: I'll end with a slide. This is how I see a lot of work that I do that there is sort of the stuff in dark blue is more stuff that's very CS focused

349

00:58:52.680 --> 00:58:57.150

Suresh Venkatasubramanian: But there's a lot of stuff involving values, how we think of what society and culture, legal frameworks, and policy,

350

00:58:57.480 --> 00:59:09.720

Suresh Venkatasubramanian: And a critical and reflective process that puts all these things together. And I think any attempt to, any attempt at collaboration should celebrate the fact that all of these notions interact with each other in complicated and sort of exciting ways, and I'll stop there. Thank you very much.

351

00:59:11.550 --> 00:59:13.230

Beth Mynatt: Terrific Suresh. Thank you.

352

00:59:15.090 --> 00:59:20.970

Beth Mynatt: Wow, what a fantastic set of panelists and talks. Thank you so much.

353

00:59:22.590 --> 00:59:33.270

Beth Mynatt: I think Alondra and I have accumulated quite a set of a collections coming from the chat longer. Alondra, do you want to chime in first, and I'll ask all of our panelists to please

354

00:59:34.380 --> 00:59:35.910

Beth Mynatt: Put your video back on.

355

00:59:37.050 --> 00:59:42.120

Alondra Nelson: I'll ask Jennifer and David to come back on video and Tiffany as well. Thank you so much. And thank you all for being here.

356

00:59:42.900 --> 00:59:47.490

Alondra Nelson: I know many of us have been having bits and pieces of this conversation in our communities for

357

00:59:47.910 --> 00:59:59.400

Alondra Nelson: Quite a long time and to be able to be all together and have you know 70ish moreover to be in this conversation is just tremendously fruitful and generative so I wanted to get us started

358

01:00:00.180 --> 01:00:07.740

Alondra Nelson: By way of kind of bringing together some of the questions on some of the presentations. I wanted to ask a question first to

359

01:00:09.000 --> 01:00:13.410

Alondra Nelson: About I think about mixed methods, what might be one way we can put Tiffany And David

360

01:00:14.010 --> 01:00:24.090

Alondra Nelson: David's presentations together. And so, you know, David, the the sort of casual way we use mixed methods and sociology is sort of a little quant, a little qual, but you're talking about something that's

361

01:00:24.600 --> 01:00:27.030

Alondra Nelson: Much more nuanced that I think takes up

362

01:00:27.750 --> 01:00:33.090

Alondra Nelson: The scale of problems we're trying to deal with the kind of social dynamics we now know that we're encountering

363

01:00:33.300 --> 01:00:44.070

Alondra Nelson: So I wanted you to kind of think about what it is you're saying, say a little bit more about what it is you're asking us to do and how maybe NSF can be fruitful and thinking that through that, helping us think about that.

364

01:00:44.760 --> 01:00:55.080

Alondra Nelson: And then, Tiffany, there's the issue of, for you of mixed methods with sort of mixed roles and really bringing the community so that it's not just academic experts and academic researchers, but there's a role for

365

01:00:55.500 --> 01:01:04.320

Alondra Nelson: Community members that make our mixed, methods mix that stop just community members as users or people who give us data but but you're imagining something else and

366

01:01:04.560 --> 01:01:14.220

Alondra Nelson: What would you advise you know NSF to sort of do and think about, and what were some of the, if you want to say a little bit more about the hurdles you faced in trying to bring a

367

01:01:15.240 --> 01:01:24.840

Alondra Nelson: participatory research focus and your work. And then of course for Suresh and Jennifer, the sort of issues around bias, of course, are the things that tie you together.

368

01:01:26.550 --> 01:01:28.830

Alondra Nelson: You know, I was struck very much by Jennifer's

369

01:01:29.910 --> 01:01:38.790

Alondra Nelson: Helping us to think through how implicit bias has been really taken up as the language of discrimination in this time. So there's one question that's asking us to

370

01:01:39.240 --> 01:01:53.730

Alondra Nelson: I think tease out the differences between bias, discrimination, statistical discrimination, and you know also thinking about, I don't know if you know Michael Mu^vtiz's work at Northwestern about how

371

01:01:54.780 --> 01:02:08.220

Alondra Nelson: How social scientists talked about demography in the past about the growing majority minority nation has sort of had this feedback

loop, much like implicit bias and how we think about what's happening in the world.

372

01:02:09.690 --> 01:02:21.300

Alondra Nelson: And then Suresh for you as well, I mean, I think it would be helpful. I mean, one of the things certainly we need to bridge across the fields is how we talk together about bias. And so, you know, just wanted to offer you and Jennifer an opportunity

373

01:02:21.840 --> 01:02:33.630

Alondra Nelson: To kind of talk to each other and then you know maybe speculatively if you two were going to work together, how could NSF support and incentivize you to work together on the question of bias?

374

01:02:45.150 --> 01:02:47.520

David Grusky: Did you want us, Alondra, to jump right in?

375

01:02:49.770 --> 01:02:51.660

Alondra Nelson: Yeah David please jump in, thank you.

376

01:02:52.530 --> 01:03:02.040

David Grusky: Okay, well, I'm happy to take on the question that you, you put, a tough one. And I think, I think it's important to distinguish between the different types of mixed methods that are in play.

377

01:03:02.400 --> 01:03:09.180

David Grusky: I think there are three types in particular that that are usefully distinguished. What you might call type one is where you have the same researcher

378

01:03:09.480 --> 01:03:16.560

David Grusky: Doing two separate studies like one quantitative, one qualitative, and the idea is that you can approach the same problem through different angles.

379

01:03:17.970 --> 01:03:23.670

David Grusky: And one researcher is responsible in effect for completing two separate studies.

