## WEBVTT

NOTE duration:"01:12:04"
NOTE recognizability:0.894
NOTE language:en-us
NOTE Confidence: 0.808112656666667
00:00:00.000 --> 00:00:02.460 I think I'm ready think. Oh
NOTE Confidence: 0.85971015
00:00:02.580 --> 00:00:06.610 OK, everybody saw that UM so thanks.
NOTE Confidence: 0.85971015
00:00:06.610 --> 00:00:08.434 Thanks John, and thank you
NOTE Confidence: 0.85971015
00:00:08.434 --> 00:00:10.340 all for coming today. Up to
NOTE Confidence: 0.695774615
00:00:10.350 --> 00:00:12.978 80 people and today's
NOTE Confidence: 0.828168238333333
00:00:13.500 --> 00:00:16.866 yet another in series of pointer,
NOTE Confidence: 0.828168238333333
00:00:16.870 --> 00:00:20.760 fellowship and journalism sponsored grand
NOTE Confidence: 0.828168238333333
00:00:20.760 --> 00:00:24.644 rounds in this has been able to fund us NOTE Confidence: 0.828168238333333

00:00:24.650 --> 00:00:26.768 for this and several other presentations NOTE Confidence: 0.828168238333333

00:00:26.768 --> 00:00:28.874 throughout the years and always a
NOTE Confidence: 0.828168238333333
00:00:28.874 --> 00:00:30.788 wonderful opportunity to hear from us,
NOTE Confidence: 0.828168238333333
00:00:30.790 --> 00:00:32.690 from journalists and people.
NOTE Confidence: 0.828168238333333
00:00:32.690 --> 00:00:33.988 For writing, I said.
NOTE Confidence: 0.828168238333333

00:00:33.988 --> 00:00:35.206 I would not want to thank them.
NOTE Confidence: 0.828168238333333
00:00:35.210 --> 00:00:36.680 I also want to thank the CMHC
NOTE Confidence: 0.828168238333333
00:00:36.680 --> 00:00:37.810 Foundation for their support.
NOTE Confidence: 0.828168238333333
00:00:37.810 --> 00:00:40.079 For the grand rounds today,
NOTE Confidence: 0.828168238333333
00:00:40.080 --> 00:00:42.210 and I want a special shout
NOTE Confidence: 0.828168238333333
00:00:42.210 --> 00:00:44.370 out to Kyle Peterson.
NOTE Confidence: 0.828168238333333
00:00:44.370 --> 00:00:46.786 Not only is the director of the foundation, NOTE Confidence: 0.828168238333333

00:00:46.790 --> 00:00:50.021 but it just would tell you that every year NOTE Confidence: 0.828168238333333

00:00:50.021 --> 00:00:53.305 Kyle introduces me and you to some of NOTE Confidence: 0.828168238333333

00:00:53.305 --> 00:00:55.795 the most interesting voices in journalism.
NOTE Confidence: 0.828168238333333
00:00:55.800 --> 00:00:58.668 It's an extraordinary opportunity for me, NOTE Confidence: 0.828168238333333

00:00:58.670 --> 00:01:02.331 and Kyle is so thoughtful in his
NOTE Confidence: 0.828168238333333
00:01:02.331 --> 00:01:05.184 selections and reaching out to people.
NOTE Confidence: 0.828168238333333
00:01:05.184 --> 00:01:07.061 So today I have the distinct
NOTE Confidence: 0.828168238333333
00:01:07.061 --> 00:01:08.516 pleasure to introduce you to.
NOTE Confidence: 0.828168238333333
00:01:08.520 --> 00:01:11.590 Any pollmer any Murphy paw?

NOTE Confidence: 0.828168238333333
00:01:11.590 --> 00:01:13.578 She's an acclaimed science writer whose work NOTE Confidence: 0.828168238333333

00:01:13.578 --> 00:01:15.618 has appeared in New York Times magazine, NOTE Confidence: 0.828168238333333

00:01:15.620 --> 00:01:16.468 Scientific American, NOTE Confidence: 0.828168238333333

00:01:16.468 --> 00:01:19.012 and the best American Science writing
NOTE Confidence: 0.828168238333333
00:01:19.012 --> 00:01:21.090 among many other publications.
NOTE Confidence: 0.828168238333333
00:01:21.090 --> 00:01:23.827 Her latest book is the Extended Mind,
NOTE Confidence: 0.828168238333333
00:01:23.830 --> 00:01:26.175 the power of thinking outside the brain.
NOTE Confidence: 0.828168238333333
00:01:26.180 --> 00:01:28.856 So this was published in June of 2021,
NOTE Confidence: 0.828168238333333
00:01:28.856 --> 00:01:30.636 and it's already been selected
NOTE Confidence: 0.828168238333333
00:01:30.636 --> 00:01:32.754 as Amazon editors pick for Best
NOTE Confidence: 0.828168238333333
00:01:32.754 --> 00:01:34.638 nonfiction and as an editor's choice
NOTE Confidence: 0.828168238333333
00:01:34.638 --> 00:01:36.958 by the New York Times Book Review.
NOTE Confidence: 0.828168238333333
00:01:36.960 --> 00:01:38.658 She's also the author of Origins,
NOTE Confidence: 0.828168238333333
00:01:38.660 --> 00:01:40.118 named by the New York Times
NOTE Confidence: 0.828168238333333
00:01:40.118 --> 00:01:41.834 Book Review as a notable book.
NOTE Confidence: 0.828168238333333

00:01:41.840 --> 00:01:43.610 And the cult of personality,
NOTE Confidence: 0.828168238333333
00:01:43.610 --> 00:01:45.898 hailed by Malcolm Gladwell in The New Yorker, NOTE Confidence: 0.828168238333333

00:01:45.900 --> 00:01:47.880 is a fascinating new book.
NOTE Confidence: 0.828168238333333
00:01:47.880 --> 00:01:50.176 Her Ted talk has been viewed by NOTE Confidence: 0.828168238333333

00:01:50.176 --> 00:01:52.406 more than two more than 2.6 million
NOTE Confidence: 0.828168238333333
00:01:52.406 --> 00:01:54.138 times at this point.
NOTE Confidence: 0.828168238333333
00:01:54.140 --> 00:01:56.303 And she's the recipient of the Rosalyn NOTE Confidence: 0.828168238333333 00:01:56.303 --> 00:01:58.440 Carter Mental Health Journalism Fellowship. NOTE Confidence: 0.828168238333333

00:01:58.440 --> 00:02:00.208 The Spencer Education Journalism NOTE Confidence: 0.828168238333333

00:02:00.208 --> 00:02:02.418 Fellowship and the Bernard L
NOTE Confidence: 0.828168238333333
00:02:02.418 --> 00:02:04.567 Schwartz Fellowship at New America.
NOTE Confidence: 0.828168238333333
00:02:04.570 --> 00:02:06.838 She graduated a graduate from Yale
NOTE Confidence: 0.828168238333333
00:02:06.838 --> 00:02:08.917 University and the Columbia University
NOTE Confidence: 0.828168238333333
00:02:08.917 --> 00:02:10.917 Graduate School of Journalism,
NOTE Confidence: 0.828168238333333
00:02:10.920 --> 00:02:13.355 and she's currently Learning Sciences
NOTE Confidence: 0.828168238333333
00:02:13.355 --> 00:02:15.790 exchange fellow at New America.

NOTE Confidence: 0.828168238333333
00:02:15.790 --> 00:02:18.240 So I I like you all,
NOTE Confidence: 0.828168238333333
00:02:18.240 --> 00:02:21.758 join me in welcoming her and Kyle will
NOTE Confidence: 0.828168238333333
00:02:21.758 --> 00:02:24.890 also be participating in this grand rounds.
NOTE Confidence: 0.828168238333333
00:02:24.890 --> 00:02:27.536 So thank you and over to Annie Murphy Paul.
NOTE Confidence: 0.91030053
00:02:28.430 --> 00:02:29.390 Thank you Mike.
NOTE Confidence: 0.91030053
00:02:29.390 --> 00:02:30.990 Hearing those introductions is always
NOTE Confidence: 0.91030053
00:02:30.990 --> 00:02:32.806 like this is your life, you know,
NOTE Confidence: 0.91030053
00:02:32.806 --> 00:02:34.630 kind of like your life passing before you.
NOTE Confidence: 0.91030053
00:02:34.630 --> 00:02:37.640 But thanks so much for that introduction.
NOTE Confidence: 0.91030053
00:02:37.640 --> 00:02:39.080 Thanks for inviting me to
NOTE Confidence: 0.91030053
00:02:39.080 --> 00:02:40.232 speak at grand Rounds.
NOTE Confidence: 0.91030053
00:02:40.240 --> 00:02:41.850 I've certainly never done anything
NOTE Confidence: 0.91030053
00:02:41.850 --> 00:02:44.075 like this before and I wanted to
NOTE Confidence: 0.91030053
00:02:44.075 --> 00:02:45.928 start off by saying that I don't
NOTE Confidence: 0.91030053
00:02:45.928 --> 00:02:47.601 want this to be a lecture where
NOTE Confidence: 0.91030053

00:02:47.601 --> 00:02:49.289 I'm just talking at you guys.
NOTE Confidence: 0.91030053
00:02:49.290 --> 00:02:51.369 I love a conversation and a back and forth,
NOTE Confidence: 0.91030053
00:02:51.370 --> 00:02:53.519 so I encourage everyone who's here to
NOTE Confidence: 0.91030053
00:02:53.519 --> 00:02:55.507 post questions in the chat and I'll.
NOTE Confidence: 0.91030053
00:02:55.510 --> 00:02:57.460 I'll pause and look over there
NOTE Confidence: 0.91030053
00:02:57.460 --> 00:02:58.435 and hopefully come.
NOTE Confidence: 0.91030053
00:02:58.440 --> 00:03:00.638 Mike and Tricia and Chris and Kyle
NOTE Confidence: 0.91030053
00:03:00.638 --> 00:03:02.676 and others can help me locate
NOTE Confidence: 0.91030053
00:03:02.676 --> 00:03:04.396 questions when they come up.
NOTE Confidence: 0.91030053
00:03:04.400 --> 00:03:07.072 I do want to thank Kyle for bringing
NOTE Confidence: 0.91030053
00:03:07.072 --> 00:03:09.171 me into this this amazing forum.
NOTE Confidence: 0.91030053
00:03:09.171 --> 00:03:11.253 Kyle and I know each other
NOTE Confidence: 0.91030053
00:03:11.253 --> 00:03:13.166 because we're baseball, parents,
NOTE Confidence: 0.91030053
00:03:13.166 --> 00:03:14.774 fellow baseball parents.
NOTE Confidence: 0.91030053
00:03:14.774 --> 00:03:17.500 So just goes to show you these.
NOTE Confidence: 0.91030053
00:03:17.500 --> 00:03:20.542 New Haven connections really can be

NOTE Confidence: 0.91030053
00:03:20.542 --> 00:03:23.630 very fruitful and many directions,
NOTE Confidence: 0.91030053
00:03:23.630 --> 00:03:26.156 so let's see where to start.
NOTE Confidence: 0.91030053
00:03:26.160 --> 00:03:26.634 I mean,
NOTE Confidence: 0.91030053
00:03:26.634 --> 00:03:28.530 I thought maybe I'd tell you a little
NOTE Confidence: 0.91030053
00:03:28.585 --> 00:03:30.314 bit of a little bit of background
NOTE Confidence: 0.91030053
00:03:30.314 --> 00:03:32.148 about me that helps can help you
NOTE Confidence: 0.91030053
00:03:32.148 --> 00:03:34.484 understand how I came to write this book.
NOTE Confidence: 0.91030053
00:03:34.484 --> 00:03:36.611 The extended mind I went to
NOTE Confidence: 0.91030053
00:03:36.611 --> 00:03:37.879 Yale as an undergraduate.
NOTE Confidence: 0.91030053
00:03:37.880 --> 00:03:38.966 I was dumb.
NOTE Confidence: 0.91030053
00:03:38.966 --> 00:03:41.138 Planning to be an English major
NOTE Confidence: 0.91030053
00:03:41.138 --> 00:03:43.934 until I was felled by the Fairy Queen.
NOTE Confidence: 0.91030053
00:03:43.940 --> 00:03:45.856 You know that long,
NOTE Confidence: 0.91030053
00:03:45.856 --> 00:03:48.730 dense poem by Spencer that just
NOTE Confidence: 0.91030053
00:03:48.730 --> 00:03:50.434 was not like the novels that I that
NOTE Confidence: 0.91030053

00:03:50.434 --> 00:03:52.157 I loved as a high school student.
NOTE Confidence: 0.91030053
00:03:52.160 --> 00:03:53.462 When I was planning on being
NOTE Confidence: 0.91030053
00:03:53.462 --> 00:03:54.113 an English major.
NOTE Confidence: 0.91030053
00:03:54.120 --> 00:03:56.040 So I ended up being an
NOTE Confidence: 0.91030053
00:03:56.040 --> 00:03:57.000 American studies major,
NOTE Confidence: 0.91030053
00:03:57.000 --> 00:03:59.000 which is a major I didn't even know
NOTE Confidence: 0.91030053
00:03:59.000 --> 00:04:00.438 existed when I got to college,
NOTE Confidence: 0.91030053
00:04:00.440 --> 00:04:02.450 and I found it because,
NOTE Confidence: 0.91030053
00:04:02.450 --> 00:04:03.920 you know, back in those days,
NOTE Confidence: 0.91030053
00:04:03.920 --> 00:04:07.301 there was a hard copy course catalog NOTE Confidence: 0.91030053

00:04:07.301 --> 00:04:10.620 that was became dog eared with use. NOTE Confidence: 0.91030053

00:04:10.620 --> 00:04:12.846 And highlighted and you know post it
NOTE Confidence: 0.91030053
00:04:12.846 --> 00:04:15.031 noted and all the most interesting
NOTE Confidence: 0.91030053
00:04:15.031 --> 00:04:17.359 classes that I located where it
NOTE Confidence: 0.91030053
00:04:17.359 --> 00:04:19.470 happened to be in American studies.
NOTE Confidence: 0.91030053
00:04:19.470 --> 00:04:20.882 So American studies doesn't

NOTE Confidence: 0.91030053
00:04:20.882 --> 00:04:23.400 prepare you to do much in life,
NOTE Confidence: 0.91030053
00:04:23.400 --> 00:04:26.050 but it what did turn out to be a good
NOTE Confidence: 0.91030053
00:04:26.129 --> 00:04:28.367 preparation for being a journalist in NOTE Confidence: 0.91030053

00:04:28.367 --> 00:04:31.660 that it was an interdisciplinary major.
NOTE Confidence: 0.91030053
00:04:31.660 --> 00:04:34.628 And certainly what I do as a
NOTE Confidence: 0.91030053
00:04:34.628 --> 00:04:37.179 journalist involves a lot of pulling
NOTE Confidence: 0.91030053
00:04:37.180 --> 00:04:38.600 thread strands from different
NOTE Confidence: 0.91030053
00:04:38.600 --> 00:04:40.375 areas and weaving them together.
NOTE Confidence: 0.91030053
00:04:40.380 --> 00:04:41.372 And I started to.
NOTE Confidence: 0.91030053
00:04:41.372 --> 00:04:43.991 Learn how to do that as an American
NOTE Confidence: 0.91030053
00:04:43.991 --> 00:04:46.733 studies major as a Yale undergraduate.
NOTE Confidence: 0.91030053
00:04:46.740 --> 00:04:48.021 So I graduated,
NOTE Confidence: 0.91030053
00:04:48.021 --> 00:04:51.891 my first job was at Yale's Alumni magazine,
NOTE Confidence: 0.91030053
00:04:51.891 --> 00:04:55.353 where I got to interview and
NOTE Confidence: 0.91030053
00:04:55.353 --> 00:04:58.120 write about a lot of yells,
NOTE Confidence: 0.91030053

00:04:58.120 --> 00:04:59.842 researchers and professors,
NOTE Confidence: 0.91030053
00:04:59.842 --> 00:05:04.420 and that's when I began to realize that.
NOTE Confidence: 0.91030053
00:05:04.420 --> 00:05:05.686 This is the kind of journalism
NOTE Confidence: 0.91030053
00:05:05.686 --> 00:05:06.720 that I love to do.
NOTE Confidence: 0.91030053
00:05:06.720 --> 00:05:07.156 You know,
NOTE Confidence: 0.91030053
00:05:07.156 --> 00:05:09.269 I think I I at least had the impression
NOTE Confidence: 0.91030053
00:05:09.269 --> 00:05:11.439 that a journalist is someone who goes
NOTE Confidence: 0.91030053
00:05:11.439 --> 00:05:13.839 up to people on the street and says,
NOTE Confidence: 0.91030053
00:05:13.840 --> 00:05:14.900 what do you think about,
NOTE Confidence: 0.91030053
00:05:14.900 --> 00:05:17.930 you know yesterday's election or whatever,
NOTE Confidence: 0.91030053
00:05:17.930 --> 00:05:19.255 and I was never comfortable NOTE Confidence: 0.91030053

00:05:19.255 --> 00:05:20.580 with that kind of journalism.
NOTE Confidence: 0.948654162857143
00:05:20.580 --> 00:05:23.639 I wanted to write about big ideas.
NOTE Confidence: 0.948654162857143
00:05:23.640 --> 00:05:25.356 I wanted to write about research.
NOTE Confidence: 0.948654162857143
00:05:25.360 --> 00:05:27.840 I wanted to interview people NOTE Confidence: 0.948654162857143

00:05:27.840 --> 00:05:30.320 who had listed phone numbers.

