Edited Transcript from Northwestern's Center for HCI + Design Dialogue on Pluriversal Design with Don Norman, Arturo Escobar, B. Scott Rousse, Fernando Flores, and Terry Winograd. Moderated by Liz Gerber December 4, 2020 14 00:01:39.540 --> 00:01:41.370 Liz Gerber: It's wonderful to see everyone here. 15 00:01:43.710 --> 00:01:44.220 Liz Gerber: Welcome 16 00:01:46.680 --> 00:01:47.460 Excellent. 17 00:01:49.080 --> 00:01:52.950Liz Gerber: Okay, we are going to get started. 18 00:01:54.930 --> 00:02:06.150 Liz Gerber: Hello everyone. Welcome. Again, on behalf of northwestern Center for Human Computer Interaction and design, I would like to welcome that over 800 registered attendees from around the globe today. 19 00:02:07.170 --> 00:02:14.850 Liz Gerber: The goal of our center is to study design and develop the future of human computer interaction at work, at home, and at play. 20 00:02:15.930 --> 00:02:23.670 Liz Gerber: And most importantly, we want to develop a new interaction paradigm to support collaboration sustainability and an equitable society. 21 00:02:24.210 --> 00:02:29.670 Liz Gerber: So we've designed this dialogue series to connect and engage with meaningful ideas to help realize this vision. 22 00:02:30.660 --> 00:02:44.310 Liz Gerber: Today we will hear from the beyond computers and cognition group. This group includes Don Norman Professor Emeritus of computer science at Northwestern and director of the design lab at UCSD. 23 00:02:45.480 --> 00:02:57.900

Liz Gerber: Terry Winograd Professor Emeritus of computer science at Stanford, Arturo Escobar, the Kenyan Distinguished Professor of Anthropology at the University of North Carolina at Chapel Hill. 24 00:02:58.740 --> 00:03:07.890 Liz Gerber: Fernando Fernando florists, the founder of pluralistic networks and be Scott was the director of research for pluralistic networks. 25 00:03:08.460 --> 00:03:16.050 Liz Gerber: Obviously, these people are very accomplished, and I could say many more things about them, but in the interest of hearing their thoughts. 26 00:03:16.950 --> 00:03:22.110 Liz Gerber: We will move on to a few zoom keeping rules so that we can get started right away. 27 00:03:22.830 --> 00:03:30.150 Liz Gerber: So I invite you, if you'd like to post a clarifying question in the Q AMP. A I will be reviewing this along with my teammates. 28 00:03:30.510 --> 00:03:39.330 Liz Gerber: As we go through if there's a clarifying question that needs to be asked. We're going to be using the chat for sharing resources, websites, book references, etc. 29 00:03:39.690 --> 00:03:51.330 Liz Gerber: And for all those who are joining us. The event will be recorded, so please keep that in mind. So without further ado, I want to get right into hearing from our fabulous. 31 00:03:54.510 --> 00:04:08.070 Liz Gerber: Can you start by giving us a little background about what your group is how did you start, who, who was invited and what were the goals of the group. I'll turn it over to you. 32 00:04:09.360 --> 00:04:31.140 Don Norman: I've been assigned the starting position and Danielle Fernando will continue the story. So I'm going to start in 1972, Terry Winograd who was that a graduate student at MIT published his or finished and then published his PhD thesis. 33

00:04:32.160 --> 00:04:36.660

Don Norman: Which was called Understanding natural language. 36 00:04:47.430 --> 00:05:00.360 Don Norman: I was on the board of the newly founded journal called cognitive psychology and we thought Terry's thesis was so important we publish the entire thesis and it fills in entire issue of the journal 37 00:05:01.650 --> 00:05:11.970 Don Norman: It was a thesis that actually changed the field. People said, Ha, we now understand how to understand natural language and see. It's a wonderful demonstration. 38 00:05:13.890 --> 00:05:22.920 Don Norman: Then with the passage of time to the 1972 1980 I became a consultant to the Xerox Palo Alto Research Center Park. 39 00:05:24.210 --> 00:05:28.200Don Norman: A group studying natural language, headed by Danny Barbereu. 40 00:05:29.130 --> 00:05:50.700 Don Norman: And Terry was a member of that group Terry by that point had been appointed assistant professor at Stanford in computer science, but also had a position at Xerox PARC, and so we've worked together for several years and then in 1988, is that right 1986 Terry published this book. Δ1 00:05:53.430 --> 00:06:01.560 Don Norman: With Fernando Flores understanding computers and cognition and basically it is a simplified view it said 42 00:06:02.700 --> 00:06:14.490 Don Norman: That Terry's thesis was all wrong irrelevant. It was all about a toy system. It was a very idealistic situation. And sure, you could understand language when everything was constrained and simple. 43 00:06:15.300 --> 00:06:26.730 Don Norman: And it was still a breakthrough, by the way, because it was much more complex and then had been done before, but it still was was a toy problem in what my friend Erin sicker L has called the white room. 44 00:06:27.180 --> 00:06:38.820 Don Norman: And used to say, everything was controlled. So there were no extraneous things and it also went through a lot in there and it was heavily influenced by the philosopher Heidegger

45 00:06:40.950 --> 00:06:56.820 Don Norman: And I read it at the time. And I said, What was interesting. I thought, some of the items were sensible Heidegger, I still don't understand even though I've been giving me some private tutoring modo by be who's on the panel. I'm 46 00:06:57.840 --> 00:06:58.380 Don Norman: Using 47 00:07:01.650 --> 00:07:06.840 Don Norman: Any event I read, I discovered the book again about 48 00:07:07.890 --> 00:07:19.440 Don Norman: I don't know, six months ago and I said, you know, maybe because I've been changing what I'm doing and changing my whole view of the way that the mind works the way the society works to the way that we interact 49 00:07:19.890 --> 00:07:30.090 Don Norman: And so I pick up the book and I read it. And I said, oh, wow, this is fantastic. And so I wrote a letter to cherries and I discovered this wonderful book you wrote it and 50 00:07:30.720 --> 00:07:40.110 Don Norman: I think the problem was it was written ahead of its time. And when I first read it. I didn't understand the full implications and I do now, maybe you should just re release it. 51 00:07:40.860 --> 00:07:53.280 Don Norman: Okay, Terry then contacted Fernando and mentioned this Julian. And so, Fernando. They called me up to see if I were, I quess, a reasonable person who was this funny person. 52 00:07:54.150 --> 00:07:59.700 Don Norman: And we had this wonderful chat was a really great chatter and as I hear, Fernando more and more 53 00:08:00.180 --> 00:08:14.370 Don Norman: I said, you know, I've been reading a whole bunch of stuff. And what you're saying is very similar to what Arturo Escobar saying, Did you know this work, you really want to read him and Fernando laughed and said, boy. Yes, he was a student of mine.

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00:08:15.690 --> 00:08:34.530 Don Norman: So that's how we began, and so I guess Fernando reported back to Terry that I was okay and then he put together this group. And now I'll let for. That's my version of the story, by the way, that isn't necessarily everyone else's version, but now let's turn it over to Fernando. Okay. 55 00:08:34.830 --> 00:08:46.710 Fernando Flores: Sink sink. Ooh, on when I went to the show best and I came from Chile, the excerpt from political reasons. It's been three years of my life. I used to spend really mean it's bent 56 00:08:48.990 --> 00:09:03.960 Fernando Flores: Because they claim that they weren't minister, they go in and not are. There's no charge. Nothing. And they were very fortunately that Stanford University. It was interesting to me. And in an IRA to be reset associated computer science, something they don't know at all. 57 00:09:04.980 --> 00:09:14.220 Fernando Flores: That in that time and not too much. Now, when they found a wonderful person that was telling their through also we shared a common friend called sensical Layla. 58 00:09:15.420 --> 00:09:27.240 Fernando Flores: And and we begin big that action and we want to lay a paper together. Yeah. I understand what you mean I from police. No, no, no sequel academic world was here. 59 00:09:27.960 --> 00:09:39.840 Fernando Flores: Yeah, I know you have gone to chronicle one year when we begin to do that story short, at the end, saying to him. Also, I get contact with people from Berkeley certainly and and rifles. 60 00:09:40.530 --> 00:09:54.270Fernando Flores: And we have a seminar, together with them and at safe to do a PhD in Berkeley Berkeley right now they be really short and led really short because w me 50% of the book are you 61 00:09:55.740 --> 00:09:57.750 Fernando Flores: Reading really Quinn We're studying 62 00:09:59.070 --> 00:10:11.340 Fernando Flores: English will date was another you know was still in belly, especially on also have not played with a student was in