380

01:03:24.780 --> 01:03:32.070

David Grusky: That's a very conventional model. And of course you know we ramp it up and put it on steroids. And now the expectation is you shouldn't do two separate studies, but three, four, five,

381

01:03:33.840 --> 01:03:40.500

David Grusky: And I think that's what, that's one model and it can be productive but but I think there are two other models that I was talking about a bit more that are also productive.

382

01:03:40.980 --> 01:03:49.980

David Grusky: The second type two mixed methods studies where you you have the same researcher, but it's an integrated studies. So with the American Voices project, most of it's all about qualitative

383

01:03:50.220 --> 01:03:56.190

David Grusky: Immersive interview data, but in addition respondents are asked if they would consent to link to administrative data.

384

01:03:57.060 --> 01:04:03.330

David Grusky: The vast majority when you explain the terms under which that consent could be given agree to do so. And that then

385

01:04:03.630 --> 01:04:18.210

David Grusky: opens up the possibility of, of carrying out a combination of rich immersive qualitative data with with quantitative data. And so it's a single study same researcher model. That's type two, and I think that can be very fruitful kind of fuses two methods together

386

01:04:18.660 --> 01:04:22.980

David Grusky: With, with data on the same individual that's both quantitative and qualitative.

387

01:04:23.340 --> 01:04:27.810

David Grusky: Um, and then, then there's a third type, though, that I was also advocating for which I think is important. It kind of

388

01:04:28.050 --> 01:04:30.240

David Grusky: cherishes, celebrates the division of labor.

389

01:04:30.450 --> 01:04:39.420

David Grusky: It says that, you know, it's not the case that a single researcher has to do all types of research, both qualitative and quantitative, we can have one stream of the qualitative research, it's very valuable,

390

01:04:39.600 --> 01:04:49.020

David Grusky: That carries up, that allows for these holistic understanding subsystems. And then you should have another stream of

research that is quantitative and then you can have people whose job is to diffuse those two.

391

01:04:49.320 --> 01:04:59.910

David Grusky: And you don't have to necessarily have a single researcher doing both at once, but we just have to have data systems that allow us to do both really well. So I think those three types all valuable, and I was kind of advocating, advocating for types two and three.

392

01:05:03.360 --> 01:05:10.530

Beth Mynatt: And David just to jump in with a quick follow on and then back to Alondra's impressive list of questions. There was some chatter about

393

01:05:11.460 --> 01:05:17.970

Beth Mynatt: The ethical implications of secondary use of qualitative data that a number of us coming from those traditions,

394

01:05:18.300 --> 01:05:27.330

Beth Mynatt: You know, that is not the norm, but it's more about kind of the trust and relationship when you set up doing that work, which doesn't lend itself to secondary use. Can you can you speak to that?

395

01:05:29.400 --> 01:05:33.660

David Grusky: Sure, yeah. I mean, that's obviously the critical issue and and

396

01:05:35.280 --> 01:05:45.270

David Grusky: First and most most most critical one is you need informed consent. You need to be completely transparent about the secondary uses to which the data will be used. Make sure that the respondents understand

397

01:05:46.500 --> 01:05:52.950

David Grusky: That and and have full and informed consent to the extent that that's possible in the world, such as it is, um.

398

01:05:53.820 --> 01:06:08.460

David Grusky: The other really critical part of it is that the same sort of infrastructure that we use to ensure confidentiality for quantitative data can be deployed for for qualitative data. That is, you can identify you can have disclosure review, you can carry out analyses in in

399

01:06:08.970 --> 01:06:16.920

David Grusky: secure facilities. Federal Statistical research data centers have, you know, are a treasure of the of the of the of the

400

01:06:17.730 --> 01:06:25.950

David Grusky: Quantitative world in terms of protecting data quite quite quite successfully, I would say, relative to the standards that propel the private world

401

01:06:26.430 --> 01:06:35.400

David Grusky: Or private sector and that same sort of infrastructure can principle, then I think should be used to to protect confidentiality for qualitative data as well.

402

01:06:36.840 --> 01:06:37.440

Beth Mynatt: Thank you.

403

01:06:38.310 --> 01:06:38.790

Tiffany?

404

01:06:41.070 --> 01:06:58.890

Tiffany Veinot: So with regards to trying to engage community members and research. So I've been doing community based participatory research for a long time. And I think that there is a need for dedicated funding sources specifically for that kind of work.

405

01:06:59.970 --> 01:07:12.180

Tiffany Veinot: My experience with other funders has been that there are mechanisms that are better for dealing with community groups in the sense that you can have subcontract, you can pay for stuff, you can cover overhead.

406

01:07:12.750 --> 01:07:21.720

Tiffany Veinot: In my experience with an NSF grant that I had recently, we could not, after we actually paid for our students,

407

01:07:22.680 --> 01:07:30.390

Tiffany Veinot: And our various kind of hard costs around building technology, we couldn't afford to put anything in for our community organizations.

408

01:07:30.720 --> 01:07:45.930

Tiffany Veinot: So that was a problem. They agreed to participate anyways, but it's quite difficult with nonprofits and other organizations, healthcare, that have so many competing priorities to command an organization's attention

409

01:07:46.320 --> 01:07:52.890

Tiffany Veinot: If you don't actually have a way to pay them. And I would also say that with regards to nonprofits, there's also

410

01:07:53.550 --> 01:08:02.910

Tiffany Veinot: Because they're not funded necessarily securely, etc., sometimes there is a need to even try to bring money into stabilize them because there's so much turnover of staff,

411

01:08:03.210 --> 01:08:15.210

Tiffany Veinot: They might be facing difficulties financially and so I feel like in some ways, trying to fund a sort of nonprofit infrastructure to support research organizations in which

412

01:08:15.510 --> 01:08:21.570

Tiffany Veinot: there's actually a certain amount of people's time ready and able to participate in research

413

01:08:21.870 --> 01:08:30.540

Tiffany Veinot: Would be a way to go. And it could also really help to stabilize and build skills in our nonprofit sector in the country as well. And I think we should

414

01:08:30.900 --> 01:08:41.580

Tiffany Veinot: Understand that that actually could be a very powerful mode of diversifying our workforce by being able to reach out to community activists from a host of

415

01:08:42.270 --> 01:08:50.760

Tiffany Veinot: Communities. I mean, I myself with somebody working in a nonprofit organization who got involved in CVPR research and decided to go back and do a PhD.