NOTE Confidence: 0.948654162857143
00:05:30.320 --> 00:05:35.128 You know, it's a very different kind of.
NOTE Confidence: 0.948654162857143
00:05:35.130 --> 00:05:37.110 Journalism then say the more
NOTE Confidence: 0.948654162857143
00:05:37.110 --> 00:05:38.694 adverse aerial journalism that NOTE Confidence: 0.948654162857143

00:05:38.694 --> 00:05:40.518 happens in the political realm.
NOTE Confidence: 0.948654162857143
00:05:40.520 --> 00:05:44.069 I actually see my work with scientists
NOTE Confidence: 0.948654162857143
00:05:44.069 --> 00:05:46.515 interviewing an writing about the work of NOTE Confidence: 0.948654162857143

00:05:46.515 --> 00:05:48.780 scientists as more like a collaboration.
NOTE Confidence: 0.948654162857143
00:05:48.780 --> 00:05:51.462 It's it's really important for me
NOTE Confidence: 0.948654162857143
00:05:51.462 --> 00:05:54.630 to get their input and their help,
NOTE Confidence: 0.948654162857143
00:05:54.630 --> 00:05:56.492 and making sure that I get the
NOTE Confidence: 0.948654162857143
00:05:56.492 --> 00:05:58.150 details right about their research.
NOTE Confidence: 0.948654162857143
00:05:58.150 --> 00:05:59.490 They they are the experts.
NOTE Confidence: 0.948654162857143
00:05:59.490 --> 00:06:02.226 I'm the person who's translating that
NOTE Confidence: 0.948654162857143
00:06:02.226 --> 00:06:05.688 research for a for a broader audience.
NOTE Confidence: 0.948654162857143
00:06:05.690 --> 00:06:09.210 So after two years at the Alumni magazine, NOTE Confidence: 0.948654162857143

00:06:09.210 --> 00:06:10.505 I moved on to New York City,
NOTE Confidence: 0.948654162857143
00:06:10.510 --> 00:06:12.230 where I was an editor,
NOTE Confidence: 0.948654162857143
00:06:12.230 --> 00:06:14.315 writer and editor at Psychology
NOTE Confidence: 0.948654162857143
00:06:14.315 --> 00:06:15.149 Today magazine,
NOTE Confidence: 0.948654162857143
00:06:15.150 --> 00:06:18.750 and that's when I sort of further refined my
NOTE Confidence: 0.948654162857143
00:06:18.750 --> 00:06:22.278 interests and my my beat as a journalist.
NOTE Confidence: 0.948654162857143
00:06:22.280 --> 00:06:23.804 I realized that I really liked NOTE Confidence: 0.948654162857143

00:06:23.804 --> 00:06:24.566 writing about research,
NOTE Confidence: 0.948654162857143
00:06:24.570 --> 00:06:26.850 but specifically social science
NOTE Confidence: 0.948654162857143
00:06:26.850 --> 00:06:30.138 research and I just find people
NOTE Confidence: 0.948654162857143
00:06:30.138 --> 00:06:32.286 endlessly interesting human behavior, NOTE Confidence: 0.948654162857143

00:06:32.290 --> 00:06:32.870 endlessly interesting,
NOTE Confidence: 0.948654162857143
00:06:32.870 --> 00:06:35.190 and I'm sure those of you who have
NOTE Confidence: 0.948654162857143
00:06:35.241 --> 00:06:36.915 chosen to go into psychiatry can.
NOTE Confidence: 0.948654162857143
00:06:36.920 --> 00:06:38.684 Can understand that, UM.
NOTE Confidence: 0.948654162857143
00:06:38.684 --> 00:06:42.270 So after two years at Psychology Today I

NOTE Confidence: 0.948654162857143
00:06:42.270 --> 00:06:44.850 went freelance and I've been freelance
NOTE Confidence: 0.948654162857143
00:06:44.850 --> 00:06:47.560 for the last 20 something years.
NOTE Confidence: 0.948654162857143
00:06:47.560 --> 00:06:48.687 I don't even really want to think NOTE Confidence: 0.948654162857143

00:06:48.687 --> 00:06:50.166 about how long it's been, but, uh,
NOTE Confidence: 0.948654162857143
00:06:50.166 --> 00:06:52.670 I've been on my own in the sense
NOTE Confidence: 0.948654162857143
00:06:52.747 --> 00:06:54.577 that I've been out here,
NOTE Confidence: 0.948654162857143
00:06:54.580 --> 00:06:59.188 writing magazine articles and writing books.
NOTE Confidence: 0.948654162857143
00:06:59.190 --> 00:07:02.214 Those were really my only two jobs.
NOTE Confidence: 0.948654162857143
00:07:02.220 --> 00:07:06.888 Uhm, and my first book was.
NOTE Confidence: 0.948654162857143
00:07:06.890 --> 00:07:09.946 About it was a cultural critique and signed.
NOTE Confidence: 0.948654162857143
00:07:09.950 --> 00:07:12.855 It was a sorry, a scientific critique
NOTE Confidence: 0.948654162857143
00:07:12.855 --> 00:07:15.828 and cultural history of personality testing,
NOTE Confidence: 0.948654162857143
00:07:15.830 --> 00:07:20.310 which I became fascinated by this idea.
NOTE Confidence: 0.948654162857143
00:07:20.310 --> 00:07:23.992 That test certainly tests have shaped my NOTE Confidence: 0.948654162857143

00:07:23.992 --> 00:07:28.029 own academic life and and professional life, NOTE Confidence: 0.948654162857143

00:07:28.030 --> 00:07:33.154 but at that a test could sum up a person's
NOTE Confidence: 0.948654162857143
00:07:33.154 --> 00:07:36.250 character or or describe their personality.
NOTE Confidence: 0.948654162857143
00:07:36.250 --> 00:07:37.816 I was skeptical of that idea.
NOTE Confidence: 0.948654162857143
00:07:37.820 --> 00:07:40.055 And persuaded of the eventually
NOTE Confidence: 0.948654162857143
00:07:40.055 --> 00:07:41.396 through my research,
NOTE Confidence: 0.948654162857143
00:07:41.400 --> 00:07:44.076 persuaded of the idea that actually
NOTE Confidence: 0.948654162857143
00:07:44.076 --> 00:07:46.633 those tests were capturing more about
NOTE Confidence: 0.948654162857143
00:07:46.633 --> 00:07:49.401 the inventors of the tests and of the
NOTE Confidence: 0.948654162857143
00:07:49.473 --> 00:07:52.137 time and the era in which they lived.
NOTE Confidence: 0.948654162857143
00:07:52.140 --> 00:07:54.596 And then my next book was called Origins.
NOTE Confidence: 0.948654162857143
00:07:54.600 --> 00:07:57.012 It was about the science of
NOTE Confidence: 0.948654162857143
00:07:57.012 --> 00:07:57.816 prenatal influences.
NOTE Confidence: 0.948654162857143
00:07:57.820 --> 00:07:58.690 And you know,
NOTE Confidence: 0.948654162857143
00:07:58.690 --> 00:08:00.720 I'd like to say that or journalists
NOTE Confidence: 0.948654162857143
00:08:00.779 --> 00:08:02.199 generally like to offer,
NOTE Confidence: 0.948654162857143
00:08:02.200 --> 00:08:03.740 will often acknowledge that all

NOTE Confidence: 0.948654162857143
00:08:03.740 --> 00:08:05.780 research is is me search, you know, NOTE Confidence: 0.948654162857143

00:08:05.780 --> 00:08:07.530 and this in the case of origins,
NOTE Confidence: 0.948654162857143
00:08:07.530 --> 00:08:09.110 that was especially true.
NOTE Confidence: 0.948654162857143
00:08:09.110 --> 00:08:11.480 I was pregnant with my second
NOTE Confidence: 0.948654162857143
00:08:11.553 --> 00:08:14.307 child when I was researching and
NOTE Confidence: 0.948654162857143
00:08:14.307 --> 00:08:16.143 researching and writing origins
NOTE Confidence: 0.948654162857143
00:08:16.150 --> 00:08:18.285 and so you know that the research
NOTE Confidence: 0.948654162857143
00:08:18.285 --> 00:08:20.249 for that book often found me,
NOTE Confidence: 0.948654162857143
00:08:20.250 --> 00:08:20.896 you know,
NOTE Confidence: 0.948654162857143
00:08:20.896 --> 00:08:22.511 eight months pregnant like heading
NOTE Confidence: 0.948654162857143
00:08:22.511 --> 00:08:24.981 into a lab to talk to a scientist
NOTE Confidence: 0.948654162857143
00:08:24.981 --> 00:08:26.950 about the science of fetal origins,
NOTE Confidence: 0.948654162857143
00:08:26.950 --> 00:08:29.290 the idea that what of pregnant
NOTE Confidence: 0.948654162857143
00:08:29.290 --> 00:08:31.799 woman feels and eats and experiences
NOTE Confidence: 0.948654162857143
00:08:31.799 --> 00:08:34.415 while she's pregnant has an effect
NOTE Confidence: 0.948654162857143

00:08:34.415 --> 00:08:36.969 on the fetus and potentially
NOTE Confidence: 0.948654162857143
00:08:36.970 --> 00:08:39.682 potentially lasting into that.
NOTE Confidence: 0.948654162857143
00:08:39.682 --> 00:08:41.038 Childs life.
NOTE Confidence: 0.948654162857143
00:08:41.040 --> 00:08:41.644 That dumb,
NOTE Confidence: 0.948654162857143
00:08:41.644 --> 00:08:42.248 you know,
NOTE Confidence: 0.948654162857143
00:08:42.248 --> 00:08:44.060 those those seem like two very
NOTE Confidence: 0.909417488666667
00:08:44.122 --> 00:08:45.897 different topics and they are, NOTE Confidence: 0.909417488666667

00:08:45.900 --> 00:08:47.636 but to me they're all kinds of,
NOTE Confidence: 0.909417488666667
00:08:47.640 --> 00:08:48.690 they're all. They all kinds.
NOTE Confidence: 0.909417488666667
00:08:48.690 --> 00:08:50.783 They both kind of all my work
NOTE Confidence: 0.909417488666667
00:08:50.783 --> 00:08:52.640 orbits around the same question, NOTE Confidence: 0.909417488666667

00:08:52.640 --> 00:08:55.620 which is what makes us the way we are and
NOTE Confidence: 0.909417488666667
00:08:55.692 --> 00:08:58.452 what makes us the way we are. And then, NOTE Confidence: 0.909417488666667

00:08:58.452 --> 00:09:00.082 more recently I've become interested
NOTE Confidence: 0.909417488666667
00:09:00.082 --> 00:09:02.167 in the question of how do we change?
NOTE Confidence: 0.909417488666667
00:09:02.170 --> 00:09:06.130 How do we move on from what we are?

NOTE Confidence: 0.909417488666667
00:09:06.130 --> 00:09:09.002 But the personality testing book I think came NOTE Confidence: 0.909417488666667

00:09:09.002 --> 00:09:12.149 out of an interest in how society shapes.
NOTE Confidence: 0.909417488666667
00:09:12.150 --> 00:09:14.319 Yes, or how society tells us who we are NOTE Confidence: 0.909417488666667

00:09:14.319 --> 00:09:16.467 and what we do with that information.
NOTE Confidence: 0.909417488666667
00:09:16.470 --> 00:09:17.655 The the origins.
NOTE Confidence: 0.909417488666667
00:09:17.655 --> 00:09:20.025 The book about prenatal influences emerged NOTE Confidence: 0.909417488666667

00:09:20.025 --> 00:09:22.866 out of an interest in this nurture nature.
NOTE Confidence: 0.909417488666667
00:09:22.870 --> 00:09:23.898 Question this,
NOTE Confidence: 0.909417488666667
00:09:23.898 --> 00:09:26.982 you know eternal debate between nature
NOTE Confidence: 0.909417488666667
00:09:26.982 --> 00:09:30.758 and nurture and my sense that in our
NOTE Confidence: 0.909417488666667
00:09:30.758 --> 00:09:33.290 discussions about nature and nurture
NOTE Confidence: 0.909417488666667
00:09:33.290 --> 00:09:35.313 there was this nine month gap that
NOTE Confidence: 0.909417488666667
00:09:35.313 --> 00:09:36.790 we weren't necessarily looking at.
NOTE Confidence: 0.909417488666667
00:09:36.790 --> 00:09:38.238 We were, you know,
NOTE Confidence: 0.909417488666667
00:09:38.238 --> 00:09:40.410 concerned with that moment of conception
NOTE Confidence: 0.909417488666667

00:09:40.476 --> 00:09:42.807 when the DNA blueprint gets laid down.
NOTE Confidence: 0.909417488666667
00:09:42.810 --> 00:09:45.190 And then we were concerned with nurture
NOTE Confidence: 0.909417488666667
00:09:45.190 --> 00:09:47.776 as it begins at the moment of birth.
NOTE Confidence: 0.909417488666667
00:09:47.780 --> 00:09:50.240 But there was this very consequential
NOTE Confidence: 0.909417488666667
00:09:50.240 --> 00:09:53.014 time in between that I thought could
NOTE Confidence: 0.909417488666667
00:09:53.014 --> 00:09:55.130 have something interesting and fresh and
NOTE Confidence: 0.909417488666667
00:09:55.130 --> 00:09:57.889 new to say about that nurture nature.
NOTE Confidence: 0.909417488666667
00:09:57.890 --> 00:10:00.466 Question what makes us who we are.
NOTE Confidence: 0.909417488666667
00:10:00.470 --> 00:10:03.914 So then continuing this sort of me
NOTE Confidence: 0.909417488666667
00:10:03.914 --> 00:10:06.860 search theme those those children that
NOTE Confidence: 0.909417488666667
00:10:06.860 --> 00:10:11.010 I bore when I was writing origins.
NOTE Confidence: 0.909417488666667
00:10:11.010 --> 00:10:12.996 They grew up, they started school.
NOTE Confidence: 0.909417488666667
00:10:13.000 --> 00:10:14.680 And I became very interested in
NOTE Confidence: 0.909417488666667
00:10:14.680 --> 00:10:15.800 the science of learning.
NOTE Confidence: 0.909417488666667
00:10:15.800 --> 00:10:18.370 I was very interested in.
NOTE Confidence: 0.909417488666667
00:10:18.370 --> 00:10:19.760 What my children were learning,

NOTE Confidence: 0.909417488666667
00:10:19.760 --> 00:10:22.172 how they were learning how their NOTE Confidence: 0.909417488666667

00:10:22.172 --> 00:10:24.159 teachers were teaching them and NOTE Confidence: 0.909417488666667

00:10:24.159 --> 00:10:26.329 at the same time as a journalist.
NOTE Confidence: 0.909417488666667
00:10:26.330 --> 00:10:28.731 I saw that there was a really
NOTE Confidence: 0.909417488666667
00:10:28.731 --> 00:10:31.041 dynamic and exciting body of growing
NOTE Confidence: 0.909417488666667
00:10:31.041 --> 00:10:33.061 body of research about learning
NOTE Confidence: 0.909417488666667
00:10:33.061 --> 00:10:35.246 the science of of how we learn,
NOTE Confidence: 0.909417488666667
00:10:35.250 --> 00:10:38.070 mostly psychology and cognitive science.
NOTE Confidence: 0.909417488666667
00:10:38.070 --> 00:10:40.226 And so I started writing about that,
NOTE Confidence: 0.909417488666667
00:10:40.230 --> 00:10:43.282 writing lots of articles and planned to
NOTE Confidence: 0.909417488666667
00:10:43.282 --> 00:10:47.188 write a book about it that didn't work out.
NOTE Confidence: 0.909417488666667
00:10:47.190 --> 00:10:48.366 I may yet write a book about
NOTE Confidence: 0.909417488666667
00:10:48.366 --> 00:10:49.270 the science of learning,
NOTE Confidence: 0.909417488666667
00:10:49.270 --> 00:10:53.365 but my struggle there was that I,
NOTE Confidence: 0.909417488666667
00:10:53.370 --> 00:10:54.660 as I said, I really loved.
NOTE Confidence: 0.909417488666667

00:10:54.660 --> 00:10:55.950 I love a big idea.
NOTE Confidence: 0.909417488666667
00:10:55.950 --> 00:10:58.983 I love a big a big idea that can
NOTE Confidence: 0.909417488666667
00:10:58.983 --> 00:11:01.419 transform the way we see something.
NOTE Confidence: 0.909417488666667
00:11:01.420 --> 00:11:03.548 And I searched and searched for a
NOTE Confidence: 0.909417488666667
00:11:03.548 --> 00:11:05.742 big idea that could kind of unite
NOTE Confidence: 0.909417488666667
00:11:05.742 --> 00:11:08.341 all the findings that I was all the
NOTE Confidence: 0.909417488666667
00:11:08.341 --> 00:11:10.116 very interesting and useful findings
NOTE Confidence: 0.909417488666667
00:11:10.116 --> 00:11:12.834 that I was gathering from the science
NOTE Confidence: 0.909417488666667
00:11:12.834 --> 00:11:15.300 of learning and eventually I had
NOTE Confidence: 0.909417488666667
00:11:15.377 --> 00:11:17.537 to kind of concede defeat that.
NOTE Confidence: 0.909417488666667
00:11:17.540 --> 00:11:19.997 There wasn't a unified theory of learning.
NOTE Confidence: 0.909417488666667
00:11:20.000 --> 00:11:20.780 I'd be interested.
NOTE Confidence: 0.909417488666667
00:11:20.780 --> 00:11:22.600 Interested to hear what and if you
NOTE Confidence: 0.909417488666667
00:11:22.649 --> 00:11:24.224 have to say about this or what
NOTE Confidence: 0.909417488666667
00:11:24.224 --> 00:11:25.200 you think about this,
NOTE Confidence: 0.909417488666667
00:11:25.200 --> 00:11:28.252 especially those of you who are really