particular student that he sent another thing I have to work at same thing 63 00:10:12.720 --> 00:10:22.770 Fernando Flores: Secret. It's another thing to do, but we can with his work ethic long time to finish at five and that's just all your company's recognition. 64 00:10:23.610 --> 00:10:36.360 Fernando Flores: Know phenomenal CURE, they set up our doodle doodle, we're still in America, like when I was there and some of our common for him without in contact with other recent 65 00:10:37.290 --> 00:10:46.140 Fernando Flores: And in an invitation to a couple of seminar with me and and some equipment I begin to see that he was talking about the logical the same that what's that word today. 66 00:10:46.860 --> 00:10:57.000 Fernando Flores: I invented eight years and that's why they will kill. So you said introduction to the same be saying something that have been another input. Now, if my location of you saying 67 00:10:57.930 --> 00:11:08.880 Fernando Flores: But anyway, that's the way the day, then what is it the monthly, and then they need to talk about be be was this building, or three philosophy being embarrassed me and northwestern 68 00:11:09.630 --> 00:11:23.730 Fernando Flores: And better we have in common that they put us in different generation. And one day I it was suggested by day was that they can hire him. We got a new son personally don't need to go into detail. 69 00:11:24.360 --> 00:11:31.320 Fernando Flores: And after that we have been a wonderful friends and and color with a third. We have been one of my life difficult book now. 70 00:11:31.920 --> 00:11:43.410 Fernando Flores: Together and also training people in keeping people in the new way of looking and Debbie, have you make the input all the end docking and also we got sink into the something together. 71 00:11:44.100 --> 00:11:50.550

Fernando Flores: And that's why I called on because if lit up the conversation within 10 people there. The envious a fade people watching that. 72 00:11:51.360 --> 00:12:03.690 Fernando Flores: And he said, I want to give thanks to the university to put this together outside and now a positive story too early and you your complete your presentation Damocles 73 00:12:09.180 --> 00:12:10.200 Terry Winograd: Okay, um, 74 00:12:12.120 --> 00:12:17.520 Terry Winograd: Well, you can. You've heard the history and what interested me was that 75 00:12:19.200 --> 00:12:26.520 Terry Winograd: The world here, we wrote this book, but the 86 so that's almost 40 years ago 35 years ago and 76 00:12:27.120 --> 00:12:36.930 Terry Winograd: Many of the things that we said there, I would still say today in the same way. But of course, the world has changed a lot. And the concerns that people have about computers. 77 00:12:37.410 --> 00:12:43.950 Terry Winograd: Have shifted and to some extent that's due to the shift in how people think of artificial intelligence right that there's been this 78 00:12:44.460 --> 00:12:54.510 Terry Winograd: Change away from the representational version that Don and I both were involved with early on to everything is machine learning data sets and so on. 79 00:12:55.260 --> 00:13:01.920 Terry Winograd: And they're moving into more and more aspects of human life making judgments about things that we would say people should make decisions of 80 00:13:02.640 --> 00:13:25.740 Terry Winograd: Business industry and justice, and someone. So my interest in rekindling this conversation was to bring it into the current context and try to understand how a philosophical background and

underpinning could help us figure out where we could move to with these current day problems. 81 00:13:26.970 --> 00:13:28.440 Terry Winograd: And so I think the time is right. 82 00:13:29.520 --> 00:13:39.120 Terry Winograd: And of course it's easy to find lots of examples where AI is becoming a major issue and the time is right to to rethink from a foundational level. 83 00:13:40.470 --> 00:13:44.310 Terry Winograd: What what we're talking about with thought and language and artificial intelligence. 84 00:13:48.000 --> 00:13:49.830 Terry Winograd: And I'll pass it along to 85 00:13:50.910 --> 00:13:51.720 Terry Winograd: These are two 86 00:13:56.910 --> 00:14:02.790 Arturo Escobar: Things about tearing. Hello, everybody. Thanks Lisa Amy and everybody is from the invitation. 87 00:14:03.900 --> 00:14:15.870 Arturo Escobar: And so Alice Scotland arrived in Berkeley in 1978 I was coming from a background in chemical engineering Colombian Cali Colombia and then nutrition number chemistry. 88 00:14:17.070 --> 00:14:20.310 Arturo Escobar: So I started my PhD in nutrition Nutritional Sciences 89 00:14:21.450 --> 00:14:24.480 Arturo Escobar: Because I was interested in hunger and under development. 90 00:14:25.770 --> 00:14:45.810 Arturo Escobar: But I eventually be developed many other interests. So I will highlight three events for me, that would import them in connected me to Fernando, and then to the group. The first one is, and to design, since this is, after all, understand a good part of the audience is interested in design.

00:14:46.950 --> 00:14:59.970 Arturo Escobar: So finding. The first one is finding a book by one of my PhD committee members. See, West sure some of you may have remembered him. He wrote one of the first book of operations research. 92 00:15:00.720 --> 00:15:09.570 Arturo Escobar: With Russell lack of systems philosopher and the book was entitled The design of inquiring systems design of inquiry and systems. 93 00:15:09.930 --> 00:15:22.410 Arturo Escobar: You switched it difficult book for me at the time. And yeah, everybody says it was a difficult book, but I retained that idea that systems are thinking what design could be decided as great philosophical systems of thought. 94 00:15:23.760 --> 00:15:36.690 Arturo Escobar: The second event was finding one day the Berkeley bookstore, a book written by Cuba Dreyfus and port Ravi know about football. This was the fall of 1982 I believe 95 00:15:37.650 --> 00:15:57.660 Arturo Escobar: Was the hardback just book just came out and I'd read it in a few days. And it just blew my mind. And because it gave me some tools to rethink in a very fundamental way what I was trying to write about which was why Asia, Africa and Latin America had been declared to be under developed 96 00:15:58.800 --> 00:16:10.440 Arturo Escobar: So that sort of fundamental question. So I went to talk to Robin I mean to to Cuba Dr was immediately and he sent me to talk to people to port Robin anthropology first and then to Fernando 97 00:16:11.580 --> 00:16:15.540 Arturo Escobar: And then establish the connection and the friendship with Fernando 98 00:16:16.980 --> 00:16:26.280 Arturo Escobar: In around 1983, I believe, and he introduced me as well too much. Remember, Ella and when understanding computers and cognition came out. aa 00:16:27.780 --> 00:16:37.350 Arturo Escobar: I read it immediately. And you're also stay with me for a long time until today, especially the notion of ontological design. So, very important.