416

01:08:51.480 --> 01:09:01.440

Tiffany Veinot: There's lots of folks who can get the research bug if the- or technology bug if they are given those opportunities through funded projects. Thank you.

417

01:09:02.310 --> 01:09:09.090

Alondra Nelson: Thanks a lot. So let's turn to the question of bias. So there's been a lot of chatter about implicit bias. Jennifer's kind of

418

01:09:09.570 --> 01:09:19.230

Alondra Nelson: Blown some lines as has Suresh and the way that they're kind of laying out, how they're thinking about the problem. So I would just, you know, if you guys want to talk to each other about each other's

419

01:09:20.400 --> 01:09:23.220

Alondra Nelson: Presentations to start and then we've got some specific questions.

420

01:09:25.950 --> 01:09:40.320

Jennifer Richeson: Okay. Well, I mean, I guess I'll say two things. One, just generally about the question of sort of bias broadly as an umbrella term for lots of different things and lots of different forms, you know, in psychology

421

01:09:41.460 --> 01:09:45.750

Jennifer Richeson: Bias actually can mean stereotyping, it can mean discrimination,

422

01:09:49.410 --> 01:10:02.430

Jennifer Richeson: It can mean attitudes. Right. So when I'm using, in this case, I'm using bias either explicit or implicit, I'm using it as the

423

01:10:02.460 --> 01:10:05.280

Jennifer Richeson: Attitudes or stereotypes that that

424

01:10:05.430 --> 01:10:16.290

Jennifer Richeson: Presumably the actors in the articles that we're talking about have, right, toward whatever outward. So being, having negative attitudes toward

425

01:10:16.950 --> 01:10:29.610

Jennifer Richeson: People who own guns, which was one of the scenarios, and the political bias one, or toward older adults among doctors, right, and then in the in our work attributing

426

01:10:30.210 --> 01:10:41.790

Jennifer Richeson: So basically saying that we found that these doctors are treating older adult patients worse than their younger counterparts in a variety of ways.

427

01:10:42.300 --> 01:10:50.310

Jennifer Richeson: And we attribute that differential behavior, which in psychology is discrimination, that's all that discrimination is in psychology--

428

01:10:50.760 --> 01:11:01.410

Jennifer Richeson: Differential behavior based on some group membership-- to either explicit bias, meaning attitudes and stereotypes about from the doctor so they know that they have them,

429

01:11:02.370 --> 01:11:15.450

Jennifer Richeson: Or implicit bias. So they are maybe not so aware that they hold these negative attitudes and stereotypes about older adults and/or they're not aware that they

430

01:11:15.990 --> 01:11:25.050

Jennifer Richeson: That those attitudes influence their behavior, right. So it can be either of those. And so, but I do think yes, it's very important to think through

431

01:11:25.560 --> 01:11:37.230

Jennifer Richeson: Not only these these processes and what's at play because it certainly matters, and you know in the chat, Mahzarin Banaji made a really important point that it was very necessary to

432

01:11:37.740 --> 01:11:53.100

Jennifer Richeson: Bring the concept of implicit bias and actually sort of formalize that study and understand how it impacts our decision making into the for, certainly for any number of legal decisions because we know that intentional explicit, overt

433

01:11:54.360 --> 01:11:56.040

Jennifer Richeson: Forms of bias, attitudes,

434

01:11:56.220 --> 01:12:00.210

Jennifer Richeson: Stereotypes are not the only thing that's affecting behaviors. That's really important.

435

01:12:00.390 --> 01:12:06.330

Jennifer Richeson: What our work suggests is that it's almost this concept has become so popular

436

01:12:07.260 --> 01:12:25.230

Jennifer Richeson: In the public imagination that it seems to be the go to default explanation for evidence of discrimination in any number of domains, and there's often evidence that actually discrimination is due to regular ordinary explicit, overt

437

01:12:25.950 --> 01:12:31.560

Jennifer Richeson: Biases. And so it's really important to not misattribute the source.

438

01:12:31.620 --> 01:12:34.680

Jennifer Richeson: And to think about what the implications of these different sources of

439

01:12:34.680 --> 01:12:38.070

Jennifer Richeson: Biases, bias, and algorithmic bias are for

440

01:12:38.310 --> 01:12:39.180

Jennifer Richeson: Accountability.

441

01:12:39.570 --> 01:12:40.800

Jennifer Richeson: You know, so

442

01:12:42.240 --> 01:12:45.450

Jennifer Richeson: Kind of capping that and sort of thinking about Suresh's

443

01:12:45.780 --> 01:12:47.640

Jennifer Richeson: Framework, I think is useful because

444

01:12:48.090 --> 01:13:02.910

Jennifer Richeson: All of this work in this conversation focuses, you know, too much on the perspective of the so-called perpetrator. Right? And so we're like looking for, 'Okay, well did they mean it?