NOTE Confidence: 0.909417488666667
00:11:28.252 --> 00:11:31.780 involved in educating and education.
NOTE Confidence: 0.909417488666667
00:11:31.780 --> 00:11:33.915 There is no unified theory of learning.
NOTE Confidence: 0.909417488666667
00:11:33.920 --> 00:11:36.671 I came to think because the brain
NOTE Confidence: 0.909417488666667
00:11:36.671 --> 00:11:39.044 is this klugey patched together.
NOTE Confidence: 0.909417488666667
00:11:39.044 --> 00:11:43.190 You know, cobbled together patchwork.
NOTE Confidence: 0.909417488666667
00:11:43.190 --> 00:11:45.920 That evolved to help us survive,
NOTE Confidence: 0.909417488666667
00:11:45.920 --> 00:11:50.048 but that did not in any way come.
NOTE Confidence: 0.843562053333333
00:11:50.050 --> 00:11:52.270 It was not designed, you know,
NOTE Confidence: 0.843562053333333
00:11:52.270 --> 00:11:55.054 in in any coherent way that
NOTE Confidence: 0.843562053333333
00:11:55.054 --> 00:11:57.353 could be described in terms
NOTE Confidence: 0.843562053333333
00:11:57.353 --> 00:11:59.960 of a a big idea. That's that.
NOTE Confidence: 0.843562053333333
00:11:59.960 --> 00:12:03.005 That was my conclusion in any case,
NOTE Confidence: 0.843562053333333
00:12:03.010 --> 00:12:05.982 so, but in the course of doing all
NOTE Confidence: 0.843562053333333
00:12:05.982 --> 00:12:07.668 this research and reading that got NOTE Confidence: 0.843562053333333

00:12:07.668 --> 00:12:09.565 sort of progressively wider in its
NOTE Confidence: 0.843562053333333

00:12:09.565 --> 00:12:11.479 scope while trying to write this NOTE Confidence: 0.843562053333333

00:12:11.538 --> 00:12:13.266 book on the science of learning,
NOTE Confidence: 0.843562053333333
00:12:13.270 --> 00:12:16.926 I came across an article in a philosophy
NOTE Confidence: 0.843562053333333
00:12:16.926 --> 00:12:19.759 journal that was published in 1998.
NOTE Confidence: 0.843562053333333
00:12:19.759 --> 00:12:22.004 As by the philosophers Andy
NOTE Confidence: 0.843562053333333
00:12:22.004 --> 00:12:23.800 Clark and David Chalmers,
NOTE Confidence: 0.843562053333333
00:12:23.800 --> 00:12:26.579 it was titled the Extended Mind and NOTE Confidence: 0.843562053333333

00:12:26.579 --> 00:12:29.118 the Very first line of it said,
NOTE Confidence: 0.843562053333333
00:12:29.120 --> 00:12:32.006 where does the mind stop and
NOTE Confidence: 0.843562053333333
00:12:32.006 --> 00:12:35.360 the rest of the world began?
NOTE Confidence: 0.843562053333333
00:12:35.360 --> 00:12:37.745 And I found this to be a very uhm.
NOTE Confidence: 0.843562053333333
00:12:37.750 --> 00:12:39.240 You know an arresting question,
NOTE Confidence: 0.843562053333333
00:12:39.240 --> 00:12:40.434 a provocative question.
NOTE Confidence: 0.843562053333333
00:12:40.434 --> 00:12:43.220 Because partly because the answer seems to,
NOTE Confidence: 0.843562053333333
00:12:43.220 --> 00:12:45.000 it seems so obvious initially,
NOTE Confidence: 0.843562053333333
00:12:45.000 --> 00:12:49.383 so obvious that the mind stops at the skull.

NOTE Confidence: 0.843562053333333
00:12:49.390 --> 00:12:51.917 The mind is contiguous with the brain,
NOTE Confidence: 0.843562053333333
00:12:51.920 --> 00:12:54.200 but Clark and Chalmers were arguing that no,
NOTE Confidence: 0.843562053333333
00:12:54.200 --> 00:12:55.888 that's not the case.
NOTE Confidence: 0.843562053333333
00:12:55.888 --> 00:12:58.700 The mind extends beyond the brain to
NOTE Confidence: 0.843562053333333
00:12:58.700 --> 00:13:00.940 the rest of our body below the neck,
NOTE Confidence: 0.843562053333333
00:13:00.940 --> 00:13:03.264 to our physical environment,
NOTE Confidence: 0.843562053333333
00:13:03.264 --> 00:13:06.750 to our relationships with other people.
NOTE Confidence: 0.843562053333333
00:13:06.750 --> 00:13:07.797 And in particular,
NOTE Confidence: 0.843562053333333
00:13:07.797 --> 00:13:10.240 the focus of their article was on
NOTE Confidence: 0.843562053333333
00:13:10.315 --> 00:13:12.387 how we use tools to extend our
NOTE Confidence: 0.843562053333333
00:13:12.387 --> 00:13:14.506 minds and the the the principal
NOTE Confidence: 0.843562053333333
00:13:14.506 --> 00:13:16.834 tool that they were writing about.
NOTE Confidence: 0.843562053333333
00:13:16.840 --> 00:13:19.070 And remember this is in 1998 before
NOTE Confidence: 0.843562053333333
00:13:19.070 --> 00:13:21.695 smartphones became a part of our lives.
NOTE Confidence: 0.843562053333333
00:13:21.700 --> 00:13:24.022 They were talking about a notebook
NOTE Confidence: 0.843562053333333

00:13:24.022 --> 00:13:26.187 like a regular old fashioned
NOTE Confidence: 0.843562053333333
00:13:26.187 --> 00:13:29.024 notebook and how when we when?
NOTE Confidence: 0.843562053333333
00:13:29.024 --> 00:13:32.079 If it's such a notebook becomes a
NOTE Confidence: 0.843562053333333
00:13:32.079 --> 00:13:34.533 reliable part of our our thinking
NOTE Confidence: 0.843562053333333
00:13:34.533 --> 00:13:37.298 processes is coupled in a consistent way.
NOTE Confidence: 0.843562053333333
00:13:37.300 --> 00:13:39.058 With our with our thinking processes,
NOTE Confidence: 0.843562053333333
00:13:39.060 --> 00:13:40.860 it actually becomes a part
NOTE Confidence: 0.843562053333333
00:13:40.860 --> 00:13:42.300 of that cognitive loop,
NOTE Confidence: 0.843562053333333
00:13:42.300 --> 00:13:45.564 and there's no reason to call that notebook
NOTE Confidence: 0.843562053333333
00:13:45.570 --> 00:13:48.099 not part of your not part of your mind.
NOTE Confidence: 0.843562053333333
00:13:48.100 --> 00:13:48.626 It actually,
NOTE Confidence: 0.843562053333333
00:13:48.626 --> 00:13:50.730 it does constitute a part of your mind
NOTE Confidence: 0.843562053333333
00:13:50.790 --> 00:13:52.596 in a part of your thinking process.
NOTE Confidence: 0.843562053333333
00:13:52.600 --> 00:13:53.556 And interestingly,
NOTE Confidence: 0.843562053333333
00:13:53.556 --> 00:13:54.512 this article,
NOTE Confidence: 0.843562053333333
00:13:54.512 --> 00:13:57.938 which subsequently became one of the most

NOTE Confidence: 0.843562053333333
00:13:57.938 --> 00:14:00.848 cited articles in the philosophy literature, NOTE Confidence: 0.843562053333333

00:14:00.850 --> 00:14:02.905 was rejected from three journals NOTE Confidence: 0.843562053333333 00:14:02.905 --> 00:14:05.442 before it was finally accepted and NOTE Confidence: 0.843562053333333

00:14:05.442 --> 00:14:07.507 published in the journal Analysis.
NOTE Confidence: 0.843562053333333
00:14:07.510 --> 00:14:08.890 And when it was published,
NOTE Confidence: 0.843562053333333
00:14:08.890 --> 00:14:12.066 it it really occasioned a lot of division, NOTE Confidence: 0.843562053333333

00:14:12.070 --> 00:14:13.480 and a lot of, UM,
NOTE Confidence: 0.843562053333333
00:14:13.480 --> 00:14:13.966 mocking,
NOTE Confidence: 0.843562053333333
00:14:13.966 --> 00:14:17.368 sort of ridicule and skepticism from from
NOTE Confidence: 0.843562053333333
00:14:17.368 --> 00:14:19.770 philosophers from other philosophers.
NOTE Confidence: 0.843562053333333
00:14:19.770 --> 00:14:22.269 UM, who just thought this idea was, NOTE Confidence: 0.843562053333333

00:14:22.270 --> 00:14:23.620 was really wacky,
NOTE Confidence: 0.843562053333333
00:14:23.620 --> 00:14:25.870 and what's interesting is that
NOTE Confidence: 0.843562053333333
00:14:25.870 --> 00:14:28.084 events kind of overtook the NOTE Confidence: 0.843562053333333

00:14:28.084 --> 00:14:30.144 the reception of this paper,
NOTE Confidence: 0.843562053333333

00:14:30.150 --> 00:14:33.586 in the sense that in 2007 the
NOTE Confidence: 0.843562053333333
00:14:33.586 --> 00:14:35.826 Apple introduced the iPhone and
NOTE Confidence: 0.843562053333333
00:14:35.826 --> 00:14:38.049 and all of a sudden.
NOTE Confidence: 0.843562053333333
00:14:38.050 --> 00:14:41.270 Lots of us were offloading or extending
NOTE Confidence: 0.843562053333333
00:14:41.270 --> 00:14:44.840 our minds by offloading mental functions
NOTE Confidence: 0.843562053333333
00:14:44.840 --> 00:14:47.612 that had previously been performed
NOTE Confidence: 0.843562053333333
00:14:47.612 --> 00:14:49.724 by our brains onto our phones.
NOTE Confidence: 0.843562053333333
00:14:49.730 --> 00:14:50.264 You know,
NOTE Confidence: 0.843562053333333
00:14:50.264 --> 00:14:51.866 like who remembers phone numbers anymore?
NOTE Confidence: 0.843562053333333
00:14:51.870 --> 00:14:54.528 Because our phones remember them for
NOTE Confidence: 0.843562053333333
00:14:54.528 --> 00:14:57.691 us and so the use of the smartphone, NOTE Confidence: 0.843562053333333

00:14:57.691 --> 00:15:00.568 which is nothing if not a reliable
NOTE Confidence: 0.843562053333333
00:15:00.568 --> 00:15:02.525 and consistent present in our
NOTE Confidence: 0.843562053333333
00:15:02.525 --> 00:15:03.949 presence in our lives,
NOTE Confidence: 0.843562053333333
00:15:03.950 --> 00:15:06.525 became this sort of continual
NOTE Confidence: 0.843562053333333
00:15:06.525 --> 00:15:08.716 proof of concept, you know.

NOTE Confidence: 0.843562053333333
00:15:08.716 --> 00:15:11.300 And and every day and every day life
NOTE Confidence: 0.967607791428571
00:15:11.300 --> 00:15:14.954 demonstrating how the mind is extended and NOTE Confidence: 0.967607791428571

00:15:14.960 --> 00:15:19.007 one of David Chalmers is colleagues at NYU, NOTE Confidence: 0.967607791428571

00:15:19.007 --> 00:15:20.902 another philosopher named Ned Block
NOTE Confidence: 0.967607791428571
00:15:20.902 --> 00:15:23.522 likes to say that the the thesis of
NOTE Confidence: 0.967607791428571
00:15:23.522 --> 00:15:25.534 the extended mind, the extended mind NOTE Confidence: 0.967607791428571

00:15:25.534 --> 00:15:28.110 thesis was false when it was written, NOTE Confidence: 0.967607791428571

00:15:28.110 --> 00:15:30.625 but subsequent subsequently became true
NOTE Confidence: 0.967607791428571
00:15:30.625 --> 00:15:34.340 because of the way that technology has
NOTE Confidence: 0.967607791428571
00:15:34.340 --> 00:15:36.804 begun to extend our minds in our in
NOTE Confidence: 0.967607791428571
00:15:36.804 --> 00:15:38.897 our everyday lives in ways that we.
NOTE Confidence: 0.967607791428571
00:15:38.900 --> 00:15:40.664 Can readily see I,
NOTE Confidence: 0.967607791428571
00:15:40.664 --> 00:15:43.310 I myself and more interest less
NOTE Confidence: 0.967607791428571
00:15:43.404 --> 00:15:46.048 interested in the way that tools
NOTE Confidence: 0.967607791428571
00:15:46.048 --> 00:15:48.136 and technology can extend our mind,
NOTE Confidence: 0.967607791428571

00:15:48.140 --> 00:15:49.224 although I think that's
NOTE Confidence: 0.967607791428571
00:15:49.224 --> 00:15:50.308 very interesting as well.
NOTE Confidence: 0.967607791428571
00:15:50.310 --> 00:15:53.012 I'm more interested in the way that NOTE Confidence: 0.967607791428571

00:15:53.012 --> 00:15:55.718 our bodies extend our minds through
NOTE Confidence: 0.967607791428571
00:15:55.718 --> 00:15:58.173 things like our internal sensations,
NOTE Confidence: 0.967607791428571
00:15:58.180 --> 00:16:00.552 our movements or gestures.
NOTE Confidence: 0.967607791428571
00:16:00.552 --> 00:16:03.517 The way that our physical
NOTE Confidence: 0.967607791428571
00:16:03.517 --> 00:16:05.758 surroundings extend our minds,
NOTE Confidence: 0.967607791428571
00:16:05.760 --> 00:16:06.700 meaning nature,
NOTE Confidence: 0.967607791428571
00:16:06.700 --> 00:16:07.640 natural settings,
NOTE Confidence: 0.967607791428571
00:16:07.640 --> 00:16:10.881 but also built settings and are the NOTE Confidence: 0.967607791428571

00:16:10.881 --> 00:16:13.310 places where we learn and work and
NOTE Confidence: 0.967607791428571
00:16:13.310 --> 00:16:15.957 also what I call the space of ideas,
NOTE Confidence: 0.967607791428571
00:16:15.960 --> 00:16:18.704 which is when we do offload our meant
NOTE Confidence: 0.967607791428571
00:16:18.704 --> 00:16:21.356 the contents of our minds onto physical NOTE Confidence: 0.967607791428571

00:16:21.356 --> 00:16:24.140 space and interact with them in new ways.

NOTE Confidence: 0.967607791428571
00:16:24.140 --> 00:16:25.652 That's another way of
NOTE Confidence: 0.967607791428571
00:16:25.652 --> 00:16:27.542 extending the mind with space,
NOTE Confidence: 0.967607791428571
00:16:27.550 --> 00:16:29.440 and then finally the way that we NOTE Confidence: 0.967607791428571

00:16:29.440 --> 00:16:31.308 extend our minds with other people.
NOTE Confidence: 0.967607791428571
00:16:31.310 --> 00:16:34.340 With our peers with experts that
NOTE Confidence: 0.967607791428571
00:16:34.340 --> 00:16:38.193 we learn from and and in groups so.
NOTE Confidence: 0.967607791428571
00:16:38.193 --> 00:16:38.606 B.
NOTE Confidence: 0.967607791428571
00:16:38.606 --> 00:16:41.497 When I read the the this article
NOTE Confidence: 0.967607791428571
00:16:41.497 --> 00:16:43.780 on the extended mind,
NOTE Confidence: 0.967607791428571
00:16:43.780 --> 00:16:47.196 it really it was a kind of Eureka
NOTE Confidence: 0.967607791428571
00:16:47.196 --> 00:16:52.140 moment because I had been collecting
NOTE Confidence: 0.967607791428571
00:16:52.140 --> 00:16:54.786 and and gathering instances of research
NOTE Confidence: 0.967607791428571
00:16:54.786 --> 00:16:57.792 in the science of learning with the
NOTE Confidence: 0.967607791428571
00:16:57.792 --> 00:17:00.501 idea of writing a book about the NOTE Confidence: 0.967607791428571

00:17:00.581 --> 00:17:03.131 science of learning that fell into NOTE Confidence: 0.967607791428571

00:17:03.131 --> 00:17:05.482 into into three kind of buckets.
NOTE Confidence: 0.967607791428571
00:17:05.482 --> 00:17:08.050 And I I felt that these buckets were
NOTE Confidence: 0.967607791428571
00:17:08.121 --> 00:17:10.135 related in some way, but it was.
NOTE Confidence: 0.967607791428571
00:17:10.135 --> 00:17:12.379 It was hard for me to put my finger
NOTE Confidence: 0.967607791428571
00:17:12.379 --> 00:17:13.899 on how they were related.
NOTE Confidence: 0.967607791428571
00:17:13.900 --> 00:17:16.552 The three buckets that I'm talking
NOTE Confidence: 0.967607791428571
00:17:16.552 --> 00:17:18.222 about are embodied cognition.
NOTE Confidence: 0.967607791428571
00:17:18.222 --> 00:17:20.959 This this this body of work that
NOTE Confidence: 0.967607791428571
00:17:20.959 --> 00:17:23.082 suggests that our bodies are an
NOTE Confidence: 0.967607791428571
00:17:23.082 --> 00:17:25.330 integral part of the thinking process.
NOTE Confidence: 0.967607791428571
00:17:25.330 --> 00:17:26.166 Situated cognition.
NOTE Confidence: 0.967607791428571
00:17:26.166 --> 00:17:29.092 The idea that where we are really
NOTE Confidence: 0.967607791428571
00:17:29.092 --> 00:17:31.686 affects the way we think and
NOTE Confidence: 0.967607791428571
00:17:31.686 --> 00:17:32.528 distributed cognition,
NOTE Confidence: 0.967607791428571
00:17:32.530 --> 00:17:33.700 socially distributed cognition,
NOTE Confidence: 0.967607791428571
00:17:33.700 --> 00:17:36.430 this the idea that we don't just