100 00:16:38.730 --> 00:16:48.330 Arturo Escobar: And why I didn't do anything wrong designer on any of these for quite a while until about 10 years ago when I began to think about design again. 101 00:16:49.980 --> 00:17:01.560 Arturo Escobar: And again three very simple factors in that process. The first one is that the, I guess the return or questions about technology and social theory what was called the ontological turn 102 00:17:02.130 --> 00:17:12.990 Arturo Escobar: In political philosophy anthropologists your V. The second one was finding a small group within design studies that was working also or logical design approaches. 103 00:17:14.700 --> 00:17:18.810 Liz Gerber: For for those not familiar, can you define that, please. I took until logical 104 00:17:18.840 --> 00:17:19.980 Arturo Escobar: Logical design what I 105 00:17:20.010 --> 00:17:20.520 Liz Gerber: Gave you 106 00:17:20.610 --> 00:17:39.570 Arturo Escobar: What to me is still the most succinct definition which is in in in in understanding computers and cognition which is that design some theological because in designing tools and broadly speaking, institutions tools services equipment we are descending ways of being 107 00:17:40.590 --> 00:17:50.130 Arturo Escobar: That design is about the creation of ways of being the creation of words about all making it will make in practice. So to me, and that's what I learned from the book early on. 108 00:17:50.940 --> 00:18:04.770 Arturo Escobar: Which I didn't quite understand in his magnitude again like Don may be on till about 10 years ago when I went back to the idea and it just began to staring me ended up in the book finally decides for the universe. 109 00:18:06.000 --> 00:18:11.280

Arturo Escobar: And the last event that I mentioned is that I realized, more and more that many social struggles 110 00:18:12.090 --> 00:18:25.980 Arturo Escobar: Against ecological devastation for the defense of territories are politically strokes that about defending particular ways of life ways of being that are not sort of the sort of capitalistic Domini dominating ways of life. 111 00:18:27.300 --> 00:18:33.270 Arturo Escobar: So that's, that's what brings me to the group and and I think I'll leave it at that for now. Thank you. 112 00:18:36.360 --> 00:18:42.480 B. Scot Rousse: And I will also start in 1978 like Arturo. That's the year I was born. 113 00:18:43.800 --> 00:18:48.720 B. Scot Rousse: Just as the year I was born. But that's, that's my way of saying, I'm the younger guy. 114 00:18:48.780 --> 00:18:59.010 B. Scot Rousse: On the block here and it's one of the great fortunes in my life to find myself in this group and in conversation like this that is so pivotal for 115 00:19:00.180 --> 00:19:07.020 B. Scot Rousse: shaping our understanding of ourselves and what design and our relationship to designing computers might be in the future. 116 00:19:08.370 --> 00:19:25.770 B. Scot Rousse: My background is in philosophy and my PhD is actually from Northwestern. I wrote a PhD thesis on Heidegger, who is a controversial figure, but who had a lot to say about ontology, which is the study of being of what it means to be in the various ways. 117 00:19:26.790 --> 00:19:28.470 B. Scot Rousse: Entities are or things can be 118 00:19:29.820 --> 00:19:44.460 B. Scot Rousse: After my PhD at Northwestern. I spent several years at Berkeley with Hubert Dreyfus who you've heard as a sort of hinge person for for bringing a lot of people together in this group and through birch through Dreyfus, I met Fernando

119 00:19:45.750 --> 00:19:55.950 B. Scot Rousse: And it was right about the time I was going to go on the job market, what we call the job market and academia and Fernando invited me to work on some research with him. 120 00:19:58.020 --> 00:20:04.410 B. Scot Rousse: That he was doing in Chile and that seques into working with his company pluralistic networks and 121 00:20:04.980 --> 00:20:20.670 B. Scot Rousse: From there, I've been working with them for working with Fernando and pluralistic networks for about seven years I've been met. Carrie and Don and Arturo through Fernando. And I would say so simply that are working pluralistic networks has involved the 122 00:20:22.320 --> 00:20:35.490 B. Scot Rousse: Integration and expansion of the basic philosophical theoretical foundation and understanding computers and cognition and we expand it to integrate it in both philosophical ways, but also in practical ways 123 00:20:36.810 --> 00:20:44.400 B. Scot Rousse: In courses that we give in training that we provide. And in other ways. And so my job in the group has been 124 00:20:45.600 --> 00:21:02.850 B. Scot Rousse: A lot of the work I've done is to help facilitate the conversation to support it and to contribute to pushing us along each meeting. I'm kind of the, the host of the meetings. So I'm going to take that role, to a certain extent now and just watch the conversation. 125 00:21:04.020 --> 00:21:06.000 B. Scot Rousse: And the way I'm going to do that is by 126 00:21:08.160 --> 00:21:16.110 B. Scot Rousse: Two things. I'm going to correct a little bit something Don said because I don't think it's fully correct to say, or it's an incomplete to say that 127 00:21:16.650 --> 00:21:31.860 B. Scot Rousse: When Terry turned around from his original work his PhD thesis. It wasn't just because it had a micro world or or a pretend play world, the white room. It was also because it operated with a distorting

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00:21:32.880 --> 00:21:35.430 B. Scot Rousse: ontology of what it means to be human. 129 00:21:36.840 --> 00:21:48.570 B. Scot Rousse: And operated with what we call a representation of just understanding of the human mind that sees the human mind as essentially a space of representing and manipulating symbols. 130 00:21:49.590 --> 00:21:58.140 B. Scot Rousse: And the work and understand the computer security mission attacks and undermined that conception of the mind by drawing on three different traditions. 131 00:21:59.190 --> 00:22:05.460 B. Scot Rousse: The tradition of biological research and the tradition of Article aces from much Rhonda and Varela 1.32 00:22:06.660 --> 00:22:17.340 B. Scot Rousse: The tradition that emphasizes commitment and speaking and not just the transmission of representations and symbols and that's what we call the speech act tradition and the philosophy of language. 133 00:22:17.880 --> 00:22:23.910 B. Scot Rousse: And the tradition of hermeneutics ontology or hermeneutics which is the study of what it means to understand 134 00:22:24.810 --> 00:22:35.280 B. Scot Rousse: And when we understand we're not just manipulating symbols were drawing on a background a tacit background that is not represented but provides the background for us to understand our representations 135 00:22:36.000 --> 00:22:42.990 B. Scot Rousse: And so, in a word, those are the three pillars of the understanding computers and cognition philosophical foundation 136 00:22:43.920 --> 00:22:51.480 B. Scot Rousse: And what we've been doing in this groups. The past few weeks is asking ourselves, and Terry tented at some of this. We've been asking ourselves. 137 00:22:52.170 --> 00:22:59.880 B. Scot Rousse: How has the contemporary world changed such that if we were going to pose the question and and pursue the investigation.

138 00:23:00.420 --> 00:23:09.690 B. Scot Rousse: That the line of investigation. The understanding computers and cognition sketched. How do we have to make sense of the contemporary situation, what has changed since then. 139 00:23:10.350 --> 00:23:18.900 B. Scot Rousse: And I'm going to just spell out a few things that have changed since again echoing some of what Terry said, first of all, is that we've 140 00:23:20.070 --> 00:23:27.780 B. Scot Rousse: Our relationship to computers has changed. They've went from being a marginal curiosity to being absolutely predictive 141 00:23:28.200 --> 00:23:33.870 B. Scot Rousse: And we're, we have the luxury of connecting with each other all over the world. And this combination conversation now because of that. 142 00:23:34.560 --> 00:23:48.630 B. Scot Rousse: And the, the, the success and artificial intelligence is also undeniable and the transformation from the representational just symbolic AI to machine learning and so forth, has has changed the role of computers in our life. 143 00:23:50.370 --> 00:24:00.630 B. Scot Rousse: The other thing, obviously, that happened with computers is the rise of the Internet and the rise of the Internet brought with it the in the recent decade or so, the rise of social media. 144 00:24:01.290 --> 00:24:13.800 B. Scot Rousse: And that brings me to the second issue that we've been concerned with somewhat in this group, which is the way that socially mediated or technologically mediated communication and relationships have brought about. 145 00:24:14.460 --> 00:24:26.010 B. Scot Rousse: A corrosion and civic life and erosion of norms of truth and trust that have that have been reverberating in different dimensions of life. 146 00:24:27.000 --> 00:24:43.530 B. Scot Rousse: The third thing, Arturo himself had mentioned that's distinctive of our age compared to or that has been in the forefront of our interpretation of our current age compared to the 1980s, is the

ecological crisis that we're facing and accelerating in this on this planet. 147 00:24:44.850 --> 00:24:45.990 Fernando Flores: Related in various ways. 148 00:24:46.050 --> 00:24:50.970 B. Scot Rousse: To the representational is understanding of the mind, but I won't elaborate that now. 149 00:24:52.230 --> 00:24:58.620 B. Scot Rousse: Fourth, and Fifth briefly we're entering the Twilight's of the Western European dominance of the globe. 150 00:24:59.760 --> 00:25:06.090 B. Scot Rousse: And part of that is remains the open wounds left from legacies of colonialism and racism. 151 00:25:08.130 --> 00:25:18.300 B. Scot Rousse: And in relation to that is, and that reckoning is the call that our age has to cultivate a pluralistic way of being. 1.52 00:25:20.100 --> 00:25:24.150 B. Scot Rousse: In a way that understands the radical interdependence and relation ality 153 00:25:25.860 --> 00:25:30.120 B. Scot Rousse: Of our relations to each other and to our ecological niche. 154 00:25:31.140 --> 00:25:46.020 B. Scot Rousse: We have a new concern which is to care for the planet. We have a new concern which is the call to cultivate pluralistic way of being in relation ality for what Arturo calls in his work flow reversal design designing for the plenary verse 155 00:25:47.820 --> 00:25:48.330 B. Scot Rousse: And 156 00:25:49.470 --> 00:25:58.800 B. Scot Rousse: So this is the the background that we're leaving coming from in the conversation. And we've been kicking around in this space. Ever since for the past several weeks.