445

01:13:03.300 --> 01:13:16.290

Jennifer Richeson: Was it intentional? Where did it come from? What can we do?' and not enough attention, I think, on the harms to the victims and what it means for them and does it matter for them if

446

01:13:16.590 --> 01:13:23.850

Jennifer Richeson: It was intentional or not or due to an algorithm or not. And I think that shift to the harm to the

447

01:13:24.510 --> 01:13:34.530

Jennifer Richeson: Victim in in our work and I think in this general discussion is one that I think is really important and also important, just in our public conversations about

448

01:13:35.160 --> 01:13:43.290

Jennifer Richeson: Bias and discrimination. So I'll stop there except to say some of this work was thankfully, we're grateful for support from the National Science Foundation.

449

01:13:50.910 --> 01:13:56.220

Suresh Venkatasubramanian: So thanks for that. And Jennifer, I remember listening to your interview with Ezra Klein on Vox and

450

01:13:56.640 --> 01:14:05.430

Suresh Venkatasubramanian: And being very depressed by the by the tail of the of the political dynamics and sad a bit, but that's okay. I get depressed a lot nowadays which stinks. So

451

01:14:06.420 --> 01:14:15.000

Suresh Venkatasubramanian: I want to highlight two things. I think so. One is, sort of, sort of a history of the work we were trying to do in understanding stereotyping and

452

01:14:15.330 --> 01:14:18.720

Suresh Venkatasubramanian: What happened was we were talking with Danah, Danah Boyd, and we're trying to

453

01:14:19.170 --> 01:14:23.490

Suresh Venkatasubramanian: Piece out what it might mean to think about, you know, even what it means to talk about stereotyping and

454

01:14:23.790 --> 01:14:29.520

Suresh Venkatasubramanian: We very quickly came to the conclusion that we don't you know as computer scientists, we don't understand what stereotyping means so

455

01:14:29.880 --> 01:14:32.880

Suresh Venkatasubramanian: This sort of necessitated a six month long deep dive into

456

01:14:33.240 --> 01:14:44.100

Suresh Venkatasubramanian: Some of the early works on sort of Lippmann's original sort of definition of stereotyping and all the literature in that area. This distinction between stereotyping between prejudice and discrimination and how they're all very different things--

457

01:14:44.610 --> 01:14:54.690

Suresh Venkatasubramanian: To the point where, you know, we had at least semblance of a beginnings of an inkling of a handle on on what what one

version of stereotyping might represent, and not even all of it, one version of it.

458

01:14:55.680 --> 01:15:02.280

Suresh Venkatasubramanian: And it's funny because in the time since I've been talking with colleagues, especially those who do NLP and I've been pointing out sort of thing that you know

459

01:15:02.550 --> 01:15:14.520

Suresh Venkatasubramanian: What they referred to as biases is a very packed term that has to be unpacked in many different ways. And there isn't much of, you know, an understanding yet of that fact. And I think one of the points of contact between

460

01:15:15.660 --> 01:15:22.860

Suresh Venkatasubramanian: Life found between the computer science and the social sciences is this ability is this need to unpack notions that we

461

01:15:23.490 --> 01:15:33.720

Suresh Venkatasubramanian: Are using in some sense carelessly. But if we had the rich nuance that comes with a deep understanding of bias, of explicit bias, of implicit bias, so the implications of these things,

462

01:15:34.230 --> 01:15:39.150

Suresh Venkatasubramanian: We would be able to fully understand both the ramifications of the technology we're using and maybe

463

01:15:39.810 --> 01:15:47.130

Suresh Venkatasubramanian: Design remedies or other forms of technical interventions that might be helpful in this context. So I think that that point of interaction that's been true for a lot of the work I've done

464

01:15:47.430 --> 01:15:51.630

Suresh Venkatasubramanian: Being able to unpack just, you know, words that have a loaded meaning

465

01:15:52.230 --> 01:16:00.510

Suresh Venkatasubramanian: by by by the appropriate direction has been very helpful. And I should mention that my work also, together with Danah, has been funded by the National Science Foundation. We are the ground together so

466

01:16:00.840 --> 01:16:07.920

Suresh Venkatasubramanian: It's, it's, it's the by the big data programs that was great. The other thing I think this when you bring up sort of the, the harms to the

467

01:16:08.760 --> 01:16:15.060

Suresh Venkatasubramanian: To the victims and this is another common theme and a lot of computer science work in this topic, there's this

468

01:16:15.690 --> 01:16:26.880

Suresh Venkatasubramanian: Understanding that something must be done because algorithms by themselves have all kinds of problems, but there is a resistance to doing anything that might sound like it's trying to

469

01:16:28.260 --> 01:16:34.320

Suresh Venkatasubramanian: Address inequities, which is odd, right? Because if you think you want to address inequities, you should be going in and addressing them.

470

01:16:34.590 --> 01:16:42.270

Suresh Venkatasubramanian: But there's a sense of, 'No, no. All we want to do is make sure we have a level playing field,' and of course as many people have observed, you can't have a level playing field when it's been skewed for so long.

471

01:16:42.960 --> 01:16:46.650

Suresh Venkatasubramanian: And I think trying to focus on harms and not, and

472

01:16:47.190 --> 01:16:54.510

Suresh Venkatasubramanian: I think we do spend a lot of time worrying about, well, what was the intent? Was there a bad intent? Is that something, you know is it our job just to sort of worry about the intent? And

473

01:16:54.960 --> 01:16:57.360

Suresh Venkatasubramanian: This reframing this around: it doesn't matter.

474

01:16:58.350 --> 01:17:05.370

Suresh Venkatasubramanian: That the harm is the point. And that's what you have to focus on and centering, and I think a lot of people have been talking about this idea of, you know, centering

475

01:17:05.760 --> 01:17:11.640

Suresh Venkatasubramanian: The, the people who are harmed by the technology or harmed by the system, whether it's, you know, technical system or not.