NOTE Confidence: 0.967607791428571
00:17:36.494 --> 00:17:38.690 think with our own individual minds,
NOTE Confidence: 0.967607791428571
00:17:38.690 --> 00:17:40.620 but we we think with.
NOTE Confidence: 0.967607791428571
00:17:40.620 --> 00:17:41.340 Other people,
NOTE Confidence: 0.967607791428571
00:17:41.340 --> 00:17:44.687 often in a kind of group mind or
NOTE Confidence: 0.967607791428571
00:17:44.687 --> 00:17:47.168 or collective intelligence.
NOTE Confidence: 0.967607791428571
00:17:47.170 --> 00:17:50.390 So it was really the discovery of
NOTE Confidence: 0.967607791428571
00:17:50.390 --> 00:17:53.346 this article about the extended mind
NOTE Confidence: 0.967607791428571
00:17:53.346 --> 00:17:56.316 that allowed me to pull together
NOTE Confidence: 0.967607791428571
00:17:56.316 --> 00:17:58.710 those disparate threads and weave
NOTE Confidence: 0.967607791428571
00:17:58.710 --> 00:18:03.079 them into a book that I wanted to bring.
NOTE Confidence: 0.967607791428571
00:18:03.079 --> 00:18:04.738 This exciting idea.
NOTE Confidence: 0.967607791428571
00:18:04.740 --> 00:18:07.085 I really find the idea of the
NOTE Confidence: 0.967607791428571
00:18:07.085 --> 00:18:09.347 extended mind really generative and
NOTE Confidence: 0.967607791428571
00:18:09.347 --> 00:18:11.564 really endlessly fascinating, and.
NOTE Confidence: 0.967607791428571
00:18:11.564 --> 00:18:14.228 And uhm, fertile as an idea,
NOTE Confidence: 0.967607791428571

00:18:14.230 --> 00:18:16.924 but I also really wanted to
NOTE Confidence: 0.967607791428571
00:18:16.924 --> 00:18:19.850 operationalize it in the sense of OK,
NOTE Confidence: 0.967607791428571
00:18:19.850 --> 00:18:22.286 if if these outside the brain NOTE Confidence: 0.967607791428571

00:18:22.286 --> 00:18:24.282 resources really do influence how
NOTE Confidence: 0.967607791428571
00:18:24.282 --> 00:18:26.354 we think and are actually a part
NOTE Confidence: 0.967607791428571
00:18:26.354 --> 00:18:28.190 of the thinking process.
NOTE Confidence: 0.967607791428571
00:18:28.190 --> 00:18:30.134 What does that mean in our
NOTE Confidence: 0.967607791428571
00:18:30.134 --> 00:18:31.430 everyday lives for education?
NOTE Confidence: 0.967607791428571
00:18:31.430 --> 00:18:33.686 For the workplace, for you know,
NOTE Confidence: 0.967607791428571
00:18:33.690 --> 00:18:37.018 daily our daily lives.
NOTE Confidence: 0.967607791428571
00:18:37.020 --> 00:18:39.678 Wanted to take this idea out
NOTE Confidence: 0.967607791428571
00:18:39.678 --> 00:18:41.450 of the ivory tower
NOTE Confidence: 0.909292874705882
00:18:41.547 --> 00:18:44.466 and kind of really show how it.
NOTE Confidence: 0.909292874705882
00:18:44.470 --> 00:18:47.314 Uh, not only how it's operating in our lives
NOTE Confidence: 0.909292874705882
00:18:47.314 --> 00:18:49.999 now because we all do extend our minds.
NOTE Confidence: 0.909292874705882
00:18:50.000 --> 00:18:53.008 This is our our brains kind of evolved

NOTE Confidence: 0.909292874705882
00:18:53.008 --> 00:18:56.394 to take advantage of all these all
NOTE Confidence: 0.909292874705882
00:18:56.394 --> 00:19:00.918 these extra neural resources and and.
NOTE Confidence: 0.909292874705882
00:19:00.920 --> 00:19:02.828 But also how how we could
NOTE Confidence: 0.909292874705882
00:19:02.828 --> 00:19:04.100 potentially do that better?
NOTE Confidence: 0.909292874705882
00:19:04.100 --> 00:19:06.578 How we could be more skilled and
NOTE Confidence: 0.909292874705882
00:19:06.578 --> 00:19:08.809 more intentional in the way that
NOTE Confidence: 0.909292874705882
00:19:08.809 --> 00:19:10.639 we use extra neural resources?
NOTE Confidence: 0.909292874705882
00:19:10.640 --> 00:19:12.782 And finally, I also wanted this book
NOTE Confidence: 0.909292874705882
00:19:12.782 --> 00:19:15.554 to be a social critique, you know,
NOTE Confidence: 0.909292874705882
00:19:15.554 --> 00:19:18.210 and a critique of of the very common
NOTE Confidence: 0.909292874705882
00:19:18.289 --> 00:19:21.271 and pervasive ideas about the brain and
NOTE Confidence: 0.909292874705882
00:19:21.271 --> 00:19:23.928 about thinking that are out there that
NOTE Confidence: 0.909292874705882
00:19:23.930 --> 00:19:26.540 you know what Andy Clark, one of the Co Co.
NOTE Confidence: 0.909292874705882
00:19:26.540 --> 00:19:29.810 Authors of the the the extended
NOTE Confidence: 0.909292874705882
00:19:29.810 --> 00:19:31.445 mind paper calls.
NOTE Confidence: 0.909292874705882

00:19:31.450 --> 00:19:32.854 The brain bound mentality.
NOTE Confidence: 0.909292874705882
00:19:32.854 --> 00:19:33.907 In other words,
NOTE Confidence: 0.909292874705882
00:19:33.910 --> 00:19:37.078 this idea that thinking only goes on up here.
NOTE Confidence: 0.909292874705882
00:19:37.080 --> 00:19:38.148 And when you think about it,
NOTE Confidence: 0.909292874705882
00:19:38.150 --> 00:19:41.678 so many of our institutions and our practices
NOTE Confidence: 0.909292874705882
00:19:41.678 --> 00:19:44.610 are rooted in this brain bound idea.
NOTE Confidence: 0.909292874705882
00:19:44.610 --> 00:19:47.440 That thinking is contained within
NOTE Confidence: 0.909292874705882
00:19:47.440 --> 00:19:50.631 the skull that we can evaluate
NOTE Confidence: 0.909292874705882
00:19:50.631 --> 00:19:52.797 and rank people based on how
NOTE Confidence: 0.909292874705882
00:19:52.797 --> 00:19:55.328 big the lump of intelligence is.
NOTE Confidence: 0.909292874705882
00:19:55.330 --> 00:19:58.170 That's inside there inside their NOTE Confidence: 0.909292874705882

00:19:58.170 --> 00:20:00.610 heads and that really that there's
NOTE Confidence: 0.909292874705882
00:20:00.610 --> 00:20:02.920 really a kind of blind spot.
NOTE Confidence: 0.909292874705882
00:20:02.920 --> 00:20:05.069 For all the ways that the raw
NOTE Confidence: 0.909292874705882
00:20:05.069 --> 00:20:06.653 materials of thinking you know NOTE Confidence: 0.909292874705882

00:20:06.653 --> 00:20:08.459 our ability to move our bodies,

NOTE Confidence: 0.909292874705882
00:20:08.460 --> 00:20:10.460 the freedom we have to move our bodies, NOTE Confidence: 0.909292874705882

00:20:10.460 --> 00:20:13.309 the access we have to natural spaces
NOTE Confidence: 0.909292874705882
00:20:13.309 --> 00:20:16.124 or two well designed interiors or NOTE Confidence: 0.909292874705882

00:20:16.124 --> 00:20:19.130 two networks of peers and mentors
NOTE Confidence: 0.909292874705882
00:20:19.130 --> 00:20:21.837 and teachers who can help us.
NOTE Confidence: 0.909292874705882
00:20:21.840 --> 00:20:24.024 All those things are actually a part
NOTE Confidence: 0.909292874705882
00:20:24.024 --> 00:20:25.891 of our thinking processes and we
NOTE Confidence: 0.909292874705882
00:20:25.891 --> 00:20:28.282 have a blind spot to those when we
NOTE Confidence: 0.909292874705882
00:20:28.282 --> 00:20:30.438 insist on this brain bound model that,
NOTE Confidence: 0.909292874705882
00:20:30.440 --> 00:20:32.942 like all that matters is is.
NOTE Confidence: 0.909292874705882
00:20:32.942 --> 00:20:35.038 It goes on up here in the head,
NOTE Confidence: 0.909292874705882
00:20:35.040 --> 00:20:38.658 so the book came out in in June this
NOTE Confidence: 0.909292874705882
00:20:38.658 --> 00:20:42.799 past June and I've been very gratified by.
NOTE Confidence: 0.909292874705882
00:20:42.800 --> 00:20:44.744 The reception and surprised by it NOTE Confidence: 0.909292874705882

00:20:44.744 --> 00:20:47.551 in some ways lots of teachers have NOTE Confidence: 0.909292874705882

00:20:47.551 --> 00:20:49.475 really enthusiastically embraced it.
NOTE Confidence: 0.909292874705882
00:20:49.480 --> 00:20:51.937 Lots of people in the arts have embraced it,
NOTE Confidence: 0.909292874705882
00:20:51.940 --> 00:20:54.016 which when I think about it,
NOTE Confidence: 0.909292874705882
00:20:54.020 --> 00:20:55.825 shouldn't surprise me because I
NOTE Confidence: 0.909292874705882
00:20:55.825 --> 00:20:58.424 think people in the arts have always
NOTE Confidence: 0.909292874705882
00:20:58.424 --> 00:21:00.590 thought with their bodies and with
NOTE Confidence: 0.909292874705882
00:21:00.590 --> 00:21:03.048 come with physical spaces and and NOTE Confidence: 0.909292874705882

00:21:03.048 --> 00:21:05.128 in collaboration with other people
NOTE Confidence: 0.909292874705882
00:21:05.130 --> 00:21:06.562 and lots of people.
NOTE Confidence: 0.909292874705882
00:21:06.562 --> 00:21:09.454 Lots of readers have told me that that
NOTE Confidence: 0.909292874705882
00:21:09.454 --> 00:21:12.366 they had found their way to these techniques.
NOTE Confidence: 0.909292874705882
00:21:12.370 --> 00:21:14.410 And these insights that I wrote
NOTE Confidence: 0.909292874705882
00:21:14.410 --> 00:21:15.770 about in the book,
NOTE Confidence: 0.909292874705882
00:21:15.770 --> 00:21:17.972 but that they were very glad
NOTE Confidence: 0.909292874705882
00:21:17.972 --> 00:21:20.090 to have the scientific backing,
NOTE Confidence: 0.909292874705882
00:21:20.090 --> 00:21:22.095 that that their intuitions or

NOTE Confidence: 0.909292874705882
00:21:22.095 --> 00:21:24.100 their trial and error experiments, NOTE Confidence: 0.909292874705882

00:21:24.100 --> 00:21:26.060 had steered them in the right direction, NOTE Confidence: 0.909292874705882

00:21:26.060 --> 00:21:28.572 and that they felt seen by this book NOTE Confidence: 0.909292874705882

00:21:28.572 --> 00:21:30.948 in a way that they had not before,
NOTE Confidence: 0.909292874705882
00:21:30.948 --> 00:21:32.520 that they that they used their NOTE Confidence: 0.909292874705882

00:21:32.574 --> 00:21:34.578 extended minds in their everyday lives.
NOTE Confidence: 0.909292874705882
00:21:34.580 --> 00:21:37.086 And now they had a better understanding
NOTE Confidence: 0.909292874705882
00:21:37.090 --> 00:21:38.446 of what they were already doing,
NOTE Confidence: 0.909292874705882
00:21:38.450 --> 00:21:40.508 which was, you know, as an author.
NOTE Confidence: 0.909292874705882
00:21:40.510 --> 00:21:42.690 You kind of never know.
NOTE Confidence: 0.909292874705882
00:21:42.690 --> 00:21:42.943 Uh,
NOTE Confidence: 0.909292874705882
00:21:42.943 --> 00:21:44.714 what kind of reception your book is
NOTE Confidence: 0.909292874705882
00:21:44.714 --> 00:21:46.382 going to get until it's out there
NOTE Confidence: 0.909292874705882
00:21:46.382 --> 00:21:47.487 and so that was a
NOTE Confidence: 0.898079025666667
00:21:47.548 --> 00:21:49.384 very that was a surprising and
NOTE Confidence: 0.898079025666667

00:21:49.384 --> 00:21:51.459 gratifying kind of feedback to get up,
NOTE Confidence: 0.898079025666667
00:21:51.459 --> 00:21:54.259 so I'll just pause here for a moment and NOTE Confidence: 0.898079025666667

00:21:54.259 --> 00:21:57.251 I'll look to see if there's any questions, NOTE Confidence: 0.898079025666667
00:21:57.260 --> 00:21:58.736 then Kyle if you have any.
NOTE Confidence: 0.898079025666667
00:21:58.740 --> 00:22:01.036 I know you Kyle was an early reader
NOTE Confidence: 0.898079025666667
00:22:01.036 --> 00:22:04.005 of my book and I I really have
NOTE Confidence: 0.898079025666667
00:22:04.005 --> 00:22:06.409 appreciated his enthusiasm and I know
NOTE Confidence: 0.898079025666667
00:22:06.409 --> 00:22:08.773 we have lots of overlapping interests,
NOTE Confidence: 0.898079025666667
00:22:08.780 --> 00:22:10.280 so perhaps Kyle has has a
NOTE Confidence: 0.898079025666667
00:22:10.280 --> 00:22:11.280 question or a thought.
NOTE Confidence: 0.894437417142857
00:22:13.430 --> 00:22:14.006 Thank you Andy.
NOTE Confidence: 0.894437417142857
00:22:14.006 --> 00:22:15.158 Thank you so much for being
NOTE Confidence: 0.894437417142857
00:22:15.158 --> 00:22:16.277 here today and for sharing.
NOTE Confidence: 0.894437417142857
00:22:16.280 --> 00:22:18.116 You are your work with us,
NOTE Confidence: 0.894437417142857
00:22:18.120 --> 00:22:19.389 particularly this book, NOTE Confidence: 0.894437417142857

00:22:19.389 --> 00:22:21.927 but also how you introduced yourself

NOTE Confidence: 0.894437417142857
00:22:21.927 --> 00:22:24.035 and how you came to come through NOTE Confidence: 0.894437417142857

00:22:24.035 --> 00:22:25.805 the work on the extended mind.
NOTE Confidence: 0.894437417142857
00:22:25.810 --> 00:22:28.064 I have a question when you know NOTE Confidence: 0.894437417142857

00:22:28.064 --> 00:22:29.770 you mentioned UM the iPhone
NOTE Confidence: 0.894437417142857
00:22:29.770 --> 00:22:31.780 coming around and sort of being
NOTE Confidence: 0.894437417142857
00:22:31.780 --> 00:22:34.369 a proof of concept for that that
NOTE Confidence: 0.894437417142857
00:22:34.369 --> 00:22:36.012 question about the extended mind.
NOTE Confidence: 0.894437417142857
00:22:36.012 --> 00:22:37.920 I know that you started this
NOTE Confidence: 0.894437417142857
00:22:37.987 --> 00:22:39.487 book before the pandemic.
NOTE Confidence: 0.894437417142857
00:22:39.490 --> 00:22:42.048 Yeah, and then the pandemic came yeah, NOTE Confidence: 0.894437417142857

00:22:42.048 --> 00:22:45.226 and I'm wondering what you see in NOTE Confidence: 0.894437417142857

00:22:45.226 --> 00:22:48.254 the pandemic that illuminates or
NOTE Confidence: 0.894437417142857
00:22:48.254 --> 00:22:51.353 helps you understand this work on
NOTE Confidence: 0.894437417142857
00:22:51.353 --> 00:22:54.256 the extended mind and and what, UM, NOTE Confidence: 0.894437417142857

00:22:54.256 --> 00:22:57.744 what applications you might be able to share.
NOTE Confidence: 0.970030791666667

00:22:58.710 --> 00:23:00.378 Yeah, that's such an interesting question.
NOTE Confidence: 0.970030791666667
00:23:00.380 --> 00:23:03.266 Call it the the pandemic was.
NOTE Confidence: 0.970030791666667
00:23:03.270 --> 00:23:03.770 Uhm, happening.
NOTE Confidence: 0.970030791666667
00:23:03.770 --> 00:23:06.037 Just as I was finishing up the book and
NOTE Confidence: 0.970030791666667
00:23:06.037 --> 00:23:07.936 I really had a question as to you know,
NOTE Confidence: 0.970030791666667
00:23:07.940 --> 00:23:10.537 do I include even a reference to
NOTE Confidence: 0.970030791666667
00:23:10.537 --> 00:23:12.429 the pandemic in the book?
NOTE Confidence: 0.970030791666667
00:23:12.430 --> 00:23:14.348 Because so little was known at that
NOTE Confidence: 0.970030791666667
00:23:14.348 --> 00:23:15.859 point and everything was changing.
NOTE Confidence: 0.970030791666667
00:23:15.860 --> 00:23:18.290 So in the end, in the end II really I didn't.
NOTE Confidence: 0.970030791666667
00:23:18.290 --> 00:23:21.802 But I do think that the the NOTE Confidence: 0.970030791666667