157 00:25:59.880 --> 00:26:13.710 B. Scot Rousse: And I will see if anyone in my group wants to raise a question for our discussion today. We've been batting around various ideas like the last time. But let me stop talking for a moment and see who wants to 158 $00:26:14.730 \rightarrow 00:26:15.480$ B. Scot Rousse: Grab it from there. 159 00:26:21.900 --> 00:26:25.320 Don Norman: Well, actually. You did a really good job of laying it out. 160 00:26:26.640 --> 00:26:42.960 Don Norman: It's actually interesting. I learned something from each of your presentations about your history, even though we've been talking for some time and I've known some of you for a long time and you can speak to the audience. You can see we've decided to tackle a very small problem, namelv 161 00:26:44.160 --> 00:26:48.690 Don Norman: The problem being being in this world, being in this universe. 162 00:26:50.490 --> 00:27:00.300 Don Norman: And it's interesting because we come from very different backgrounds. I started off as an electrical engineer and ended up as a psychologist and then computer scientists and then a 163 00:27:01.500 --> 00:27:15.060 Don Norman: Designer and a but that's still makes me more practical, in some sense, because I've also had jobs and industry and more tied to data and real phenomena. 164 00:27:16.020 --> 00:27:27.090 Don Norman: And Arturo has an interesting background, starting in chemistry and ending up as a as an anthropologist Arturo. By the way, today is in Columbia. 165 00:27:27.660 --> 00:27:45.750 Don Norman: So we are around the world and Fernando is was a minister of finance in Chile, then was in jail and then got a PhD at Berkeley and philosophy and as a very successful consulting company right now be is 166 00:27:45.780 --> 00:27:46.530

Don Norman: As far as I know. 167 00:27:47.370 --> 00:27:52.680 Fernando Flores: You need to lead you and still have not gotten back to social engineer myself. 168 00:27:52.710 --> 00:28:07.650 Don Norman: You will try your undergrad, you are trained as an engineer now be if you look at look at the background of these see all those vinyl records. So he actually has an amazing collection, I am told, I've only seen it this way by zoom 169 00:28:09.390 --> 00:28:15.300 Don Norman: And and cherry has been a friend for Jewish since the 1980s, I guess. 170 00:28:16.650 --> 00:28:21.750 Don Norman: Is a computer scientist, but it's also been very, very heavily involved in a lot of the ethical concerns of 171 00:28:22.830 --> 00:28:25.170 Don Norman: The use of computers and technology in general. 172 00:28:26.700 --> 00:28:29.820 Don Norman: And so it leaves interesting discussions and 173 00:28:32.070 --> 00:28:34.800 Don Norman: I'll get I'll be to make it happen. 174 00:28:35.520 --> 00:28:36.780 Liz Gerber: Done before. Oh. 175 00:28:36.840 --> 00:28:37.650 Liz Gerber: If I may interrupt. 176 00:28:37.710 --> 00:28:40.050 Liz Gerber: There's a few questions. If 177 00:28:40.080 --> 00:28:54.990 Liz Gerber: The global diversity. The into interdisciplinary diversity of the group is really phenomenal. There are some questions, rising about the gender and racial diversity and makeup every group. And I'm curious how you've thought about the makeup of your group and

178 00:28:56.490 --> 00:28:58.140 Liz Gerber: How it's influenced the conversation. 179 00:28:59.010 --> 00:29:00.690 Don Norman: Well, we have the unfortunate. 180 00:29:02.790 --> 00:29:08.400 Don Norman: Unfortunately we're all except for be we're all old white males and 181 00:29:09.600 --> 00:29:23.970 Don Norman: I'm not going to apologize for being hold but and I've been. I had no control over being white and being a male and you're right we are trying to talk about major issues in the world and yet we are old white males. 182 00:29:25.290 --> 00:29:27.750 Don Norman: Media media age white male for be 183 00:29:29.160 --> 00:29:31.290 Don Norman: And that's, that's a problem. 184 00:29:33.570 --> 00:29:53.460 Fernando Flores: I have one excuse my daughter three agreement and three and men and the blessing of realistic if that woman and Malia to that question. Then we have, but we cannot push too many people each time that name, sometimes you're getting back to them. 185 00:29:54.810 --> 00:29:56.130 Fernando Flores: They can talk. Okay. 186 00:29:57.870 --> 00:29:59.550 Arturo Escobar: Yeah, good. 187 00:30:00.990 --> 00:30:12.300 Terry Winograd: Is meet with zoom in on that which is the obvious consequence of the way that intellectual discussion in politics and all those things work to the disadvantage of people who are outside of it which is 188 00:30:12.840 --> 00:30:26.760

Terry Winograd: The people that you tend to talk to or the people you already know. Or maybe you heard these deep connections going back many years, and some of them. And historically, because the situation's we're in. We don't have those kinds of deep connections with a more diverse group. 189 00:30:27.810 --> 00:30:40.710 Terry Winograd: Now being conscious of that and try to form it to create them to bring them in, but I think it is a systemic problem which is inertia, right, the people you've at least two or three people usually 190 00:30:42.870 --> 00:30:45.180 Arturo Escobar: I think maybe if I can add something. Liz 191 00:30:46.290 --> 00:30:48.810 Arturo Escobar: I think there's an important call sir and 192 00:30:49.890 --> 00:30:57.420 Arturo Escobar: I will take that as a bit of a diversity in the group in the sense that Phil and when I come from South America. Isn't that counts for something 193 00:30:57.960 --> 00:31:08.670 Arturo Escobar: But it still has don't put it with all you know white males. I do myself with mostly with now in the last five years or so with a group of 194 00:31:09.420 --> 00:31:25.680 Arturo Escobar: A Colombian feminist indigenous feminists and feminism has always been an important part of my work or my life. But yes, we hope that if was we will we will move along, we will be able to actively seek out to incorporate 195 00:31:27.600 --> 00:31:30.270 Arturo Escobar: gender and racial diversity and support. 196 00:31:32.700 --> 00:31:40.740 B. Scot Rousse: Every. This is our first time going public as a group, so to speak, and it happened rather quickly and contentions Lee, as you know, is and 197 00:31:41.610 --> 00:31:57.600 B. Scot Rousse: So we stuck. We've been talking together kind of came together through our close relationships and now going public with our

group and this is true we something we need to expand and as we progress with the group and the research. 198 00:31:58.050 --> 00:32:11.370 Liz Gerber: Well, I think it's wonderful, wonderful that we can have these conversations and this is understanding better understanding each other and hearing different points of view is precisely what I think is needed. So thank you so much for being being open to 199 00:32:11.880 --> 00:32:12.720 Don Norman: Hearing your perspective. 200 00:32:13.230 --> 00:32:17.010 Don Norman: I will comment was that you and I are both involved in a different 201 00:32:19.350 --> 00:32:27.600 Don Norman: Initiative named need to reform and change the way that designers is torn across the world. And we've started 202 00:32:28.770 --> 00:32:35.370 Don Norman: I wrote a paper with Michael Meyer about how to be what's wrong with design education and suggestions about changing 203 00:32:36.150 --> 00:32:46.230 Don Norman: We decided we should implement that idea, but it was a big one. But IBM design decided to help us. They have higher 2500 designers in the last couple of years. 204 00:32:47.040 --> 00:32:57.540 Don Norman: And we started with a high level steering committee of 16 people senior designers from across the world, half of them are men half our women have 205 00:32:59.250 --> 00:33:11.640 Don Norman: Quite a percentage in academics and quieter and the rest in industry and Liz is one of these people and we tried very hard to balance that one that we have men and women, and we have 206 00:33:13.260 --> 00:33:18.000 Don Norman: We've asked for volunteers we have 600 700 volunteers at this point. 207 00:33:18.390 --> 00:33:35.700