476

01:17:12.300 --> 01:17:17.700

Suresh Venkatasubramanian: That's something that we still have to get used to. And, you know, again, we've talked a bit in the past about, so in the

477

01:17:18.360 --> 01:17:29.880

Suresh Venkatasubramanian: last hour about security concepts, this idea of threat modeling, of threats to peoples as harms is a useful way to sort of align the computer science viewpoint of thinking about this, along with

478

01:17:30.360 --> 01:17:37.170

Suresh Venkatasubramanian: This larger perspective on on harms that in a security language, it's actually possible to think about specific harms, specific vectors of harms

479

01:17:37.380 --> 01:17:44.160

Suresh Venkatasubramanian: Without having to worry about trying to solve the problem in some sense. And I think that's another point of where we can actually overlap in some way

480

01:17:45.210 --> 01:17:47.880

Suresh Venkatasubramanian: if we, if we write this grant together that the NSF is going to fund us for, Jennifer.

481

01:17:51.510 --> 01:17:52.740

Alondra Nelson: Thank you so much. Beth?

482

01:17:53.760 --> 01:17:58.230

Beth Mynatt: Yeah, we're looking for attribution for this roundtable for all the grants that are going to come,

483

01:17:58.770 --> 01:18:01.080

Beth Mynatt: grant applications that are going to come out of these discussions.

484

01:18:01.380 --> 01:18:14.010

Beth Mynatt: And in particular, there's just a recent thread that has shown up in the chat that I want to grab because I think it connects to what Suresh and others have been speaking to you, which is how do we, what, what is the

485

01:18:15.450 --> 01:18:28.680

Beth Mynatt: The goal around impact for the research that we're doing? Because in terms of what, you know, what type of standard should NSF be setting, should it be a higher setting

486

01:18:30.090 --> 01:18:40.560

Beth Mynatt: To have a societal impact in terms of the research that we do, which would, would maybe draw in kind of the need for the sustained community partnerships that Tiffany and others have pointed to?

487

01:18:41.100 --> 01:18:52.200

Beth Mynatt: Or are we making things more difficult because, you know, trying to show measurable impact in a world of, you know, a long standing historical disparities

488

01:18:52.500 --> 01:19:13.470

Beth Mynatt: you know, may either discourage or shift researchers into, you know, another form of, of proximal impact variable. So how should, how should NSF be thinking about what these collaborative proposals should be trying to achieve above and beyond scholarship, scientific scholarship?

489

01:19:20.370 --> 01:19:22.560

Beth Mynatt: Tiffany, I'll put you on the spot.

490

01:19:26.040 --> 01:19:27.210

Tiffany Veinot: So I think

491

01:19:28.860 --> 01:19:40.920

Tiffany Veinot: I think it's necessary to be thinking about disparities or marginalized populations from the basic from, from the moment of asking the question

492

01:19:41.430 --> 01:19:46.710

Tiffany Veinot: On through to assessing the outcomes or evaluating the work.

493

01:19:47.460 --> 01:20:02.520

Tiffany Veinot: I think that there are a number of process-oriented things that we could be trying to evaluate things, like who's in our studies? Have, what are the methods we used? How what how equitable or fair was our process?

494

01:20:03.270 --> 01:20:16.950

Tiffany Veinot: Looking at targeting some of these phases of an intervention cycle, where if you could say this approach is one which will be taken up by these marginalized groups that we have worked with that shows

495

01:20:17.370 --> 01:20:26.160

Tiffany Veinot: That that or there's a difference in how people respond to it, I think that one can chip away at the problem.

496

01:20:27.510 --> 01:20:32.940

Tiffany Veinot: And I think we could try to have research that through its process actually makes a difference.

497

01:20:34.020 --> 01:20:36.480

Tiffany Veinot: So that would be my comment on that.

498

01:20:40.890 --> 01:20:43.440

Beth Mynatt: Wise words. Anyone else want to jump in here on this?

499

01:20:44.460 --> 01:20:47.160

Beth Mynatt: Again picking up on some of the, the chatter as well

500

01:20:50.580 --> 01:20:51.090

David Grusky: I'm happy to

501

01:20:51.180 --> 01:20:52.200

David Grusky: say something if

502

01:20:52.500 --> 01:20:54.060

David Grusky: If there aren't others.

503

01:20:55.650 --> 01:21:04.650

David Grusky: I would just want to elaborate and say that I think in some of the social sciences, evaluation research has been a bit disparaged and that that's unfortunate.

504

01:21:04.980 --> 01:21:11.610

David Grusky: Because we need to know what you know what has worked and what hasn't worked with respect to the disparities. When we have moments of crisis, like this one,

505

01:21:11.880 --> 01:21:21.750

David Grusky: We need to have that bank of of evidence upon which we can draw so that the decisions that are made, when the opportunity presents itself, decisions are made on the basis of the evidence and and

506

01:21:22.410 --> 01:21:27.450

David Grusky: I also think though that's not enough. It's not enough just to evaluate what's been tried, but we also have to have

507

01:21:27.720 --> 01:21:41.490

David Grusky: A very holistic capacity to understand new solutions that go beyond what has been tried, but we need both. And I think sometimes the evaluation research side of the equation hasn't been valued as much as it should be.

508

01:21:44.910 --> 01:21:46.410

Beth Mynatt: Thank you. All right.