00:23:21.802 --> 00:23:24.988 book coming out when it did.
NOTE Confidence: 0.970030791666667
00:23:24.990 --> 00:23:26.229 The time I thought it was the
NOTE Confidence: 0.970030791666667
00:23:26.229 --> 00:23:27.369 tail end of the pandemic.
NOTE Confidence: 0.970030791666667
00:23:27.370 --> 00:23:28.426 You remember those brief, NOTE Confidence: 0.970030791666667

00:23:28.426 --> 00:23:29.746 glorious moments in the summer

NOTE Confidence: 0.970030791666667
00:23:29.746 --> 00:23:31.229 when we all thought that it was.
NOTE Confidence: 0.970030791666667
00:23:31.230 --> 00:23:33.250 It was in in retreat,
NOTE Confidence: 0.970030791666667
00:23:33.250 --> 00:23:35.548 but that wasn't to be so, NOTE Confidence: 0.970030791666667

00:23:35.550 --> 00:23:37.190 but certainly by that point
NOTE Confidence: 0.970030791666667
00:23:37.190 --> 00:23:39.549 in in June when it came out,
NOTE Confidence: 0.970030791666667
00:23:39.550 --> 00:23:41.175 we'd been through more than NOTE Confidence: 0.970030791666667 00:23:41.175 --> 00:23:43.550 a year of of the pandemic, NOTE Confidence: 0.970030791666667

00:23:43.550 --> 00:23:48.076 and I really did feel that the pandemic,
NOTE Confidence: 0.970030791666667
00:23:48.076 --> 00:23:49.252 oddly enough,
NOTE Confidence: 0.970030791666667
00:23:49.252 --> 00:23:52.192 was almost like this vast
NOTE Confidence: 0.970030791666667
00:23:52.192 --> 00:23:54.735 natural experiment that exposed.
NOTE Confidence: 0.970030791666667
00:23:54.735 --> 00:23:55.950 In many ways,
NOTE Confidence: 0.970030791666667
00:23:55.950 --> 00:23:57.975 the importance of the extended
NOTE Confidence: 0.970030791666667
00:23:57.975 --> 00:24:00.478 mind precisely because it cut off.
NOTE Confidence: 0.970030791666667
00:24:00.480 --> 00:24:04.990 So for so many of us it cut off from us.
NOTE Confidence: 0.970030791666667

00:24:04.990 --> 00:24:07.384 The habitual use of our of our, NOTE Confidence: 0.970030791666667

00:24:07.390 --> 00:24:09.130 the mental extensions that
NOTE Confidence: 0.970030791666667
00:24:09.130 --> 00:24:11.740 usually help us think in everyday
NOTE Confidence: 0.970030791666667
00:24:11.814 --> 00:24:13.989 pre pandemic life for example.
NOTE Confidence: 0.970030791666667
00:24:13.990 --> 00:24:16.932 I mean the most most obvious example is
NOTE Confidence: 0.970030791666667
00:24:16.932 --> 00:24:19.939 that all of the sudden many of our students,
NOTE Confidence: 0.970030791666667
00:24:19.940 --> 00:24:21.782 many of our children were not NOTE Confidence: 0.970030791666667

00:24:21.782 --> 00:24:23.010 interacting with their classmates
NOTE Confidence: 0.970030791666667
00:24:23.066 --> 00:24:24.190 and teachers in person.
NOTE Confidence: 0.970030791666667
00:24:24.190 --> 00:24:25.738 Many of us were no longer
NOTE Confidence: 0.970030791666667
00:24:25.738 --> 00:24:26.770 interacting with their colleagues. NOTE Confidence: 0.970030791666667

00:24:26.770 --> 00:24:28.961 At work or even even with friends
NOTE Confidence: 0.970030791666667
00:24:28.961 --> 00:24:30.829 or others outside our household,
NOTE Confidence: 0.970030791666667
00:24:30.830 --> 00:24:33.287 and I think we really felt the
NOTE Confidence: 0.970030791666667
00:24:33.287 --> 00:24:35.060 the contraction you know of NOTE Confidence: 0.970030791666667

00:24:35.060 --> 00:24:37.004 of not having that in person.

NOTE Confidence: 0.970030791666667
00:24:37.010 --> 00:24:38.575 Interaction with other people and
NOTE Confidence: 0.970030791666667
00:24:38.575 --> 00:24:41.214 the way that we can share mine space NOTE Confidence: 0.970030791666667

00:24:41.214 --> 00:24:43.236 with other people when we're having NOTE Confidence: 0.970030791666667

00:24:43.236 --> 00:24:45.169 that face to face conversation,
NOTE Confidence: 0.970030791666667
00:24:45.170 --> 00:24:47.193 although of course we all did our
NOTE Confidence: 0.970030791666667
00:24:47.193 --> 00:24:49.234 best with with zoom and these
NOTE Confidence: 0.970030791666667
00:24:49.234 --> 00:24:50.347 these other platforms.
NOTE Confidence: 0.970030791666667
00:24:50.350 --> 00:24:51.886 But there are other examples too,
NOTE Confidence: 0.970030791666667
00:24:51.890 --> 00:24:54.162 like there was a professor who said to
NOTE Confidence: 0.970030791666667
00:24:54.162 --> 00:24:56.780 me that he was no longer able to access.
NOTE Confidence: 0.970030791666667
00:24:56.780 --> 00:24:58.485 His on campus office because
NOTE Confidence: 0.970030791666667
00:24:58.485 --> 00:24:59.849 all during the pandemic,
NOTE Confidence: 0.970030791666667
00:24:59.850 --> 00:25:02.362 all of that had been shut down and
NOTE Confidence: 0.970030791666667
00:25:02.362 --> 00:25:04.598 he realized that he had an office
NOTE Confidence: 0.970030791666667
00:25:04.598 --> 00:25:06.931 full of books that were arranged in NOTE Confidence: 0.970030791666667

00:25:06.931 --> 00:25:09.465 on shelves around him in a specific
NOTE Confidence: 0.970030791666667
00:25:09.465 --> 00:25:11.455 order and that he actually had
NOTE Confidence: 0.970030791666667
00:25:11.455 --> 00:25:13.466 become used to using the visual NOTE Confidence: 0.970030791666667

00:25:13.466 --> 00:25:15.692 cues of the books around him to
NOTE Confidence: 0.970030791666667
00:25:15.692 --> 00:25:17.858 shape his thinking or structure.
NOTE Confidence: 0.970030791666667
00:25:17.860 --> 00:25:18.440 His thinking,
NOTE Confidence: 0.970030791666667
00:25:18.440 --> 00:25:21.148 and he felt sort of bereft, you know, NOTE Confidence: 0.970030791666667

00:25:21.148 --> 00:25:25.020 being cut off from this physical setting of,
NOTE Confidence: 0.970030791666667
00:25:25.020 --> 00:25:25.544 you know,
NOTE Confidence: 0.970030791666667
00:25:25.544 --> 00:25:27.116 there was some sense in which.
NOTE Confidence: 0.970030791666667
00:25:27.120 --> 00:25:29.824 His mind was outside his his skull and NOTE Confidence: 0.970030791666667

00:25:29.824 --> 00:25:32.641 and and on his raid on his shelves and
NOTE Confidence: 0.970030791666667
00:25:32.641 --> 00:25:35.738 he was no longer having access to that.
NOTE Confidence: 0.970030791666667
00:25:35.740 --> 00:25:36.096 So,
NOTE Confidence: 0.970030791666667
00:25:36.096 --> 00:25:36.808 you know,
NOTE Confidence: 0.970030791666667
00:25:36.808 --> 00:25:38.588 philosophers have long played around

NOTE Confidence: 0.970030791666667
00:25:38.588 --> 00:25:40.904 with this sort of thought experiment of NOTE Confidence: 0.970030791666667

00:25:40.904 --> 00:25:43.700 like what if we're all just brains in vats, NOTE Confidence: 0.970030791666667

00:25:43.700 --> 00:25:44.826 you know, NOTE Confidence: 0.970030791666667

00:25:44.826 --> 00:25:46.870 like the the movie The matrix?
NOTE Confidence: 0.970030791666667
00:25:46.870 --> 00:25:47.786 Kind of, you know,
NOTE Confidence: 0.970030791666667
00:25:47.786 --> 00:25:49.160 plays with this idea as well.
NOTE Confidence: 0.970030791666667
00:25:49.160 --> 00:25:50.735 And I actually have the NOTE Confidence: 0.970030791666667

00:25:50.735 --> 00:25:52.310 I have the feeling that
NOTE Confidence: 0.905017070714286
00:25:52.382 --> 00:25:54.058 come during the pandemic.
NOTE Confidence: 0.905017070714286
00:25:54.060 --> 00:25:55.860 We all kind of were brains in vats.
NOTE Confidence: 0.905017070714286
00:25:55.860 --> 00:25:57.468 You know? We were brains in front of.
NOTE Confidence: 0.905017070714286
00:25:57.470 --> 00:26:00.726 Greens, lots of us were not moving around
NOTE Confidence: 0.905017070714286
00:26:00.726 --> 00:26:04.289 as much as we used as we would normally.
NOTE Confidence: 0.905017070714286
00:26:04.290 --> 00:26:05.220 We weren't commuting.
NOTE Confidence: 0.905017070714286
00:26:05.220 --> 00:26:06.150 We weren't traveling.
NOTE Confidence: 0.905017070714286

00:26:06.150 --> 00:26:08.676 We weren't visiting, stimulating new places, NOTE Confidence: 0.905017070714286

00:26:08.680 --> 00:26:11.440 we weren't seeing people in person.
NOTE Confidence: 0.905017070714286
00:26:11.440 --> 00:26:12.724 Some of us may have been
NOTE Confidence: 0.905017070714286
00:26:12.724 --> 00:26:13.850 getting out into nature more.
NOTE Confidence: 0.905017070714286
00:26:13.850 --> 00:26:15.929 I think that was one upside of the pandemic,
NOTE Confidence: 0.905017070714286
00:26:15.930 --> 00:26:21.150 but uhm. You know one of the, UM?
NOTE Confidence: 0.905017070714286
00:26:21.150 --> 00:26:24.060 One of the points that I return to again and NOTE Confidence: 0.905017070714286

00:26:24.135 --> 00:26:26.754 again in the book is the metaphors we use NOTE Confidence: 0.905017070714286

00:26:26.754 --> 00:26:29.640 to understand the brain and and thinking, NOTE Confidence: 0.905017070714286

00:26:29.640 --> 00:26:32.226 and how, how profoundly those metaphors NOTE Confidence: 0.905017070714286

00:26:32.226 --> 00:26:35.837 affect the way we we think about thinking. NOTE Confidence: 0.905017070714286

00:26:35.840 --> 00:26:39.081 And one of those metaphors very common NOTE Confidence: 0.905017070714286

00:26:39.081 --> 00:26:41.539 and pervasive metaphor is the brain.
NOTE Confidence: 0.905017070714286
00:26:41.540 --> 00:26:42.664 As computer, you know.
NOTE Confidence: 0.905017070714286
00:26:42.664 --> 00:26:44.717 And it always strikes me as interesting NOTE Confidence: 0.905017070714286

00:26:44.717 --> 00:26:46.880 that human beings in the middle of

NOTE Confidence: 0.905017070714286
00:26:46.880 --> 00:26:49.019 the last century created computers.
NOTE Confidence: 0.905017070714286
00:26:49.020 --> 00:26:50.670 And then we kind of analogize
NOTE Confidence: 0.905017070714286
00:26:50.670 --> 00:26:51.495 ourselves to them.
NOTE Confidence: 0.905017070714286
00:26:51.500 --> 00:26:53.700 And compared ourselves to them in some ways,
NOTE Confidence: 0.905017070714286
00:26:53.700 --> 00:26:57.648 we created computers to be a kind of NOTE Confidence: 0.905017070714286

00:26:57.648 --> 00:26:59.424 idealized version of the human brain.
NOTE Confidence: 0.905017070714286
00:26:59.430 --> 00:26:59.998 You know,
NOTE Confidence: 0.905017070714286
00:26:59.998 --> 00:27:02.270 a brain that we could give commands to
NOTE Confidence: 0.905017070714286
00:27:02.333 --> 00:27:04.565 that would execute those commands that
NOTE Confidence: 0.905017070714286
00:27:04.565 --> 00:27:08.083 would not be embroiled in all this messy
NOTE Confidence: 0.905017070714286
00:27:08.083 --> 00:27:11.339 stuff of emotions and and and the body.
NOTE Confidence: 0.905017070714286
00:27:11.340 --> 00:27:16.506 And that's interestingly, I think the.
NOTE Confidence: 0.905017070714286
00:27:16.510 --> 00:27:18.510 B.
NOTE Confidence: 0.905017070714286
00:27:18.510 --> 00:27:23.886 Miss the the misconceptions are Aurum.
NOTE Confidence: 0.905017070714286
00:27:23.890 --> 00:27:26.428 You know faulty beliefs behind that
NOTE Confidence: 0.905017070714286

00:27:26.428 --> 00:27:28.865 idea are becoming more and more
NOTE Confidence: 0.905017070714286
00:27:28.865 --> 00:27:31.545 evident in in the failures or the the
NOTE Confidence: 0.905017070714286
00:27:31.624 --> 00:27:34.248 deficits of artificial intelligence.
NOTE Confidence: 0.905017070714286
00:27:34.250 --> 00:27:36.819 It turns out that we can create
NOTE Confidence: 0.905017070714286
00:27:36.819 --> 00:27:38.430 computers that play chess.
NOTE Confidence: 0.905017070714286
00:27:38.430 --> 00:27:39.940 You know better than than
NOTE Confidence: 0.905017070714286
00:27:39.940 --> 00:27:40.846 the world's grandmasters.
NOTE Confidence: 0.905017070714286
00:27:40.850 --> 00:27:43.946 But it turns out to be really hard to
NOTE Confidence: 0.905017070714286
00:27:43.946 --> 00:27:46.967 program a robot to navigate through space,
NOTE Confidence: 0.905017070714286
00:27:46.970 --> 00:27:49.790 as well as a child can or or interact with
NOTE Confidence: 0.905017070714286
00:27:49.862 --> 00:27:52.614 another person as fluidly as a child can.
NOTE Confidence: 0.905017070714286
00:27:52.620 --> 00:27:53.976 So when we.
NOTE Confidence: 0.905017070714286
00:27:53.976 --> 00:27:57.140 Think of the brain as a computer.
NOTE Confidence: 0.905017070714286
00:27:57.140 --> 00:27:59.534 We're actually cutting off or ignoring
NOTE Confidence: 0.905017070714286
00:27:59.534 --> 00:28:01.953 many of the wellsprings of human NOTE Confidence: 0.905017070714286
00:28:01.953 --> 00:28:03.838 intelligence which are the body.

NOTE Confidence: 0.905017070714286
00:28:03.840 --> 00:28:06.492 Which are the fact that which do NOTE Confidence: 0.905017070714286

00:28:06.492 --> 00:28:08.380 in here in the sense that we are NOTE Confidence: 0.905017070714286 00:28:08.443 --> 00:28:10.113 embedded in a physical environment NOTE Confidence: 0.905017070714286

00:28:10.113 --> 00:28:12.272 and we're embedded in a social
NOTE Confidence: 0.905017070714286
00:28:12.272 --> 00:28:13.976 network of social connections.
NOTE Confidence: 0.905017070714286
00:28:13.980 --> 00:28:16.194 So the other prominent metaphor that NOTE Confidence: 0.905017070714286

00:28:16.194 --> 00:28:18.820 you will often hear in regards to the NOTE Confidence: 0.905017070714286 00:28:18.820 --> 00:28:21.498 brain is the brain is a muscle and this NOTE Confidence: 0.905017070714286

00:28:21.498 --> 00:28:24.370 is I'm circling back around to the to the.
NOTE Confidence: 0.905017070714286
00:28:24.370 --> 00:28:25.770 To the pandemic and your
NOTE Confidence: 0.905017070714286
00:28:25.770 --> 00:28:27.160 question about the pandemic.
NOTE Confidence: 0.905017070714286
00:28:27.160 --> 00:28:30.570 Kyle because although the idea of the
NOTE Confidence: 0.905017070714286
00:28:30.570 --> 00:28:32.954 brain is a muscle which is prominent
NOTE Confidence: 0.905017070714286
00:28:32.954 --> 00:28:35.192 in theories like the growth mindset
NOTE Confidence: 0.905017070714286
00:28:35.192 --> 00:28:37.966 which is put put forth by psychologist, NOTE Confidence: 0.905017070714286

00:28:37.970 --> 00:28:38.770 Carol Dweck,
NOTE Confidence: 0.905017070714286
00:28:38.770 --> 00:28:41.970 or the theory of grit put forward by
NOTE Confidence: 0.905017070714286
00:28:42.053 --> 00:28:44.829 psychologist and Angela Duckworth.
NOTE Confidence: 0.905017070714286
00:28:44.830 --> 00:28:47.094 Although I think that idea that the brain
NOTE Confidence: 0.905017070714286
00:28:47.094 --> 00:28:50.127 is a muscle and the more we work our brains,
NOTE Confidence: 0.905017070714286
00:28:50.130 --> 00:28:51.650 the the stronger they get,
NOTE Confidence: 0.905017070714286
00:28:51.650 --> 00:28:53.528 the smarter we get that can
NOTE Confidence: 0.905017070714286
00:28:53.528 --> 00:28:55.370 be a very empowering message.
NOTE Confidence: 0.905017070714286
00:28:55.370 --> 00:28:56.606 In a positive message,
NOTE Confidence: 0.905017070714286
00:28:56.606 --> 00:28:58.876 I think it's limited in the sense
NOTE Confidence: 0.905017070714286
00:28:58.876 --> 00:29:00.626 that it's still brain bound.
NOTE Confidence: 0.94091315
00:29:00.630 --> 00:29:02.388 It's still focused on on the
NOTE Confidence: 0.94091315
00:29:02.388 --> 00:29:03.990 brain and the brain alone.
NOTE Confidence: 0.94091315
00:29:03.990 --> 00:29:05.766 And what happened during the pandemic?
NOTE Confidence: 0.94091315
00:29:05.770 --> 00:29:08.110 You know, as many of us found that we NOTE Confidence: 0.94091315