Don Norman: And they represent people from across the world from graduate students from undergraduate students to very senior deans and people, but the indigenous population is also highly represented and we've made sure that we have a very wide racial diversity. 208 00:33:37.260 --> 00:33:46.710 Don Norman: And so we are very sensitive to the issue and but the five of us got together sort of by accident and my who we knew is cherry pointed out. 209 00:33:48.030 --> 00:33:55.200 Don Norman: This could go on forever, but because we're being very defensive defensive places because we really appreciate that. 210 00:33:56.760 --> 00:33:58.650 Don Norman: Our failure in this particular dimension. 211 00:34:00.180 --> 00:34:03.540Liz Gerber: Thank you so much. JOHN. That means a lot back to you. Be. Thank you. 212 00:34:04.440 --> 00:34:18.360 B. Scot Rousse: Well, I'm one of the we've been developing some notes through our meetings the past couple of weeks. And last time. One of the things that we started to talk about was 213 00:34:18.990 --> 00:34:35.790 B. Scot Rousse: Different ways of imagine reimagining a philosophical foundation for design for thinking about our relationship to technology to computers for thinking about our relationship to sue the environments to our ecological about 214 00:34:37.140 --> 00:34:45.270 B. Scot Rousse: And we started to explore a metaphor or better, not even that it's a metaphor, but a way of illuminating 215 00:34:47.400 --> 00:34:52.740 B. Scot Rousse: What it means to be human and a way that's an alternative still to the 216 00:34:54.180 --> 00:35:02.490 B. Scot Rousse: We're still fighting against, so to speak, the ghost of the that rationalist stick tradition, the understanding computers and cognition poised itself against

217 00:35:03.000 --> 00:35:12.270 B. Scot Rousse: And the nationalistic tradition. The problem with it isn't just that it misconceived the human mind as a as a place of manipulating 218 00:35:13.110 --> 00:35:22.140 B. Scot Rousse: Symbols and representations, but it sets up the human being in in as a ontological differentiation from its environment. 219 00:35:22.380 --> 00:35:38.400 B. Scot Rousse: Such that it's enabled a way that we relate to the earth as an abode of resources that we can understand through knowledge and prediction and control and the primary way that we've taken to relate to the earth, and to other human beings is through 220 00:35:39.480 --> 00:35:47.430 B. Scot Rousse: Relations of control of prediction of knowing them exhaustively. And this is part of what has contributed to 221 00:35:48.150 --> 00:36:06.390 B. Scot Rousse: The ecological devastation part of what's contributed to the legacies of colonialism and aftermath. And we've been looking for ways to rethink re construe human beings, one of the one of the notions. We came to was what we were calling navigation. 222 00:36:07.530 --> 00:36:27.900 B. Scot Rousse: And we were getting into some dispute about that last time about how to understand what it means to to navigate in the world as opposed to represents the world control the world know the world predict the world. And this was something that Don started to raise 223 00:36:29.730 --> 00:36:31.080 B. Scot Rousse: Objections to or 224 00:36:32.220 --> 00:36:37.020 B. Scot Rousse: reservations about last time. And I thought that could be someplace. We could start to talk 225 00:36:40.080 --> 00:36:44.820 Don Norman: I had the feeling that in the discussion. There was still too logical 226 00:36:45.420 --> 00:36:54.810

Don Norman: Network with the assumption that there's that we are goal directed and that will trying to endure various ways of approaching the goal and we're navigating our way through. 227 00:36:55.410 --> 00:37:12.120 Don Norman: All through well all sorts of things nowadays sources experiences, etc. And I said, Well, no, much of what we do is, is it has is triggered internally or externally so 228 00:37:12.810 --> 00:37:25.770 Don Norman: One of my favorite analyses, is that of distraction, we're claiming human errors is blame for many, many accidents and in fact most of the human most of the accidents are caused by the person was distracted. 229 00:37:26.640 --> 00:37:37.560 Don Norman: And I say, you know what, that's stupid. We have this wonderful attribute a human attribute is called Curiosity. And Curiosity is what causes us to be creative and it's wonderful. 230 00:37:37.830 --> 00:37:44.310 Don Norman: And that it is part of our biology, our biology is tuned to be sensitive to changes in the environment. 2.31 00:37:45.240 --> 00:37:57.600 Don Norman: Anything novel or tracks are of interest or anything in the environment that changes attracts or interest in fact for some types of our sensory systems. It doesn't even notice anything that stationary. It has to be changing and 232 00:37:58.740 --> 00:38:05.640 Don Norman: Curiosity is what really brings serendipitous now and serendipitous insights creativity. 233 00:38:06.150 --> 00:38:17.400 Don Norman: Now, if you're curious when you're trying to control an automobile and driving at high speed down a highway and you. Isn't that interesting. You might crash and die. And that's called distraction. 234 00:38:18.180 --> 00:38:25.200 Don Norman: So, but, you know, it's because we designed a technology that requires us to pay continual attention even when nothing is happening. 235 00:38:25.740 --> 00:38:37.800

Don Norman: But since our biology says, no, no. We're tuned to things that change and things that are novel and different, but nothing is happening. We get bored and therefore we have internal triggers that makes the mind thinks about all sorts of things. 236 00:38:39.000 --> 00:38:54.480 Don Norman: Or we notice something. And we pay attention to it and say, and drive our mind to understand it and that's called distraction, but it's both the horrible design of the modern technology that forces us to do things that are not natural. 237 00:38:55.500 --> 00:39:11.850 Don Norman: And so I wanted to say it there lots of our behavior is not co directed. A lot of it is that there's internal triggers and or external triggers internals. When you look. Suppose horrors forbid I might say something interesting. 238 00:39:12.900 --> 00:39:22.320 Don Norman: And if you listen and you say, that's interesting. Then you might start thinking about it, thinking about this, that, and that. And that's great. You're going to learn something, or maybe create some new deep insights 239 00:39:22.650 --> 00:39:28.980 Don Norman: But while you're doing that, you're distracted from what I'm saying. And so you may not even here. The next couple minutes of my talk. 240 00:39:29.820 --> 00:39:43.230 Don Norman: That's okay with me, but that's that's the kind of dilemma we face that when people follow the biological and six to follow stuff that's interested in curious we label it as an evil thing you're distractible 241 00:39:47.100 --> 00:39:53.760 Fernando Flores: I want to reply to to be telling you want to say something. Maybe you can defer 242 00:39:55.080 --> 00:40:07.560 Terry Winograd: It was just gives me going to go back to something that be brought up, which is this question and predictability and forecasting knowing the future. I recently was doing some research for a talk I gave my ethics and in computing 243 00:40:08.340 --> 00:40:23.730 Terry Winograd: And Caitlin, of course, has been a huge amount of debate about the social dilemma. And what's happening to our lives because of

what goes on with Facebook and all these groups. And I came across a crow by Steven Levy and wired from this month. 244 00:40:25.200 --> 00:40:30.330 Terry Winograd: Where he's talking about Twitter and Facebook and 245 00:40:31.410 --> 00:40:45.540 Terry Winograd: Saying they don't want to be the ones to make decisions about what should be the ones who wants to be on which shouldn't be. And then here's the quote, they should have thought of that before they built a global platform is based on amplifying the speech of anyone from ponder presidents. 246 00:40:46.710 --> 00:40:54.720 Terry Winograd: We would pick on is that they should have thought of that because that assumes some ability to predict the drift to say this is where this will lead 247 00:40:55.050 --> 00:41:02.880 Terry Winograd: In our limits, there's extreme limits to our ability to do that. And that puts a different light on the whole question of how do you take responsibility. 248 00:41:04.020 --> 00:41:04.350 Terry Winograd: For you. 249 00:41:07.800 --> 00:41:26.490 Fernando Flores: Well with a really nice discussion between navigation busy with your CPR or surfing. That would be another word that we use, then metaphor. Nobody can be use it for which you play around knew each other I trying to say something that will be setting the normal language. 250 00:41:27.840 --> 00:41:37.350 Fernando Flores: Reading setting gentlemen philosopher from look hundred years ago, one day and say that everybody you know word with a with a piece of poetry. 251 00:41:38.340 --> 00:41:48.030 Fernando Flores: Was trying to say and connecting something that don't exist. And after the last panel of the poetry and begin to be asked. I look at and limited and room put together. 252 00:41:48.720 --> 00:41:53.970 Fernando Flores: And I believe that we are trying to the window engagement because navigation is a word that I can use in a dog would be