509

01:21:48.150 --> 01:21:54.660

Beth Mynatt: It's looking to, it's kind of like a game show, I can see you take your mic off and it's ready to queue up um

510

01:21:55.740 --> 01:22:02.520

Beth Mynatt: It's almost that we knew we'd want to bring the other panel back for this discussion, but there's been a lot of folks asking about the relationship of trust,

511

01:22:03.570 --> 01:22:10.260

Beth Mynatt: And how trust plays into the types of disparities and bias

512

01:22:12.060 --> 01:22:16.410

Beth Mynatt: That we're seeing within this. So I, I've seen a couple versions of this so

513

01:22:17.430 --> 01:22:32.640

Beth Mynatt: For example, you know, could we look at the racial equality myths that Jennifer was unpacking for us in terms of misinformation and disinformation frameworks discussed in the first session? And does that provide, you know is there

514

01:22:33.630 --> 01:22:43.140

Beth Mynatt: Perhaps a sweet spot or sort of bringing these two threads together? And then there's another version of this. So starting with Jennifer, but another version

515

01:22:44.370 --> 01:22:48.480

Beth Mynatt: queuing up Suresh, Tiffany, and others, which is the relationship of

516

01:22:50.640 --> 01:23:05.520

Beth Mynatt: Where authority comes from in its relationship to IT systems and the the the coupling of authority and trust to potential uptake. So, Tiffany I would expect you would see this in some of the health IT work.

517

01:23:06.180 --> 01:23:16.200

Beth Mynatt: So first person system where its traditional authority may not have the same level of uptake from communities that don't trust that authority to begin with.

518

01:23:16.530 --> 01:23:23.790

Beth Mynatt: So maybe there's some ways of unpacking that so I'm probably you know this is a this is hard though. So the third panel has to answer questions that

519

01:23:24.120 --> 01:23:34.410

Beth Mynatt: Go across all of the roundtable so they're going to get ready for that. But, you know, how do we look at these these trust in Information Network questions and bring this into the disparities conversation?

520

01:23:36.150 --> 01:23:46.050

Jennifer Richeson: Yeah, I actually think that's a really interesting way to to think about it and frame it, and if there is some level of

521

01:23:47.340 --> 01:24:04.740

Jennifer Richeson: Misinformation, if not disinformation, around what Implicit bias is and is not and what types of behaviors and decisions it affords and does not afford and under what conditions? So, there is something there, I think.

522

01:24:06.270 --> 01:24:17.070

Jennifer Richeson: We know less about and the question of how they're repeated or probably, but maybe even incidental

523

01:24:18.450 --> 01:24:33.240

Jennifer Richeson: attributions of, you know, for instance of policing case that you know, disparate outcomes in policing or in mortgage lending or any number of domains, how making those attributions

524

01:24:34.260 --> 01:24:46.980

Jennifer Richeson: To implicit bias. And then perhaps to algorithms, how that actually impacts the trust and I would say large set of emotions of the communities that once again

525

01:24:47.460 --> 01:25:01.590

Jennifer Richeson: Are sort of on the downside, right. Are again facing years more evidence of inequality, of discrimination, yet here again, there is no good answer about

526

01:25:01.950 --> 01:25:09.180

Jennifer Richeson: Why it's happened and in many times, the answer is something that, as we were saying in our work leads to

527

01:25:09.870 --> 01:25:21.000

Jennifer Richeson: inaction, right, and or you know basically excusing the behavior. And so I think, you know, more work we're really investigating that, and again this is

528

01:25:21.360 --> 01:25:30.930

Jennifer Richeson: Shifting it to a harm-centered view, I think is, is really important because we are, and I would argue and others have, that our

529

01:25:31.470 --> 01:25:41.010

Jennifer Richeson: But our desire to believe that society, people are inherently good and are getting better, right, and our moralization around

530

01:25:41.790 --> 01:25:46.680

Jennifer Richeson: Racism, or any of these other biases. This is not just true for racism, I'm just using this account.

531

01:25:47.520 --> 01:25:59.430

Jennifer Richeson: If I think it motivates us to want to make excuses for both individual actors and institutional actors, even while they're continuing to produce the very same inequalities

532

01:26:00.420 --> 01:26:05.850

Jennifer Richeson: From the past. So I think we really need to, you know, change the way we're thinking about these

533

01:26:06.810 --> 01:26:18.210

Jennifer Richeson: These processes. And yeah, perhaps shift to to the side of the story where we're like, you know, actually, maybe it's, we

just need a whole new default. Let's just assume that everybody's biased in some way,

534

01:26:18.510 --> 01:26:27.870

Jennifer Richeson: And the- the systems that they create are biased in some way. And why don't we try to preempt those biases on the front end instead of, you know, for instance, that famous case of the

535

01:26:28.140 --> 01:26:38.490

Jennifer Richeson: Algorithm on patient care, right, where hundreds of thousands of black patients didn't get the care that they needed because the algorithm had these baked in biases about you know how much

536

01:26:38.850 --> 01:26:48.480

Jennifer Richeson: money you're spending on healthcare. Well, you know, that was probably really predictable if you had a different set of people in the room, or even with those people if you started from the

537

01:26:48.810 --> 01:26:59.370

Jennifer Richeson: The assumption that there, there there's discrimination and healthy inequalities based on race already in existence, and we need to account for that sort of upfront.

538

01:27:04.950 --> 01:27:06.120

Tiffany Veinot: That speaks to, Oh, sorry.

539

01:27:07.980 --> 01:27:16.680

Tiffany Veinot: I was going to jump in and speak to the trust issue so, so yes trust is a major factor underlying uptake of technologies.

540

01:27:17.070 --> 01:27:29.760

Tiffany Veinot: And that's those we see that in terms of the sociology of trust. We see African Americans in particular are less likely to adopt patient portals that are linked to healthcare, low SES populations are less likely to

541

01:27:29.760 --> 01:27:36.690

Tiffany Veinot: adopt, there may be access issues there. But often, when you control for access to technology, these relationships were made.