00:29:08.110 --> 00:29:10.265 were working longer hours than ever

NOTE Confidence: 0.94091315
00:29:10.265 --> 00:29:12.790 because we didn't have a commute.
NOTE Confidence: 0.94091315
00:29:12.790 --> 00:29:15.387 We didn't have a water cooler chats,
NOTE Confidence: 0.94091315
00:29:15.390 --> 00:29:17.462 you know. It was just us in
NOTE Confidence: 0.94091315
00:29:17.462 --> 00:29:18.998 our computers working, working,
NOTE Confidence: 0.94091315
00:29:18.998 --> 00:29:21.590 working, exercising our brains.
NOTE Confidence: 0.94091315
00:29:21.590 --> 00:29:22.910 But we weren't a lot,
NOTE Confidence: 0.94091315
00:29:22.910 --> 00:29:24.275 so I don't think many of us
NOTE Confidence: 0.94091315
00:29:24.275 --> 00:29:25.564 felt that we were, you know.
NOTE Confidence: 0.94091315
00:29:25.564 --> 00:29:27.650 At the top of our game during the pandemic,
NOTE Confidence: 0.94091315
00:29:27.650 --> 00:29:31.963 it actually many people felt less
NOTE Confidence: 0.94091315
00:29:31.963 --> 00:29:35.064 productive or had a sense of languishing.
NOTE Confidence: 0.94091315
00:29:35.070 --> 00:29:37.428 Or, you know,
NOTE Confidence: 0.94091315
00:29:37.430 --> 00:29:39.908 simply working our brains is not enough.
NOTE Confidence: 0.94091315
00:29:39.910 --> 00:29:40.544 So again,
NOTE Confidence: 0.94091315
00:29:40.544 --> 00:29:43.080 I feel like there was almost a natural
NOTE Confidence: 0.94091315

00:29:43.149 --> 00:29:46.000 experiment that could help make visible NOTE Confidence: 0.94091315

00:29:46.000 --> 00:29:48.325 how important mental extensions are,
NOTE Confidence: 0.94091315
00:29:48.330 --> 00:29:49.644 and I'll just say one more thing about that, NOTE Confidence: 0.94091315

00:29:49.650 --> 00:29:51.848 which is that the thing I love
NOTE Confidence: 0.94091315
00:29:51.848 --> 00:29:53.718 about the theory of the extended
NOTE Confidence: 0.94091315
00:29:53.718 --> 00:29:56.130 mind is that it gives us so many.
NOTE Confidence: 0.94091315
00:29:56.130 --> 00:29:58.020 Avenues and so many choices.
NOTE Confidence: 0.94091315
00:29:58.020 --> 00:29:59.094 You know,
NOTE Confidence: 0.94091315
00:29:59.094 --> 00:30:02.316 if you are a committed devotee
NOTE Confidence: 0.94091315
00:30:02.316 --> 00:30:05.220 of the growth mindset.
NOTE Confidence: 0.94091315
00:30:05.220 --> 00:30:07.722 What's what's your option when you're NOTE Confidence: 0.94091315

00:30:07.722 --> 00:30:10.040 confronted with some really difficult
NOTE Confidence: 0.94091315
00:30:10.040 --> 00:30:13.050 cognitive problem or or piece of work?
NOTE Confidence: 0.94091315
00:30:13.050 --> 00:30:15.498 It's just to keep at it and keep trying,
NOTE Confidence: 0.94091315
00:30:15.500 --> 00:30:18.356 and keep exercising them that muscle.
NOTE Confidence: 0.94091315
00:30:18.360 --> 00:30:20.270 Whereas with the with the

NOTE Confidence: 0.94091315
00:30:20.270 --> 00:30:22.180 theory of the extended mind,
NOTE Confidence: 0.94091315
00:30:22.180 --> 00:30:24.460 suddenly there's literally a whole
NOTE Confidence: 0.94091315
00:30:24.460 --> 00:30:26.740 world of extra neural resources
NOTE Confidence: 0.94091315
00:30:26.818 --> 00:30:29.280 that you can bring in to help your
NOTE Confidence: 0.94091315
00:30:29.280 --> 00:30:31.280 performance to enhance your thinking.
NOTE Confidence: 0.94091315
00:30:31.280 --> 00:30:33.920 You know you might, you might use gesture.
NOTE Confidence: 0.94091315
00:30:33.920 --> 00:30:34.920 You might act it out.
NOTE Confidence: 0.94091315
00:30:34.920 --> 00:30:36.138 You might go for a run.
NOTE Confidence: 0.94091315
00:30:36.140 --> 00:30:37.000 You might go outside.
NOTE Confidence: 0.94091315
00:30:37.000 --> 00:30:38.739 You might talk to a friend you know.
NOTE Confidence: 0.94091315
00:30:38.740 --> 00:30:40.420 I just come to me.
NOTE Confidence: 0.94091315
00:30:40.420 --> 00:30:43.052 It opens up the IT opens up
NOTE Confidence: 0.94091315
00:30:43.052 --> 00:30:45.845 the universe of options that we
NOTE Confidence: 0.94091315
00:30:45.845 --> 00:30:48.470 have for enhancing our thinking.
NOTE Confidence: 0.94091315
00:30:48.470 --> 00:30:51.158 And that's partly why I feel like NOTE Confidence: 0.94091315

00:30:51.158 --> 00:30:53.418 such an evangelist for this idea.
NOTE Confidence: 0.94091315
00:30:53.420 --> 00:30:55.324 And it did turn out to be the
NOTE Confidence: 0.94091315
00:30:55.324 --> 00:30:57.307 big idea that I was looking for.
NOTE Confidence: 0.844277998181818
00:31:00.080 --> 00:31:01.816 Thank you Andy. I see John you
NOTE Confidence: 0.844277998181818
00:31:01.816 --> 00:31:06.580 have your hand up, yeah so.
NOTE Confidence: 0.94200490625
00:31:06.580 --> 00:31:09.636 You know, I, I think the idea of
NOTE Confidence: 0.94200490625
00:31:09.640 --> 00:31:11.902 of the extended mind is really NOTE Confidence: 0.94200490625

00:31:11.902 --> 00:31:14.499 resonates with a kind of fundamental
NOTE Confidence: 0.94200490625
00:31:14.499 --> 00:31:16.527 and transformational process that's
NOTE Confidence: 0.94200490625
00:31:16.527 --> 00:31:19.580 happening in in our universities,
NOTE Confidence: 0.94200490625
00:31:19.580 --> 00:31:21.200 particularly in medical schools
NOTE Confidence: 0.94200490625
00:31:21.200 --> 00:31:22.415 and research enterprises,
NOTE Confidence: 0.94200490625
00:31:22.420 --> 00:31:25.493 which is a shift from a traditional
NOTE Confidence: 0.94200490625
00:31:25.493 --> 00:31:27.940 focus on an individual.
NOTE Confidence: 0.94200490625
00:31:27.940 --> 00:31:29.830 Scientists with the idea that NOTE Confidence: 0.94200490625

00:31:29.830 --> 00:31:32.173 there would be a certain rigid

NOTE Confidence: 0.94200490625
00:31:32.173 --> 00:31:34.819 narrow set of metrics by which we NOTE Confidence: 0.94200490625

00:31:34.819 --> 00:31:36.552 could evaluate all individuals.
NOTE Confidence: 0.94200490625
00:31:36.552 --> 00:31:39.468 Scientists and and a certain kind NOTE Confidence: 0.94200490625

00:31:39.468 --> 00:31:41.428 of individual productivity to
NOTE Confidence: 0.94200490625
00:31:41.428 --> 00:31:44.158 a shift to thinking about team
NOTE Confidence: 0.94200490625
00:31:44.158 --> 00:31:46.650 science and and that shift to Team
NOTE Confidence: 0.94200490625
00:31:46.650 --> 00:31:50.058 Science has really had as its as a NOTE Confidence: 0.94200490625

00:31:50.058 --> 00:31:53.549 kind of evolves in our community.
NOTE Confidence: 0.94200490625
00:31:53.550 --> 00:31:54.450 Profound consequences.
NOTE Confidence: 0.94200490625
00:31:54.450 --> 00:31:57.150 Because we it's moved us away
NOTE Confidence: 0.94200490625
00:31:57.150 --> 00:32:00.162 from a certain prototype of what
NOTE Confidence: 0.94200490625
00:32:00.162 --> 00:32:02.702 a successful scientist works like.
NOTE Confidence: 0.94200490625
00:32:02.710 --> 00:32:05.214 Thinking about a diversity,
NOTE Confidence: 0.94200490625
00:32:05.214 --> 00:32:07.718 how diversity of abilities.
NOTE Confidence: 0.94200490625
00:32:07.720 --> 00:32:09.464 Backgrounds perspectives can work
NOTE Confidence: 0.94200490625

00:32:09.464 --> 00:32:12.080 together to make an overall team
NOTE Confidence: 0.94200490625
00:32:12.155 --> 00:32:13.975 better than it would otherwise
NOTE Confidence: 0.94200490625
00:32:13.975 --> 00:32:15.420 be and and and,
NOTE Confidence: 0.94200490625
00:32:15.420 --> 00:32:18.488 and that in turn has changed our the
NOTE Confidence: 0.94200490625
00:32:18.488 --> 00:32:21.296 way we evaluate people for promotion.
NOTE Confidence: 0.94200490625
00:32:21.300 --> 00:32:24.270 We have different kinds of tracks
NOTE Confidence: 0.94200490625
00:32:24.270 --> 00:32:27.013 we not only consider what an NOTE Confidence: 0.94200490625

00:32:27.013 --> 00:32:27.922 individual person does,
NOTE Confidence: 0.94200490625
00:32:27.922 --> 00:32:30.102 but what do they bring to the
NOTE Confidence: 0.94200490625
00:32:30.102 --> 00:32:32.181 team and how is the team advanced
NOTE Confidence: 0.94200490625
00:32:32.181 --> 00:32:33.600 the community or the field?
NOTE Confidence: 0.94200490625
00:32:33.600 --> 00:32:37.737 And it's it's really in some ways
NOTE Confidence: 0.94200490625
00:32:37.737 --> 00:32:39.510 a very fundamental.
NOTE Confidence: 0.94200490625
00:32:39.510 --> 00:32:41.589 Miffed in the way we think of
NOTE Confidence: 0.94200490625
00:32:41.589 --> 00:32:43.871 what it is that we're trying to NOTE Confidence: 0.94200490625

00:32:43.871 --> 00:32:45.833 do and how we go about.

NOTE Confidence: 0.94200490625
00:32:45.840 --> 00:32:48.872 Seems very much linked to this idea of NOTE Confidence: 0.94200490625

00:32:48.872 --> 00:32:51.059 the consciousness of the team as they,
NOTE Confidence: 0.94200490625
00:32:51.060 --> 00:32:52.530 as opposed to the individual
NOTE Confidence: 0.896775922
00:32:52.760 --> 00:32:55.040 yes and John. I'm curious,
NOTE Confidence: 0.896775922
00:32:55.040 --> 00:32:57.936 is that what have been the challenges in?
NOTE Confidence: 0.896775922
00:32:57.940 --> 00:33:00.716 How do you? How do you evaluate what
NOTE Confidence: 0.896775922
00:33:00.716 --> 00:33:03.112 someone brings to a team or or do
NOTE Confidence: 0.896775922
00:33:03.112 --> 00:33:05.336 you evaluate the team as a whole
NOTE Confidence: 0.896775922
00:33:05.336 --> 00:33:07.466 rather than on the individual level?
NOTE Confidence: 0.925565293333333
00:33:07.640 --> 00:33:08.936 Well, you put your finger right
NOTE Confidence: 0.925565293333333
00:33:08.936 --> 00:33:10.740 on some of the hardest challenges,
NOTE Confidence: 0.925565293333333
00:33:10.740 --> 00:33:13.002 which is oftentimes the whole point
NOTE Confidence: 0.925565293333333
00:33:13.002 --> 00:33:16.364 of the team is to make invisible
NOTE Confidence: 0.925565293333333
00:33:16.364 --> 00:33:18.137 the individual contributions.
NOTE Confidence: 0.925565293333333
00:33:18.140 --> 00:33:19.630 And what what people bring
NOTE Confidence: 0.925565293333333

00:33:19.630 --> 00:33:21.500 to the success of the team?
NOTE Confidence: 0.925565293333333
00:33:21.500 --> 00:33:23.480 Because sometimes what people bring NOTE Confidence: 0.925565293333333

00:33:23.480 --> 00:33:26.821 to the team is the ability to hold NOTE Confidence: 0.925565293333333

00:33:26.821 --> 00:33:29.377 people together as they are making NOTE Confidence: 0.925565293333333

00:33:29.377 --> 00:33:31.567 engaged in a difficult process,
NOTE Confidence: 0.925565293333333
00:33:31.570 --> 00:33:35.480 socially or emotionally difficult process.
NOTE Confidence: 0.925565293333333
00:33:35.480 --> 00:33:37.965 And so that can be a challenge.
NOTE Confidence: 0.968910432
00:33:39.420 --> 00:33:40.370 I would say that it's
NOTE Confidence: 0.916039046
00:33:40.380 --> 00:33:43.140 kind of an evolving process,
NOTE Confidence: 0.916039046
00:33:43.140 --> 00:33:46.752 but what people look for is
NOTE Confidence: 0.916039046
00:33:46.752 --> 00:33:48.412 precisely that what what do NOTE Confidence: 0.916039046

00:33:48.412 --> 00:33:50.695 people bring to the team? What?
NOTE Confidence: 0.916039046
00:33:50.695 --> 00:33:53.470 What is a person's unique?
NOTE Confidence: 0.916039046
00:33:53.470 --> 00:33:54.805 Ability to contribute to the
NOTE Confidence: 0.916039046
00:33:54.805 --> 00:33:56.570 success of a group of people, NOTE Confidence: 0.916039046

00:33:56.570 --> 00:33:59.937 and it's not often easy to to

NOTE Confidence: 0.916039046
00:33:59.940 --> 00:34:00.774 as precisely estimate,
NOTE Confidence: 0.916039046
00:34:00.774 --> 00:34:02.900 but it's something that we're trying to do.
NOTE Confidence: 0.956820014
00:34:04.540 --> 00:34:05.356 So interesting, yeah,
NOTE Confidence: 0.956820014
00:34:05.356 --> 00:34:07.260 that makes me think of the research.
NOTE Confidence: 0.956820014
00:34:07.260 --> 00:34:10.248 UM, by Anita Woolley at Carnegie
NOTE Confidence: 0.956820014
00:34:10.248 --> 00:34:13.310 Mellon who's looked at what, what?
NOTE Confidence: 0.956820014
00:34:13.310 --> 00:34:16.950 What are the UM constituent parts that NOTE Confidence: 0.956820014

00:34:16.950 --> 00:34:19.888 add up to a group being collectively
NOTE Confidence: 0.956820014
00:34:19.888 --> 00:34:22.792 intelligent and one of the major factors
NOTE Confidence: 0.956820014
00:34:22.792 --> 00:34:25.498 that she has found is psychological NOTE Confidence: 0.956820014

00:34:25.498 --> 00:34:27.728 perceptiveness you know the the NOTE Confidence: 0.956820014

00:34:27.728 --> 00:34:30.254 individuals ability to understand other
NOTE Confidence: 0.956820014
00:34:30.254 --> 00:34:33.539 people empathize with other people.
NOTE Confidence: 0.956820014
00:34:33.540 --> 00:34:35.508 Take the perspective of other people
NOTE Confidence: 0.956820014
00:34:35.508 --> 00:34:38.241 and and she's also found that collective NOTE Confidence: 0.956820014

00:34:38.241 --> 00:34:40.506 intelligence of a really important
NOTE Confidence: 0.956820014
00:34:40.506 --> 00:34:42.134 contributing factor to collective
NOTE Confidence: 0.956820014
00:34:42.134 --> 00:34:44.102 intelligence is how many women are NOTE Confidence: 0.956820014

00:34:44.102 --> 00:34:46.300 on the team and those two things,
NOTE Confidence: 0.956820014
00:34:46.300 --> 00:34:49.150 not surprisingly, are they overlap.
NOTE Confidence: 0.857506755555556
00:34:51.940 --> 00:34:54.685 Annie, we've got a few questions in the chat,
NOTE Confidence: 0.857506755555556
00:34:54.690 --> 00:34:56.786 and I think Kendall has her hand raised.
NOTE Confidence: 0.857506755555556
00:34:56.790 --> 00:34:58.568 I'm gonna take some from the chat
NOTE Confidence: 0.857506755555556
00:34:58.568 --> 00:35:00.470 first and I'll read them aloud.
NOTE Confidence: 0.857506755555556
00:35:00.470 --> 00:35:02.630 I think this is a wonderful example
NOTE Confidence: 0.857506755555556
00:35:02.630 --> 00:35:04.590 of the extended mind in practice, NOTE Confidence: 0.857506755555556