253 00:41:54.660 --> 00:42:04.140 Fernando Flores: Is not in the the action part with that is that a normal. Let me give you an example. I wasn't BELIEVED TO GO exile. I came with a cute. 254 00:42:04.800 --> 00:42:13.560 Fernando Flores: Idea know nothing about go then Korea, I, I do not recall my son went to have a contract and maybe I need to navigate with my family, I 255 00:42:14.520 --> 00:42:31.680 Fernando Flores: Have an employment if there is a weakness or all my life. And then one day she came to me and said, if an under we are writing the book I work with all with me and concern about what they want to do next and name. 256 00:42:32.940 --> 00:42:50.940 Fernando Flores: Please send me let me go do this, don't do Berkeley and to have a meeting with some professors philosophy Leone and other I went there, a new name, the way I found a person certainly another I know about them something, but nothing conclude that in the process of doing this. 257 00:42:52.020 --> 00:42:54.090 Fernando Flores: Something begin to happen to me, not a goal. 258 00:42:55.260 --> 00:43:02.340 Fernando Flores: In dream begin equally and suddenly he looked at me that logic simple me to do what to do a PhD. 259 00:43:03.480 --> 00:43:08.820 Fernando Flores: And they and they invited me and then you're not. How difficult is to be expected to be 260 00:43:09.900 --> 00:43:18.270 Fernando Flores: A minute. Here I have the bus and they said, well, but we can I need your philosophy began to meet you in the pro in an afternoon 1pm 261 00:43:19.260 --> 00:43:32.100 Fernando Flores: Okay. And I did that. Then my life had been always put it called contingency relationship that happened during responded to contingencies all power navigation, not on yellow gold.

262 00:43:33.270 --> 00:43:43.290 Fernando Flores: And also kilometers emerging or even only went to be a policeman maybe know they want to come to Stanford and they know I wouldn't have a book, we could be they happen. 2.6.3 00:43:44.100 --> 00:44:00.390 Fernando Flores: Some of the goals, sometimes appear to some of the intervening center. They are not been our philosophy. Our meaning did moment be me pull this meeting I said we have a navigate the realities and offers and many other things in 264 00:44:01.560 --> 00:44:06.660 Fernando Flores: This intimate knowledge of that Debbie called the truth that there is a fundamental notion 265 00:44:07.980 --> 00:44:23.880 Fernando Flores: Something without board with that he going on and and include what what do but the navigation is upon me. They do nothing, keeping it was that nothing too serious. Let me give an example. We know he threw up to date night. The main thing is navigating the system. 266 00:44:25.140 --> 00:44:45.450 Fernando Flores: Because we did with with a republican today, and particularly with trend more Republicans. You don't know what's going to happen. They, they are trying to to produce difficulties, maybe brutal difficult than coming from or letting that America. And he said, I smell it data here. 267 00:44:46.710 --> 00:44:54.690 Fernando Flores: You're kind of political spending, maybe that's another another phenomenon reality. Reality dependably interpretations 268 00:44:55.590 - > 00:45:05.820Fernando Flores: Now, it doesn't mean that it's finally reputation. It doesn't mean that every interpretation is right that's that's the mean dead been in mean that different possibility of world and the same habits. 269 00:45:06.630 --> 00:45:21.510 Fernando Flores: And then in then for Chinese guy should be doing curiosity and and navigation with not only about words. You need to be out on a particular topic any additional beating and we have to be vigilant be here. Okay. 270 00:45:24.300 --> 00:45:34.710

B. Scot Rousse: Yeah, I was seeing the the comment on curiosity and the comments about navigation as a sort of ontological metaphor or 271 00:45:35.580 --> 00:45:44.220 B. Scot Rousse: Guiding expression about how to understand what it means to be human. They're operating at different registers at different discursive registers or interpretive registers. 272 00:45:44.910 --> 00:45:57.780 B. Scot Rousse: And I like the points you make Don about curiosity and being open to changes in the environment and being responsive to what is new and what is emerging and that were built for that as a living being. 273 00:45:58.920 --> 00:46:07.890 B. Scot Rousse: I would, I think we need to preserve that as a as an insight, but subsume it into the the foundational picture, which is 274 00:46:09.450 --> 00:46:21.990 B. Scot Rousse: Something to replace or to count to continue to counteract the, the old dual isms that I've still been holding our mind prisoner in, especially in the west. The dualism is between 275 00:46:22.770 --> 00:46:36.510 B. Scot Rousse: Mind and Body between self and other between person and earth. And when we talk about navigation. We're trying to counteract that that framework or that's 276 00:46:37.560 --> 00:46:46.560 B. Scot Rousse: Those distinctions that have been holding us prisoner as we can. Stein said and navigation is something when you are immersed in a world 277 00:46:47.100 --> 00:46:58.530 B. Scot Rousse: You can see have an intuition of the horizon that's coming, but you can't predict this, you can't control it and you are responsive to the contingencies that are emerging. And I would say that the 278 00:46:59.280 --> 00:47:08.190 B. Scot Rousse: The curiosity that you're pointing to is enveloped into that as part of that as part of our capacities that we draw on when we can 279 00:47:10.560 --> 00:47:22.260

B. Scot Rousse: Be responsive to what emerges at as it as it emerges rather than sticking with a prediction sticking with a longing for control and so forth. What do you think, done. 280 00:47:24.690 --> 00:47:25.170 Don Norman: Yeah. 281 00:47:28.560 --> 00:47:40.590 Don Norman: That's actually one of the difficulties, we're facing it I mean difficulties, you know, positive voice because their whole job is to try to understand the difficulties of life in the world. 2.82 00:47:42.300 --> 00:47:44.040 Don Norman: And I don't know how to do it. 283 00:47:45.210 --> 00:47:54.240 Don Norman: But that's, but I think we are agreement that we have somewhat different approaches. But we're trying to put together a story that allows all of them and 284 00:47:55.230 --> 00:48:10.500 Don Norman: I don't know how that will happen. But that's why we're together. And that's why we're still we're still investigating the phenomena. I was a bit concerned that it seemed to the word navigation bothered me. Maybe it's simply the word Yama went behind it that it seemed like it was 285 00:48:11.520 --> 00:48:17.760 Don Norman: Navigation. I think implies that you know where you're going, and you just try and, you know, the goal and you're just trying to get there and 286 00:48:18.780 --> 00:48:20.400 Don Norman: Fernando is shaking his head. No. 287 00:48:21.420 --> 00:48:33.090 Don Norman: Yes, I agree that that that's why I think it was just the word that is that misled me and some of the the rough paper that we had written. And that was about what five or six pages long. 288 00:48:34.110 --> 00:48:44.100 Don Norman: And so, yes. So how do we incorporate this because you'd have the human being is one of the most complex things in existence and it's