542

01:27:37.410 --> 01:27:47.190

Tiffany Veinot: And I think that we need to be thinking systematically about trust. What this is something I've experienced in my work in Flint related to HIV and STI prevention.

543

01:27:48.030 --> 01:27:56.910

Tiffany Veinot: In that particular work, we found that trust was absolutely the most salient factor in the design of our technology and design of our intervention.

544

01:27:57.210 --> 01:28:04.920

Tiffany Veinot: And we, despite taking it into account through developing as Trust Center design framework which we published, I could share that if you'd like,

545

01:28:05.940 --> 01:28:11.100

Tiffany Veinot: But despite doing that and systematically trying to address it, we still found that

546

01:28:12.000 --> 01:28:24.900

Tiffany Veinot: We did not have a lot of uptake of our intervention because people were so worried about talking about sexual health on social, in social media type environments because of other experiences that they were having in their lives

547

01:28:25.560 --> 01:28:32.160

Tiffany Veinot: That it basically impeded the uptake work. That's work we're going to be publishing soon. Thanks

548

01:28:35.130 --> 01:28:35.640

Suresh Venkatasubramanian: They

549

01:28:36.420 --> 01:28:56.010

Suresh Venkatasubramanian: The whole interaction between trust, authority, and especially IT systems is is very complicated because like it's a game that's being played out at high speed, at least it seems to me in the last few years as well. Right? So, first there's the rhetorical trust of, you know,

550

01:28:57.030 --> 01:29:03.060

Suresh Venkatasubramanian: You should trust the algorithms, because, you know-- this is from a few years ago, right-- trust the algorithms because they're objective and they're free of all the

551

01:29:03.480 --> 01:29:06.480

Suresh Venkatasubramanian: All the biases that come with it. And this is an argument that's made to this day, right that if

552

01:29:06.750 --> 01:29:15.000

Suresh Venkatasubramanian: We replace human decision making with algorithm decision making it somewhat, it is better because it's free of the biases or it's more transparent. And then of course the counter trust

553

01:29:15.390 --> 01:29:22.020

Suresh Venkatasubramanian: Is that, 'No, no. In fact, we know how these algorithms absorb and transmit and magnify all the biases in our system.'

554

01:29:22.740 --> 01:29:34.530

Suresh Venkatasubramanian: Which leads us with, which leaves us with a situation where on the one hand, there are attempts to claim that algorithms represent some kind of epistemological standard that is higher.

555

01:29:35.400 --> 01:29:40.320

Suresh Venkatasubramanian: And on the other hand, the claim that they're much lower because you can't, because they're not transparent.

556

01:29:41.040 --> 01:29:55.890

Suresh Venkatasubramanian: And then you end up with a situation where, in cases, I think the COVID tracking, contact tracing sort of discussions around this is a good example of this, where they're actually might be a value for certain kinds of technology appropriately designed and appropriately centered to help

557

01:29:57.090 --> 01:30:04.650

Suresh Venkatasubramanian: People in different communities, but because we've destroyed the trust or we've created enough doubt around where the trust, I think that's the key thing about this situation is that it creates doubt,

558

01:30:05.190 --> 01:30:12.060

Suresh Venkatasubramanian: Enough doubt has been created around which technologies are reliable or not, we assume none of them are and nothing is ever valuable, and I think

559

01:30:12.840 --> 01:30:23.370

Suresh Venkatasubramanian: I, this is what, you know I was saying this depressed me about the first session that it feels like, you know, we have a huge number of problems. It's not clear how we break out of this vicious cycle that we're in, and I think

560

01:30:24.750 --> 01:30:39.690

Suresh Venkatasubramanian: I don't, to be honest, I don't think you know, I don't think computer science is helping much with some of the rhetoric

that we use around this. And I think we need to work harder at being more circumspect about some of the claims that we make. But nevertheless,

561

01:30:41.400 --> 01:30:56.280

Suresh Venkatasubramanian: I think that someone trying to figure out the sweet, the balance point between throwing everything out and and maybe trusting too much is where I don't yet know how how we're going to do it and I will leave the first panel as an answer to this issue.

562

01:30:58.740 --> 01:31:10.080

Alondra Nelson: So let's, where I'm mindful of time, but let's just go to one question that I think now that we've, you know, I think had a really rich conversation about the assumptions and about that go into work,

563

01:31:11.400 --> 01:31:19.710

Alondra Nelson: computational work, social science work. There's a question I think that points a little bit, Suresh, to an answer, but that brings the technical back in so

564

01:31:20.280 --> 01:31:37.050

Alondra Nelson: This question is could we benefit from more interdisciplinary research that quantifies impact on the technology of structural bias, not just in its presence or absence, but to measure it, to scale it, how it works exactly, exactly, etc.?

565

01:31:38.340 --> 01:31:50.700

Alondra Nelson: So is there a way that we can think about collaborative projects, for example, across CISE and SBE that that sort of take the strengths of both fields to to kind of make measure and make sense of the problem?

566

01:31:56.220 --> 01:32:04.560

Tiffany Veinot: I'll make just one quick point which I feel like we, I think we should be addressing, which is the role of technology in

567

01:32:05.010 --> 01:32:13.140

Tiffany Veinot: Creating inequalities and the way that it's changing things like economic opportunity, structures of jobs people have,

568

01:32:14.100 --> 01:32:27.720

Tiffany Veinot: And how people socialize. There's, there's just so much that I think we, you talk about the technology of inequality, I think that we actually need to study the ways that technology are contributing to inequality.

569

01:32:28.890 --> 01:32:33.600

Tiffany Veinot: And I think that would be a really rich area for research that, across our areas.