00:35:04.590 --> 00:35:05.926 and I think what you were hoping for,
NOTE Confidence: 0.857506755555556
00:35:05.930 --> 00:35:07.920 not just conversation but a
NOTE Confidence: 0.857506755555556
00:35:07.920 --> 00:35:09.910 kind of a collective effort.
NOTE Confidence: 0.857506755555556
00:35:09.910 --> 00:35:12.088 So the first question is this.
NOTE Confidence: 0.857506755555556
00:35:12.090 --> 00:35:14.750 How does empathy come into

NOTE Confidence: 0.857506755555556
00:35:14.750 --> 00:35:16.878 cognition and purposeful action?
NOTE Confidence: 0.857506755555556
00:35:16.880 --> 00:35:18.520 Any emotion for that matter?
NOTE Confidence: 0.872658955
00:35:20.340 --> 00:35:22.926 Yeah, really interesting question as I
NOTE Confidence: 0.872658955
00:35:22.926 --> 00:35:26.377 was I was saying a moment ago empathy,
NOTE Confidence: 0.872658955
00:35:26.380 --> 00:35:28.504 and particularly the ability to take
NOTE Confidence: 0.872658955
00:35:28.504 --> 00:35:30.760 the perspective of the other person, NOTE Confidence: 0.872658955

00:35:30.760 --> 00:35:35.083 turns out to be. Perhaps the most
NOTE Confidence: 0.872658955
00:35:35.083 --> 00:35:37.687 important factor creating what?
NOTE Confidence: 0.872658955
00:35:37.690 --> 00:35:40.510 What scientists, what psychologists call?
NOTE Confidence: 0.872658955
00:35:40.510 --> 00:35:41.244 Collective intelligence,
NOTE Confidence: 0.872658955
00:35:41.244 --> 00:35:43.446 when the the intelligence of a
NOTE Confidence: 0.872658955
00:35:43.446 --> 00:35:45.241 group can actually be sort of
NOTE Confidence: 0.872658955
00:35:45.241 --> 00:35:47.193 more than the sum of its parts
NOTE Confidence: 0.872658955
00:35:47.193 --> 00:35:49.198 greater than the intelligence of NOTE Confidence: 0.872658955

00:35:49.198 --> 00:35:50.802 the most intelligent individual.
NOTE Confidence: 0.923267570909091

00:35:55.670 --> 00:35:56.875 I'm thinking too about this NOTE Confidence: 0.923267570909091 00:35:56.875 --> 00:35:58.730 is a bit of a diversion,

NOTE Confidence: 0.923267570909091
00:35:58.730 --> 00:36:01.298 but the first chapter of my NOTE Confidence: 0.923267570909091 00:36:01.298 --> 00:36:03.010 book is about interoception, NOTE Confidence: 0.923267570909091 00:36:03.010 --> 00:36:05.086 which is the perception of these NOTE Confidence: 0.923267570909091

00:36:05.086 --> 00:36:07.130 internal signals and what one of NOTE Confidence: 0.923267570909091

00:36:07.130 --> 00:36:08.918 the most interesting things to me NOTE Confidence: 0.923267570909091

00:36:08.918 --> 00:36:10.576 about the study of interoception
NOTE Confidence: 0.923267570909091
00:36:10.576 --> 00:36:13.578 is not only that the the the,
NOTE Confidence: 0.923267570909091
00:36:13.578 --> 00:36:16.145 how informative, those internal signals, NOTE Confidence: 0.923267570909091

00:36:16.145 --> 00:36:18.085 which were often interestingly,
NOTE Confidence: 0.923267570909091
00:36:18.090 --> 00:36:20.141 you know as a culture where we're
NOTE Confidence: 0.923267570909091
00:36:20.141 --> 00:36:21.906 often encouraged to sort of suppress
NOTE Confidence: 0.923267570909091
00:36:21.906 --> 00:36:24.255 or push aside in the interests of just
NOTE Confidence: 0.923267570909091
00:36:24.255 --> 00:36:26.385 powering through and getting getting it.
NOTE Confidence: 0.923267570909091
00:36:26.390 --> 00:36:27.730 Done with our big brains.

NOTE Confidence: 0.923267570909091
00:36:27.730 --> 00:36:29.470 You know, when actually this NOTE Confidence: 0.923267570909091

00:36:29.470 --> 00:36:30.862 flow of internal sensations,
NOTE Confidence: 0.923267570909091
00:36:30.870 --> 00:36:33.398 which is always there.
NOTE Confidence: 0.923267570909091
00:36:33.400 --> 00:36:35.554 Has carried so much non conscious
NOTE Confidence: 0.923267570909091
00:36:35.554 --> 00:36:38.025 information that we we have that otherwise
NOTE Confidence: 0.923267570909091
00:36:38.025 --> 00:36:40.980 we have no access to or little access to.
NOTE Confidence: 0.923267570909091
00:36:40.980 --> 00:36:43.386 But what's so interesting to me
NOTE Confidence: 0.923267570909091
00:36:43.386 --> 00:36:45.371 about Interoception is not only
NOTE Confidence: 0.923267570909091
00:36:45.371 --> 00:36:47.548 that it informs us about how we
NOTE Confidence: 0.923267570909091
00:36:47.548 --> 00:36:49.584 feel and and what our past,
NOTE Confidence: 0.923267570909091
00:36:49.584 --> 00:36:52.154 how our past experiences can
NOTE Confidence: 0.923267570909091
00:36:52.154 --> 00:36:54.210 inform our current behavior,
NOTE Confidence: 0.923267570909091
00:36:54.210 --> 00:36:56.534 but also there's such a thing as
NOTE Confidence: 0.923267570909091
00:36:56.534 --> 00:36:58.172 social interoception that this is NOTE Confidence: 0.923267570909091

00:36:58.172 --> 00:37:00.216 going back to that question of empathy NOTE Confidence: 0.923267570909091

00:37:00.216 --> 00:37:02.080 that you know when we're talking
NOTE Confidence: 0.923267570909091
00:37:02.080 --> 00:37:04.066 to another person face to face.
NOTE Confidence: 0.923267570909091
00:37:04.066 --> 00:37:06.396 We are automatically and unconsciously
NOTE Confidence: 0.923267570909091
00:37:06.396 --> 00:37:09.140 mimicking in a very subtle way,
NOTE Confidence: 0.923267570909091
00:37:09.140 --> 00:37:10.748 their facial expressions,
NOTE Confidence: 0.923267570909091
00:37:10.748 --> 00:37:12.524 their gestures, their postures.
NOTE Confidence: 0.923267570909091
00:37:12.524 --> 00:37:15.340 And then we read off our own bodies, NOTE Confidence: 0.923267570909091

00:37:15.340 --> 00:37:18.576 what what, that other person is feeling,
NOTE Confidence: 0.923267570909091
00:37:18.580 --> 00:37:19.080 because otherwise,
NOTE Confidence: 0.923267570909091
00:37:19.080 --> 00:37:19.580 you know,
NOTE Confidence: 0.923267570909091
00:37:19.580 --> 00:37:21.402 we have no direct access to what NOTE Confidence: 0.923267570909091

00:37:21.402 --> 00:37:23.046 another person is thinking or feeling.
NOTE Confidence: 0.923267570909091
00:37:23.050 --> 00:37:24.989 They're their brain is a kind of NOTE Confidence: 0.923267570909091

00:37:24.989 --> 00:37:27.065 black box and it's it's the body
NOTE Confidence: 0.923267570909091
00:37:27.065 --> 00:37:29.082 that creates a kind of channel NOTE Confidence: 0.923267570909091

00:37:29.082 --> 00:37:31.217 or conduit between two people.

NOTE Confidence: 0.923267570909091
00:37:31.220 --> 00:37:31.926 And interestingly,
NOTE Confidence: 0.923267570909091
00:37:31.926 --> 00:37:34.750 therapists are kind of the are the ultimate.
NOTE Confidence: 0.923267570909091
00:37:34.750 --> 00:37:35.860 Experts at this,
NOTE Confidence: 0.923267570909091
00:37:35.860 --> 00:37:37.710 you know therapists use their
NOTE Confidence: 0.923267570909091
00:37:37.710 --> 00:37:39.909 bodies to sense what the other,
NOTE Confidence: 0.923267570909091
00:37:39.910 --> 00:37:41.596 what the patient is is feeling
NOTE Confidence: 0.923267570909091
00:37:41.596 --> 00:37:43.619 even when the patient may hurt him
NOTE Confidence: 0.923267570909091
00:37:43.619 --> 00:37:45.305 or herself may not be consciously
NOTE Confidence: 0.923267570909091
00:37:45.305 --> 00:37:46.938 aware of what they're feeling.
NOTE Confidence: 0.923267570909091
00:37:46.940 --> 00:37:47.540 That you know.
NOTE Confidence: 0.923267570909091
00:37:47.540 --> 00:37:49.509 And and I don't need to tell all of you.
NOTE Confidence: 0.923267570909091
00:37:49.510 --> 00:37:50.858 And in psychiatry this,
NOTE Confidence: 0.923267570909091
00:37:50.858 --> 00:37:53.310 but I think it's so interesting again,
NOTE Confidence: 0.923267570909091
00:37:53.310 --> 00:37:56.026 in the context of our Western culture,
NOTE Confidence: 0.923267570909091
00:37:56.030 --> 00:37:58.970 which says mind and body are separate,
NOTE Confidence: 0.923267570909091

00:37:58.970 --> 00:38:00.194 mind is superior.
NOTE Confidence: 0.923267570909091
00:38:00.194 --> 00:38:02.912 Mind is this sort of spotless
NOTE Confidence: 0.923267570909091
00:38:02.912 --> 00:38:05.600 celestial sphere of rational.
NOTE Confidence: 0.923267570909091
00:38:05.600 --> 00:38:08.694 Thought and the body is this irrational,
NOTE Confidence: 0.923267570909091
00:38:08.700 --> 00:38:09.118 ungovernable,
NOTE Confidence: 0.923267570909091
00:38:09.118 --> 00:38:12.044 grubby kind of animal being that has
NOTE Confidence: 0.923267570909091
00:38:12.044 --> 00:38:15.278 nothing to contribute to intelligent thought.
NOTE Confidence: 0.923267570909091
00:38:15.280 --> 00:38:16.978 When really as I've been saying,
NOTE Confidence: 0.923267570909091
00:38:16.980 --> 00:38:19.518 the body is a wellspring of
NOTE Confidence: 0.923267570909091
00:38:19.518 --> 00:38:20.364 human intelligence.
NOTE Confidence: 0.923267570909091
00:38:20.370 --> 00:38:22.818 And to cut it off or to disregard
NOTE Confidence: 0.923267570909091
00:38:22.818 --> 00:38:24.379 it is is to make,
NOTE Confidence: 0.923267570909091
00:38:24.380 --> 00:38:25.012 uh, it's.
NOTE Confidence: 0.923267570909091
00:38:25.012 --> 00:38:27.224 It's to leave a lot of potential
NOTE Confidence: 0.923267570909091
00:38:27.224 --> 00:38:28.349 intelligence on the table.
NOTE Confidence: 0.900023788571429
00:38:31.240 --> 00:38:32.675 Thanks Annie, I'm gonna take

NOTE Confidence: 0.900023788571429
00:38:32.675 --> 00:38:34.812 one more from the chat and then
NOTE Confidence: 0.900023788571429
00:38:34.812 --> 00:38:36.070 invite Kendall after question.
NOTE Confidence: 0.900023788571429
00:38:36.070 --> 00:38:39.130 So from the chat we have thank you for this.
NOTE Confidence: 0.900023788571429
00:38:39.130 --> 00:38:40.538 Literally mind expanding work.
NOTE Confidence: 0.900023788571429
00:38:40.538 --> 00:38:43.460 It inspires a memory of a superb and
NOTE Confidence: 0.900023788571429
00:38:43.460 --> 00:38:45.686 inventive mentor saying if you do
NOTE Confidence: 0.900023788571429
00:38:45.686 --> 00:38:47.879 not understand what you are thinking,
NOTE Confidence: 0.900023788571429
00:38:47.880 --> 00:38:49.384 take a walk along,
NOTE Confidence: 0.900023788571429
00:38:49.384 --> 00:38:52.769 walk and see what more comes to your mind.
NOTE Confidence: 0.900023788571429
00:38:52.770 --> 00:38:55.696 This is enormously helpful over many years, NOTE Confidence: 0.900023788571429

00:38:55.700 --> 00:38:58.140 and I wonder what you have seen about
NOTE Confidence: 0.900023788571429
00:38:58.140 --> 00:39:00.517 such efforts to harness minds via bodies.
NOTE Confidence: 0.781459355
00:39:01.270 --> 00:39:04.050 Yeah, I love that.
NOTE Confidence: 0.781459355
00:39:04.050 --> 00:39:06.140 I love that I for me it's a bike ride.
NOTE Confidence: 0.781459355
00:39:06.140 --> 00:39:08.863 I always find that if I can't
NOTE Confidence: 0.781459355

00:39:08.863 --> 00:39:10.780 solve some tricky problem.
NOTE Confidence: 0.781459355
00:39:10.780 --> 00:39:13.970 If I go on a bike ride it comes to me,
NOTE Confidence: 0.781459355
00:39:13.970 --> 00:39:15.900 you know. And Steve Jobs, NOTE Confidence: 0.781459355

00:39:15.900 --> 00:39:18.660 the Apple founder, said that the computer NOTE Confidence: 0.781459355

00:39:18.660 --> 00:39:20.920 computer is a bicycle for the mind.
NOTE Confidence: 0.781459355
00:39:20.920 --> 00:39:21.991 You know, it makes the mind go
NOTE Confidence: 0.781459355
00:39:21.991 --> 00:39:23.160 faster and I've always thought like, NOTE Confidence: 0.781459355

00:39:23.160 --> 00:39:25.065 well, the bicycles are really
NOTE Confidence: 0.781459355
00:39:25.065 --> 00:39:26.970 good bicycle for the mind.
NOTE Confidence: 0.781459355
00:39:26.970 --> 00:39:28.725 But what's interesting about that
NOTE Confidence: 0.781459355
00:39:28.725 --> 00:39:31.248 experience that so many of us have had, NOTE Confidence: 0.781459355

00:39:31.250 --> 00:39:33.910 that, uh, that physical activity,
NOTE Confidence: 0.781459355
00:39:33.910 --> 00:39:37.426 especially physical activity in the outdoors,
NOTE Confidence: 0.781459355
00:39:37.430 --> 00:39:40.153 can. And enhance our thinking or change
NOTE Confidence: 0.781459355
00:39:40.153 --> 00:39:42.599 our thinking in a beneficial way.
NOTE Confidence: 0.781459355
00:39:42.600 --> 00:39:43.455 There's you know,

NOTE Confidence: 0.781459355
00:39:43.455 --> 00:39:44.880 there's there's reasons behind that.
NOTE Confidence: 0.781459355
00:39:44.880 --> 00:39:48.058 There's science behind that, and a couple.
NOTE Confidence: 0.781459355
00:39:48.060 --> 00:39:49.620 I'll just mention a couple of NOTE Confidence: 0.781459355

00:39:49.620 --> 00:39:51.180 those of the relevant findings.
NOTE Confidence: 0.781459355
00:39:51.180 --> 00:39:54.386 One is that you know, we are.
NOTE Confidence: 0.781459355
00:39:54.386 --> 00:39:56.158 Again, we're embodied creatures.
NOTE Confidence: 0.781459355
00:39:56.160 --> 00:39:58.260 We understand abstract ideas NOTE Confidence: 0.781459355

00:39:58.260 --> 00:40:00.885 through reference to our physical
NOTE Confidence: 0.781459355
00:40:00.885 --> 00:40:02.408 experiences in the world.
NOTE Confidence: 0.781459355
00:40:02.410 --> 00:40:05.210 And so a lot of our thinking
NOTE Confidence: 0.781459355
00:40:05.210 --> 00:40:07.100 is metaphorical in nature.
NOTE Confidence: 0.781459355
00:40:07.100 --> 00:40:08.927 And when we can move our bodies.
NOTE Confidence: 0.781459355
00:40:08.930 --> 00:40:12.188 In ways that stimulate the metaphor,
NOTE Confidence: 0.781459355
00:40:12.190 --> 00:40:14.446 the the associated metaphor, NOTE Confidence: 0.781459355

00:40:14.446 --> 00:40:17.266 then we can prime the
NOTE Confidence: 0.781459355

00:40:17.270 --> 00:40:19.034 You know we can Prime R think
NOTE Confidence: 0.781459355
00:40:19.034 --> 00:40:20.951 we can prime thoughts in the
NOTE Confidence: 0.781459355
00:40:20.951 --> 00:40:22.786 direction that we're looking for.
NOTE Confidence: 0.781459355
00:40:22.790 --> 00:40:23.810 This is sounding very vague,
NOTE Confidence: 0.781459355
00:40:23.810 --> 00:40:25.430 but I'll be more specific.
NOTE Confidence: 0.781459355
00:40:25.430 --> 00:40:28.055 Which is that when you think about
NOTE Confidence: 0.781459355
00:40:28.055 --> 00:40:30.820 creativity when we talk about creativity,
NOTE Confidence: 0.781459355
00:40:30.820 --> 00:40:32.759 you notice that the metaphors we use
NOTE Confidence: 0.781459355
00:40:32.759 --> 00:40:35.130 have to do with motion and movement.
NOTE Confidence: 0.781459355
00:40:35.130 --> 00:40:37.746 Like if if if you're not being creative.
NOTE Confidence: 0.781459355
00:40:37.750 --> 00:40:40.290 If you're if you're not.
NOTE Confidence: 0.781459355
00:40:40.290 --> 00:40:42.396 Coming up with fresh ideas often,
NOTE Confidence: 0.781459355
00:40:42.400 --> 00:40:44.740 you'll say you're stuck, or you're in a rut,
NOTE Confidence: 0.781459355
00:40:44.740 --> 00:40:46.498 but when things are going well,
NOTE Confidence: 0.781459355
00:40:46.500 --> 00:40:48.642 you might say I'm on a roll or my NOTE Confidence: 0.781459355