00:48:45.090 --> 00:48:53.670 Don Norman: And operates under many different kinds of controlling mechanisms. One of them is, some of them are subconscious and wired in the biology. 290 00:48:54.000 --> 00:49:04.530 Don Norman: Other subconscious heavily learned and others are conscious, which may very well be much more like the traditional representational scheme, I 291 00:49:04.980 --> 00:49:16.140 Don Norman: I theory for the moment is that we we do our representational beings at the level of consciousness, but most of our behavior is subconscious and that's in fact non representational 292 00:49:17.160 --> 00:49:17.430 Yeah. 293 00:49:18.750 --> 00:49:21.420 Fernando Flores: A poodle to leave now we see 294 00:49:22.320 --> 00:49:24.120 B. Scot Rousse: Did he just disappear or did he 295 00:49:24.420 --> 00:49:29.580 Fernando Flores: disappeared. Yeah, but I knew that she have a medical slowly can see family. 296 00:49:30.750 --> 00:49:32.670 Fernando Flores: You can be only white. That's why maybe 297 00:49:33.810 --> 00:49:35.160 Fernando Flores: Maybe, is it connected that 298 00:49:36.480 --> 00:49:38.010 Fernando Flores: I knew about that before. Okay. 299 00:49:43.320 --> 00:49:47.190 Fernando Flores: He living in North Carolina. Now, not, not in not in good condition. 300 00:49:48.660 --> 00:49:51.240 Don Norman: Really losing time. Okay.

301 00:49:51.480 --> 00:50:02.700 Liz Gerber: Don, just to clarify one of your question. Somebody asked a question about detecting and acting upon novel ordinances. So how do we see novel Florence's 302 00:50:05.310 --> 00:50:07.770 Don Norman: I don't understand why. 303 00:50:08.970 --> 00:50:13.290 Don Norman: Why, why it's special. How do we deal with novel situation or novel anything 304 00:50:14.430 --> 00:50:17.820 Don Norman: Accordance is that the critical variable and so novelty that's critical. 305 00:50:22.200 --> 00:50:24.840 Don Norman: So I'm not going to answer the question that's that's a 306 00:50:26.040 --> 00:50:39.120Don Norman: I suspect that the answer is dependent upon the particular nature of the novelty and your past experience. And that's a problem for psychologists to study and I don't believe we have a general answer. 307 00:50:42.930 --> 00:50:52.170 Fernando Flores: We, we have something different, you know, raping that maybe can be useful to hear. They have a New Delhi heavy bleeding, because she covering leaving something different. 308 00:50:52.860 --> 00:51:01.980 Fernando Flores: Telling me about trauma, because when you have a traumatic situation is not about another piece of all the whole world that exceeds before 309 00:51:03.810 --> 00:51:04.290 Fernando Flores: When it was 310 00:51:06.360 --> 00:51:08.970 Fernando Flores: In water and say it but Lexi, the 311 00:51:10.350 --> 00:51:22.410

Fernando Flores: More that they but example I can leave that situation in a light we can they wouldn't be nice to have it on. It was no thought ed and sometime in one day. 312 00:51:23.130 --> 00:51:40.680 Fernando Flores: The hosting chain you are known to be like, you know, I want to cut here, I cannot see my family for nine months, you know, you want to get like poor, poor, a lot of story and one of this phenomena can happen to you the spear. 313 00:51:41.820 --> 00:51:50.670 Fernando Flores: You see the emotion and more to go ahead and they're standing rational, but you're not irrational that that might seem to be there. 314 00:51:51.810 --> 00:51:57.540 Fernando Flores: We go. I see many people that were together recently with me that we had in the last 315 00:51:58.620 --> 00:52:02.970 Fernando Flores: 90 sequel to be only two weeks I hadn't thought about that before. 316 00:52:05.010 --> 00:52:06.000 Fernando Flores: I remember that when 317 00:52:07.020 --> 00:52:16.650 Fernando Flores: We would then dig that we wedding and I live in the southern Chile in the spirit and when the guy that went in bed at my mom made me laugh. They were like 35 people on 318 00:52:17.700 --> 00:52:25.290 Fernando Flores: Officially going on political leader isolate or the rest of the country 10 day after the cook with on nothing about what we have to do with us. 319 00:52:26.400 --> 00:52:38.730 Fernando Flores: And and there wasn't a the habit volume of the history of engine written by a famous if he will suffer and you said, I can't want news, what 320 00:52:39.810 --> 00:52:45.570 Fernando Flores: It. We were in England that we really are all dead. Now, they would be killed quickly.

321 00:52:46.890 --> 00:53:02.490 Fernando Flores: We have something called the people who are lucky last year and we laugh, but at the same time was a new understanding or cold, good to go with us. You please shouldn't be like one of the senior they learn that in some moment you need to leave. 322 00:53:03.840 --> 00:53:07.020 Fernando Flores: With it is fear and the anger that seemed don't make sense. 323 00:53:08.160 --> 00:53:24.030 Fernando Flores: Few years ago I found a philosopher basically friend of us, the president 16 I do that all day. Welcome. I'll try my understanding, and then a new maybe establishing about traumatic situation could be very important thing to learn for realities. 324 00:53:25.080 --> 00:53:31.650 Fernando Flores: Because that a moment in which you are lacking in your interpretation reality. Neither of you. 325 00:53:33.300 --> 00:53:34.620 B. Scot Rousse: Including new, for instance. 326 00:53:36.540 --> 00:53:37.890 Fernando Flores: I thought, yeah, again, please. 327 00:53:39.630 --> 00:53:41.970 Fernando Flores: Y'all got in the right moment to talk 328 00:53:42.900 --> 00:53:51.120 Arturo Escobar: Okay, I'm really sorry. I don't know what happened. I got disconnected. I tried to join him back. And then it was redirected to through the registration. 329 00:53:51.480 --> 00:53:55.680 Liz Gerber: Anyways, all right. It's 2020 but we'd love to hear your thoughts. 330 00:53:56.850 --> 00:54:05.730 Arturo Escobar: Well, I mean, the one thing I wanted to say, I don't know what I miss but about navigation is that it's been it's taking me a while also on the stand.

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00:54:06.570 --> 00:54:16.140 Arturo Escobar: But for an ongoing everybody means by that but i think is a really powerful new metaphor for me in the sense that I would say that he 332 00:54:16.800 --> 00:54:24.630 Arturo Escobar: He describes a new practice for living and in your practice in relation to what that is different for what 333 00:54:25.590 --> 00:54:34.050 Arturo Escobar: That is different from what we have become accustomed to, which is given to us in contemporary society which is mostly given to us by the traditions of 334 00:54:34.740 --> 00:54:47.640 Arturo Escobar: Sort of periodicals capitalism and ontological dualism, which is as be well describe it about controlling about knowing when you've location, sort of in a competition greed almost knowing where we are. 335 00:54:48.570 --> 00:54:58.200 Arturo Escobar: And then predict and control and appropriate team and navigation is a new ethics and political practice for leaving for me. 336 00:54:58.890 --> 00:55:12.240 Arturo Escobar: And that's why I really like the concept and it does contribute to the idea that we need not only to identify clearly what is the central issues of for time. 337 00:55:12.750 --> 00:55:27.030 Arturo Escobar: Many people are doing that, but how develop new ways of thinking about them and that's that's in a way that wasn't the subtitle of the book, The 1986 book a new foundation for design. 338 00:55:28.380 --> 00:55:36.450 Arturo Escobar: So now it's like we're aiming for a new foundation for something that we don't know exactly what it is. How to be Human in the contemporary period. 339 00:55:37.080 --> 00:55:47.760 Arturo Escobar: That we involve design and education and ecological relations different religions to the earth, and so forth. But that's, you know, what he wanted to say. 340 00:55:48.780 --> 00:55:49.140

Fernando Flores: Can you 341 00:55:49.170 --> 00:55:58.830 B. Scot Rousse: Can you talk a little bit about how you think the notion of navigation relates to Marie Claire reversal DESIGN AND PLAY RIVER salary. 342 00:55:59.520 --> 00:56:13.650 Arturo Escobar: Is, I think, I think I never could have bought into service be but but yes. I mean, it is it is a practice for the believers in the sense that the the the practice of being human. 343 00:56:14.790 --> 00:56:20.070 Arturo Escobar: In the universe in the assumption that the world is made out of. 344 00:56:21.090 --> 00:56:30.240 Arturo Escobar: Representations that we can understand through logical, rational means and hence open them up to be in control and manipulate it. 345 00:56:31.320 --> 00:56:42.150 Arturo Escobar: Is part of the crisis is part of the crisis and needs is that model is somebody calls it a Mano humanist sort of a secular liberal Monique humanist notion of the human 346 00:56:43.020 --> 00:56:51.480 Arturo Escobar: This is Sylvia winter Jamaican philosophy really wonderful Jamaica philosophy. So now we need to move to a pretty versa conception of the world and the human 347 00:56:52.050 --> 00:57:02.280 Arturo Escobar: And I think navigation with different many different coordinates. This is not going to be a single set of coordinates didn't have to be multiple set of coordinates and practices of navigation. 348 00:57:03.810 --> 00:57:05.340 Fernando Flores: Navigation GPS. 349 00:57:06.150 --> 00:57:06.990 Arturo Escobar: Yeah. Was it 350 00:57:08.460 --> 00:57:08.820 Fernando Flores: Okay.