570

01:32:36.990 --> 01:32:43.890

Suresh Venkatasubramanian: Can I quickly jump in? If you don't mind. So I've been thinking a lot about this, especially in the context of the pandemic and how it feels like

571

01:32:44.940 --> 01:32:48.090

Suresh Venkatasubramanian: The pandemic is showing how existing

572

01:32:49.110 --> 01:32:59.820

Suresh Venkatasubramanian: Inequities, existing inequalities, everything gets refracted through that, right. The whole issue of contact tracing, who's going to get tests, who's not going to get tests, where is information coming from? Everything is going through

573

01:33:00.300 --> 01:33:09.960

Suresh Venkatasubramanian: The existing structures of inequality we have. So in that sense I, while I agree that technology amplifies a lot of inequality, I think, at the very least, recognizing, measuring

574

01:33:10.380 --> 01:33:18.390

Suresh Venkatasubramanian: Sort of some way identifying the ways in which technology when when pushed through a very, very unequal society creates these effects

575

01:33:19.230 --> 01:33:28.680

Suresh Venkatasubramanian: is itself already helpful, even before we start worrying about the amplifying effects. Because I think that's at least that's something I think is not often appreciated

576

01:33:29.370 --> 01:33:36.360

Suresh Venkatasubramanian: Among the crowd who wants to use technology to solve problems to say that, just because you have a new technical tool,

577

01:33:36.780 --> 01:33:41.910

Suresh Venkatasubramanian: You have to reckon with the fact that you're pushing into a system that already exists, that has all these different barriers in place.

578

01:33:42.210 --> 01:33:48.810

Suresh Venkatasubramanian: You're not going to have the effect that you think you have unless you reckon with the system already. And just understand that interaction itself

579

01:33:49.290 --> 01:34:00.690

Suresh Venkatasubramanian: Is is is important and it, be- before we start worrying about the amplifying effect. And that's something you know, just as we know, is something that I think it's something that is appreciated the, in the circles that I move in.

580

01:34:02.070 --> 01:34:07.770

Alondra Nelson: Thanks that help, that's helpful. Any last words, Jennifer, David? Got a minute or two.

581

01:34:14.970 --> 01:34:20.940

Jennifer Richeson: Yeah, I mean no, except for it's, um, you know, I think

582

01:34:21.390 --> 01:34:33.990

Jennifer Richeson: It's important to, you know, I talk a lot of my work, I talk about this sort of, you know, unfolding over time and why do we have this you know this mythology and these myths, and I think it's important to not fall prey to that again

583

01:34:34.770 --> 01:34:48.210

Jennifer Richeson: In this discussion and recognize that there's there, there have for a long time, right, we've had these struggles and maybe a willful blindness to inequality, inequity,

584

01:34:49.110 --> 01:34:54.750

Jennifer Richeson: Discrimination and its sources. And in each moment, where you know there's

585

01:34:55.200 --> 01:35:03.000

Jennifer Richeson: You know evidence. So for instance, Elizabeth Hinton, the historian, is writing a new book on the you know '94 Crime Bill and the crack versus powder

586

01:35:03.240 --> 01:35:14.430

Jennifer Richeson: Cocaine disparity and how that you know happened at all. And we sort of think, well, at the time, they didn't really realize the disparate impact. It's like no, they realized it then, they talked about it then, it was called out then,

587

01:35:15.180 --> 01:35:22.890

Jennifer Richeson: and in every other attempt to get rid of it, it was called out. But people still would not just say it's disparate impact discrimination.

588

01:35:23.220 --> 01:35:28.260

Jennifer Richeson: Right. They wouldn't say that or they wouldn't say it's racist. They would say, well, people didn't intend it

589

01:35:28.590 --> 01:35:34.110

Jennifer Richeson: To have this impact, and it really is a colorblind policy so it's okay, right. And so I guess I think we need to

590

01:35:34.350 --> 01:35:49.140

Jennifer Richeson: Like just be more, maybe this is asking too much from society, but be more like honest and forthcoming about wh- and name things what they are. If it's racial discrimination, if it's racial bias, if it's racism, sexism, if whatever it is, just name it.

591

01:35:50.250 --> 01:35:58.020

Jennifer Richeson: Whether it's in algorithms or in people or in systems. So you know if that's my big picture wish, and NSF can't pay for that, though.

592

01:35:59.820 --> 01:36:01.050

Beth Mynatt: Thank you, Jennifer.

593

01:36:01.080 --> 01:36:14.010

Alondra Nelson: Well you as a panel really model I think what we're all here trying to do. You know, how we can begin to kind of talk across our, our fields in our assumptions and so thank you very much to the panelists, and I'll hand things over to Beth.

594

01:36:14.850 --> 01:36:21.720

Beth Mynatt: Again, thank you very much. Terrific, terrific discussions and so we're going to shift into two things.

595

01:36:22.110 --> 01:36:32.610

Beth Mynatt: First, if you've noticed from our very first panelist when Claudia was talking about training and talent and labor up into the comments, just a second ago in the chat channel, which is

596

01:36:32.910 --> 01:36:39.000

Beth Mynatt: It really matters who's building these types of tools that we're talking about and participation in the labor of creating them.

597

01:36:39.570 --> 01:36:46.440

Beth Mynatt: You're not going to be surprised that the questions of, you know, how what it means to have that that that workforce

598

01:36:47.340 --> 01:36:55.170

Beth Mynatt: To address these issues is queued up as the third panel. I warned them that they were going to have the hardest job because all of these conversations are rolling to them now.

599

01:36:55.620 --> 01:37:04.590

Beth Mynatt: But we all have a 30 minute break. Okay, we'll make it a 27 minute break and we'll be back together at 3pm East Coast time. Thank you so much.

600

01:37:05.880 --> 01:37:06.540

Alondra Nelson: Thanks, everybody.