351 00:57:10.170 --> 00:57:12.450 Arturo Escobar: What is my bits of time but but that's 352 00:57:13.380 --> 00:57:31.530 Fernando Flores: A good I have 111 connection. I just did what you said, hey, remember that we were talking with your Colombian friends, the other day, and then you could do your holiday purple weaker and you send me in welcoming you to our book we are committed to travel together. 353 00:57:32.940 --> 00:57:49.260 Fernando Flores: And you know it'd be a labor tones together is another note, you know, to talk our navigation with a purpose to keep navigating we go with a novelty. We haven't got time we got there no capacitive interpretation that can make sense, then 354 00:57:50.880 --> 00:57:54.240 Fernando Flores: I see that we had about a little bit of that that we can always call it before. 355 00:57:54.330 --> 00:58:02.220 Arturo Escobar: Yes, the way my friends, put it in Colombia is this, say this is not a project where we're envisioning for our region in Colombia. 356 00:58:03.600 --> 00:58:12.540 Arturo Escobar: Is a transition from a very devastating development model to something different. They say this project. This is a path is the Camino. We said project. 357 00:58:18.120 --> 00:58:23.370 Liz Gerber: Well I as the moderator. I feel this conversation is just getting going. And yet, I'm looking at the time. 358 00:58:24.360 --> 00:58:32.550 Liz Gerber: And so I wonder, practically, we have a lot of design practitioners on the line, as well as HDI practitioners and I'm wondering 359 00:58:33.000 - > 00:58:45.330Liz Gerber: This has been incredible. I'm wondering what kind of actionable insight you can offer to to these designers, as they go back to their work after this inspiring call based on what you've discussed so far. 360 00:58:48.390 --> 00:58:54.600

Terry Winograd: It's hard, a hard question. But let me give it a quick and in a way, superficial answer which is I think the message is 361 00:58:55.290 --> 00:59:08.610 Terry Winograd: Don't think of design purely in terms of the skill and the kinds of things you're designing go back and read and I'll say philosophy. But I mean, philosophy and abroad. And it's not necessarily scholarly, academic philosophy, but 362 00:59:09.090 --> 00:59:17.910 Terry Winograd: Take some time to think about what is the background, what are the broader context, that makes sense of what we're doing, as opposed to the details of how we do it. 363 00:59:21.510 --> 00:59:39.720 Don Norman: I think that's the best answer. That is, we are really reconsidering our place on Earth. And these guys play a major role here and that I would say go back and read Victor papanek of 1971 where he said the most you know design is the most dangerous. 364 00:59:40.830 --> 00:59:42.870 Don Norman: Fate of all and 365 00:59:44.850 --> 00:59:57.450 Don Norman: Because we are unknowingly creating technology most designers are creative and technology and I don't. It could be a physical thing it could be a routine. It could be a procedure. It could be a service, but they're all technology in a sense. 366 00:59:58.290 --> 01:00:03.960 Don Norman: Without thought about how it fits. Why you know about the people who are 367 01:00:06.270 --> 01:00:17.880 Don Norman: Our technology is harmful to as many people as as painful as it's helpful that it may be more harmful than it is helpful. And again, you have to look at the 368 01:00:18.750 --> 01:00:29.100 Don Norman: Look at the economic systems that we have in the world where there's a huge disparity between the people who are very, very, very wealthy the relatively small number of them who have 369 01:00:29.580 --> 01:00:49.650

Don Norman: 80% of the money or 90% and the people who are very, very poor and more and more a smaller, smaller middle class who barely she struggled to get along, but also look at the fact that we, the colonization of the earth, mostly by the Europeans, but also by the United States has caused this 370 01:00:51.930 --> 01:01:00.270 Don Norman: It's a model culture that we all think the same way we all talk the same way and we destroyed other ways of thinking and other ways of believing 371 01:01:01.170 --> 01:01:11.880 Don Norman: And in fact we did that in the Americas by naming the people as savages or slaves, which allows you to treat them differently. 372 01:01:12.570 --> 01:01:21.090 Don Norman: And then slaves in the United States in the Constitution or not people slaves and women are not counted as people and 373 01:01:21.900 --> 01:01:35.580 Don Norman: But think about that, that if you think about the history of the world, we should be doing our design because design is a field that changes thing that changes behavior that changes people changes society, take it seriously. 374 01:01:36.720 --> 01:01:42.630 Liz Gerber: I think that is the the perfect note to end on. Don and Terry, thank you so much for those 375 01:01:43.830 --> 01:01:54.810 Liz Gerber: Those challenges to think bigger and to think what designers capable of and for bringing in Victor Pepin next book which is certainly the first book I read that really changed my idea of what design was possible. 376 01:01:55.200 --> 01:02:07.110 Liz Gerber: I'd like to thank our speakers for making their debut with this large audience. We're so grateful. Don be Fernando Terry and Arturo that you took the time out of your busy schedule to join us and share 377 01:02:07.470 --> 01:02:16.980 Liz Gerber: Your emerging thoughts. Many thanks to the organizing team a nutrition Darren, Jeff. Brian, please stay tuned for our next center dialogue.

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01:02:17.460 --> 01:02:30.870 Liz Gerber: With the leading ACI and design researchers, which we are planning for winter quarter we will be announcing that on our website and as well as through the list, sir. So thank you all again be well and do good in the world. Take care. 379 01:02:31.320 --> 01:02:32.010 B. Scot Rousse: Thanks, Liz. 380 01:02:32.490 --> 01:02:33.750 Liz Gerber: Thank you so much. 381 01:02:33.810 --> 01:02:34.560 Liz Gerber: Thank you so much. 382 01:02:34.920 --> 01:02:37.770 Liz Gerber: And Don, Don Terry and being learned I have 383 01:02:37.830 --> 01:02:40.800 Liz Gerber: A we have 50 questions that we will send to you. 384 01:02:42.180 --> 01:02:45.900 Liz Gerber: So I've been at least 50 questions. So stay tuned. 385 01:02:46.080 --> 01:02:49.470 Liz Gerber: People were very engaged, but you're the conversation was so 386 01:02:50.670 --> 01:02:58.380 Liz Gerber: I didn't want to interrupt your, your, you know, your, your interactions, but I'd be delighted to share these questions with you. I think you'll I think you'll enjoy. 387 01:02:58.500 --> 01:02:59.520 B. Scot Rousse: Reading love to see them. 388 01:02:59.940 --> 01:03:11.070 Liz Gerber: Certainly, and again thank thank you so much for taking your time to debut as I said, and be willing to talk to us. It's real privilege to hear, hear your thoughts as their emerging it's really 389 01:03:11.580 --> 01:03:23.370 Liz Gerber: As I said to dawn just being able to hear how ideas are formed and contrast 20 years from now reading the book that you may right

and thinking we were we were here in listening the conversation. So thank you so much for that.

390 01:03:24.990 --> 01:03:25.560 Arturo Escobar: Thank you.