00:40:48.642 --> 00:40:50.522 thoughts are flowing, you know,

NOTE Confidence: 0.781459355
00:40:50.522 --> 00:40:52.777 and the physical experience of
NOTE Confidence: 0.781459355
00:40:52.777 --> 00:40:54.759 walking or biking is one.
NOTE Confidence: 0.781459355
00:40:54.760 --> 00:40:57.608 It's kind of a loose metaphor for creativity.
NOTE Confidence: 0.781459355
00:40:57.610 --> 00:40:59.650 You know, there's an idea.
NOTE Confidence: 0.781459355
00:40:59.650 --> 00:41:01.520 There's the sights and sounds
NOTE Confidence: 0.781459355
00:41:01.520 --> 00:41:04.090 that are sort of flowing past you.
NOTE Confidence: 0.781459355
00:41:04.090 --> 00:41:05.281 You're moving forward.
NOTE Confidence: 0.781459355
00:41:05.281 --> 00:41:07.266 It's kind of a dumb.
NOTE Confidence: 0.781459355
00:41:07.270 --> 00:41:09.302 You're priming your brain
NOTE Confidence: 0.781459355
00:41:09.302 --> 00:41:11.334 to think in creative.
NOTE Confidence: 0.781459355
00:41:11.340 --> 00:41:13.860 Open minded wide Vista ways,
NOTE Confidence: 0.781459355
00:41:13.860 --> 00:41:14.382 right?
NOTE Confidence: 0.781459355
00:41:14.382 --> 00:41:18.036 And then the part about being outdoors
NOTE Confidence: 0.781459355
00:41:18.036 --> 00:41:21.184 and you know again we this is all really NOTE Confidence: 0.781459355

00:41:21.184 --> 00:41:23.458 about thinking about what the brain is.
NOTE Confidence: 0.781459355

00:41:23.460 --> 00:41:25.602 It's a biological organ that evolved NOTE Confidence: 0.781459355

00:41:25.602 --> 00:41:27.721 to solve certain problems that are
NOTE Confidence: 0.781459355
00:41:27.721 --> 00:41:29.617 often very different from the problems
NOTE Confidence: 0.781459355
00:41:29.617 --> 00:41:31.640 we give it to solve these days.
NOTE Confidence: 0.781459355
00:41:31.640 --> 00:41:33.808 So we have to kind of keep the
NOTE Confidence: 0.781459355
00:41:33.808 --> 00:41:35.911 nature of the brain in mind and
NOTE Confidence: 0.781459355
00:41:35.911 --> 00:41:38.220 not not mistake it for a computer, NOTE Confidence: 0.781459355

00:41:38.220 --> 00:41:39.046 for example,
NOTE Confidence: 0.781459355
00:41:39.046 --> 00:41:40.698 because the the brain,
NOTE Confidence: 0.781459355
00:41:40.700 --> 00:41:42.275 unlike a computer.
NOTE Confidence: 0.781459355
00:41:42.275 --> 00:41:44.375 Is exquisitely sensitive to
NOTE Confidence: 0.781459355
00:41:44.375 --> 00:41:46.529 its context where it is,
NOTE Confidence: 0.781459355
00:41:46.530 --> 00:41:48.329 and you know to go back to
NOTE Confidence: 0.781459355
00:41:48.329 --> 00:41:49.100 that evolution piece.
NOTE Confidence: 0.781459355
00:41:49.100 --> 00:41:50.928 We evolved human beings
NOTE Confidence: 0.781459355
00:41:50.928 --> 00:41:52.756 evolved outdoors this life.

NOTE Confidence: 0.781459355
00:41:52.760 --> 00:41:54.867 We live where we are almost always
NOTE Confidence: 0.781459355
00:41:54.867 --> 00:41:57.749 inside a house or in a car is a very
NOTE Confidence: 0.781459355
00:41:57.749 --> 00:42:00.104 recent development in our human history, NOTE Confidence: 0.781459355

00:42:00.104 --> 00:42:03.469 and so the kind of information or
NOTE Confidence: 0.781459355
00:42:03.469 --> 00:42:05.757 stimuli available out outside.
NOTE Confidence: 0.781459355
00:42:05.760 --> 00:42:07.840 It's very easy for our brain to process.
NOTE Confidence: 0.93376645
00:42:07.840 --> 00:42:10.656 It's very effortless to process and in fact,
NOTE Confidence: 0.93376645
00:42:10.660 --> 00:42:12.396 the things that the brain finds easy and.
NOTE Confidence: 0.93376645
00:42:12.400 --> 00:42:13.402 Effortless to process,
NOTE Confidence: 0.93376645
00:42:13.402 --> 00:42:14.738 it also finds pleasant,
NOTE Confidence: 0.93376645
00:42:14.740 --> 00:42:16.988 so that's part of why we get such
NOTE Confidence: 0.93376645
00:42:16.988 --> 00:42:19.378 a mood boost from being outside.
NOTE Confidence: 0.93376645
00:42:19.380 --> 00:42:21.747 But because we are able to be sort of
NOTE Confidence: 0.93376645
00:42:21.747 --> 00:42:24.473 just our attention is sort of pleasantly
NOTE Confidence: 0.93376645
00:42:24.473 --> 00:42:26.574 diverted when we're outside, we do.
NOTE Confidence: 0.93376645

00:42:26.574 --> 00:42:28.056 It's not that kind of focused,
NOTE Confidence: 0.93376645
00:42:28.060 --> 00:42:30.510 hard edged attention that we have to
NOTE Confidence: 0.93376645
00:42:30.510 --> 00:42:33.356 pay to our work that refills the tank, NOTE Confidence: 0.93376645

00:42:33.356 --> 00:42:35.347 so to speak, of our attention.
NOTE Confidence: 0.93376645
00:42:35.347 --> 00:42:37.201 It's it's this is known as
NOTE Confidence: 0.93376645
00:42:37.201 --> 00:42:38.659 attention restoration theory.
NOTE Confidence: 0.93376645
00:42:38.660 --> 00:42:40.292 You know we come.
NOTE Confidence: 0.93376645
00:42:40.292 --> 00:42:42.740 We focus so much on directing.
NOTE Confidence: 0.93376645
00:42:42.740 --> 00:42:44.275 Our attention and managing our
NOTE Confidence: 0.93376645
00:42:44.275 --> 00:42:45.810 attention and being upset that
NOTE Confidence: 0.93376645
00:42:45.866 --> 00:42:47.576 our attention is being distracted, NOTE Confidence: 0.93376645

00:42:47.580 --> 00:42:50.692 but we don't often think about like the
NOTE Confidence: 0.93376645
00:42:50.692 --> 00:42:53.609 supply side of of attention like where,
NOTE Confidence: 0.93376645
00:42:53.610 --> 00:42:56.218 where and how are we restoring our attention,
NOTE Confidence: 0.93376645
00:42:56.220 --> 00:42:57.420 not just spending it down,
NOTE Confidence: 0.93376645
00:42:57.420 --> 00:42:58.638 but restoring it.

NOTE Confidence: 0.93376645
00:42:58.638 --> 00:43:01.480 And it turns out that spending time
NOTE Confidence: 0.93376645
00:43:01.563 --> 00:43:03.888 outside is the fastest and easiest and
NOTE Confidence: 0.93376645
00:43:03.888 --> 00:43:06.399 most effective way to restore our attention.
NOTE Confidence: 0.93376645
00:43:06.400 --> 00:43:08.080 So I think that helps to explain.
NOTE Confidence: 0.93376645
00:43:08.080 --> 00:43:10.000 At least I find it useful.
NOTE Confidence: 0.93376645
00:43:10.000 --> 00:43:11.137 Those two things,
NOTE Confidence: 0.93376645
00:43:11.137 --> 00:43:12.653 the metaphorical movements that
NOTE Confidence: 0.93376645
00:43:12.653 --> 00:43:14.450 are associated with creativity.
NOTE Confidence: 0.93376645
00:43:14.450 --> 00:43:16.170 And the attention restoring
NOTE Confidence: 0.93376645
00:43:16.170 --> 00:43:17.890 aspects of being outside.
NOTE Confidence: 0.93376645
00:43:17.890 --> 00:43:19.682 I think that's why taking a walk
NOTE Confidence: 0.93376645
00:43:19.682 --> 00:43:21.629 or taking a bike route outside can
NOTE Confidence: 0.93376645
00:43:21.629 --> 00:43:23.900 so often be the the place and the
NOTE Confidence: 0.93376645
00:43:23.900 --> 00:43:25.755 time where we get our best ideas.
NOTE Confidence: 0.86447443
00:43:28.450 --> 00:43:31.005 Thanks Danny, I'm gonna invite Kendall now.
NOTE Confidence: 0.80445443

00:43:33.960 --> 00:43:36.680 Thanks Andy for your talk.
NOTE Confidence: 0.80445443
00:43:36.680 --> 00:43:38.830 I actually I never join.
NOTE Confidence: 0.80445443
00:43:38.830 --> 00:43:39.970 I'm a little bit nervous 'cause
NOTE Confidence: 0.80445443
00:43:39.970 --> 00:43:42.760 I never come to grand rounds.
NOTE Confidence: 0.80445443
00:43:42.760 --> 00:43:46.435 Ever, but I'm a postdoc at Yale
NOTE Confidence: 0.80445443
00:43:46.435 --> 00:43:48.600 and a person with lived experience.
NOTE Confidence: 0.80445443
00:43:48.600 --> 00:43:51.748 I'm a little fascinated.
NOTE Confidence: 0.80445443
00:43:51.750 --> 00:43:54.030 But also in about 2 weeks I'm
NOTE Confidence: 0.80445443
00:43:54.030 --> 00:43:55.421 teaching Clark and Chalmers essay
NOTE Confidence: 0.80445443
00:43:55.421 --> 00:43:57.323 to a bunch of graduate students.
NOTE Confidence: 0.80445443
00:43:57.330 --> 00:44:01.430 So title of your talk drew me in.
NOTE Confidence: 0.80445443
00:44:01.430 --> 00:44:03.550 And I had a question when I raised my hand,
NOTE Confidence: 0.80445443
00:44:03.550 --> 00:44:05.000 but it's gotten really complicated
NOTE Confidence: 0.80445443
00:44:05.000 --> 00:44:07.836 since then. But the so maybe it's more.
NOTE Confidence: 0.80445443
00:44:07.836 --> 00:44:10.006 Maybe I'm just more, sort of.
NOTE Confidence: 0.80445443
00:44:10.006 --> 00:44:11.320 Questions to raise,

NOTE Confidence: 0.80445443
00:44:11.320 --> 00:44:14.950 then ones I expect answers to.
NOTE Confidence: 0.80445443
00:44:14.950 --> 00:44:15.630 And I do.
NOTE Confidence: 0.80445443
00:44:15.630 --> 00:44:17.639 I was the first thing I thought of was
NOTE Confidence: 0.80445443
00:44:17.639 --> 00:44:19.796 the neuroscience that just came out of it.
NOTE Confidence: 0.80445443
00:44:19.796 --> 00:44:21.378 I think it's very preliminary and those
NOTE Confidence: 0.80445443
00:44:21.378 --> 00:44:23.174 of you who are actually neuro scientists
NOTE Confidence: 0.80445443
00:44:23.174 --> 00:44:24.969 will know more about it than I do.
NOTE Confidence: 0.80445443
00:44:24.970 --> 00:44:27.916 But and I think Doctor Crystal
NOTE Confidence: 0.80445443
00:44:27.916 --> 00:44:30.350 was referencing it the the.
NOTE Confidence: 0.80445443
00:44:30.350 --> 00:44:33.680 Caltech. It's the idea of flow.
NOTE Confidence: 0.80445443
00:44:33.680 --> 00:44:35.318 I'm working in and sort of
NOTE Confidence: 0.80445443
00:44:35.318 --> 00:44:36.410 the neuroimaging that came.
NOTE Confidence: 0.80445443
00:44:36.410 --> 00:44:39.276 I think it was when teams
NOTE Confidence: 0.80445443
00:44:39.276 --> 00:44:41.303 worked together well and.
NOTE Confidence: 0.80445443
00:44:41.303 --> 00:44:44.455 But it sort of seemed like that
NOTE Confidence: 0.80445443

00:44:44.455 --> 00:44:46.240 was one possible extension of
NOTE Confidence: 0.80445443
00:44:46.306 --> 00:44:48.208 this idea that we aren't all
NOTE Confidence: 0.80445443
00:44:48.208 --> 00:44:51.330 captured in our own atomistic way,
NOTE Confidence: 0.80445443
00:44:51.330 --> 00:44:53.222 and also the idea of sort
NOTE Confidence: 0.80445443
00:44:53.222 --> 00:44:54.946 of non representation list.
NOTE Confidence: 0.80445443
00:44:54.950 --> 00:44:55.632 You know,
NOTE Confidence: 0.80445443
00:44:55.632 --> 00:44:57.678 cognitive models that that maybe don't NOTE Confidence: 0.80445443

00:44:57.678 --> 00:44:59.067 just manipulate internal representations
NOTE Confidence: 0.80445443
00:44:59.067 --> 00:45:01.342 and then act out in the world.
NOTE Confidence: 0.80445443
00:45:01.350 --> 00:45:04.148 And I think I don't know what to do with
NOTE Confidence: 0.80445443
00:45:04.148 --> 00:45:06.110 all of this because it's a heuristic.
NOTE Confidence: 0.80445443
00:45:06.110 --> 00:45:07.428 It's a really nice idea.
NOTE Confidence: 0.80445443
00:45:07.430 --> 00:45:08.480 It's both captivating.
NOTE Confidence: 0.80445443
00:45:08.480 --> 00:45:10.580 But also it's a little too
NOTE Confidence: 0.80445443
00:45:10.580 --> 00:45:12.466 cap capturing like it's.
NOTE Confidence: 0.80445443
00:45:12.466 --> 00:45:14.022 So things like nothing

NOTE Confidence: 0.80445443
00:45:14.022 --> 00:45:15.108 can explain everything.
NOTE Confidence: 0.908455421666667
00:45:17.360 --> 00:45:19.792 That said, I it.
NOTE Confidence: 0.908455421666667
00:45:19.792 --> 00:45:22.240 I find it an interesting UM, NOTE Confidence: 0.908455421666667

00:45:22.240 --> 00:45:23.840 so the way I think of it with
NOTE Confidence: 0.908455421666667
00:45:23.840 --> 00:45:25.503 the Clark and Chalmers is sort
NOTE Confidence: 0.908455421666667
00:45:25.503 --> 00:45:27.130 of its mind body artifact and
NOTE Confidence: 0.893193608571429
00:45:27.140 --> 00:45:29.338 how we all interact and and how
NOTE Confidence: 0.925612249230769
00:45:30.020 --> 00:45:31.847 we use our environments to help us
NOTE Confidence: 0.925612249230769
00:45:31.847 --> 00:45:33.798 think and to change our thinking.
NOTE Confidence: 0.925612249230769
00:45:33.800 --> 00:45:36.772 And I think within this is speaking
NOTE Confidence: 0.925612249230769
00:45:36.772 --> 00:45:38.776 as a person with lived experience.
NOTE Confidence: 0.925612249230769
00:45:38.780 --> 00:45:40.852 I think with within the psychiatric
NOTE Confidence: 0.925612249230769
00:45:40.852 --> 00:45:43.918 sort of services realm there's actually
NOTE Confidence: 0.925612249230769
00:45:43.918 --> 00:45:47.127 a place to think about that as we.
NOTE Confidence: 0.925612249230769
00:45:47.130 --> 00:45:49.470 Often seem to try to change people to NOTE Confidence: 0.925612249230769

00:45:49.470 --> 00:45:51.750 adapt to how we want them to think.
NOTE Confidence: 0.925612249230769
00:45:51.750 --> 00:45:54.380 CBT is one interesting way,
NOTE Confidence: 0.925612249230769
00:45:54.380 --> 00:45:58.020 like it's it's a way of.
NOTE Confidence: 0.925612249230769
00:45:58.020 --> 00:46:00.620 A sort of. We say what you know,
NOTE Confidence: 0.925612249230769
00:46:00.620 --> 00:46:02.088 thought thoughts start wrong,
NOTE Confidence: 0.925612249230769
00:46:02.088 --> 00:46:03.189 feelings aren't wrong.
NOTE Confidence: 0.97031416
00:46:04.370 --> 00:46:05.518 But then we immediately
NOTE Confidence: 0.866982989333333
00:46:05.530 --> 00:46:08.044 try to manipulate help a person
NOTE Confidence: 0.866982989333333
00:46:08.044 --> 00:46:10.247 aren't to reach shift those
NOTE Confidence: 0.866982989333333
00:46:10.247 --> 00:46:13.147 without taking as much account of.
NOTE Confidence: 0.866982989333333
00:46:13.147 --> 00:46:15.336 This isn't about meaning, but about NOTE Confidence: 0.866982989333333

00:46:15.336 --> 00:46:17.008 how the world they're experiencing
NOTE Confidence: 0.929561575
00:46:17.020 --> 00:46:20.375 might be influencing how those
NOTE Confidence: 0.929561575
00:46:20.375 --> 00:46:22.370 representations are being like it's it's.
NOTE Confidence: 0.935880555555556
00:46:22.680 --> 00:46:23.820 It's almost like we're
NOTE Confidence: 0.935880555555556
00:46:23.820 --> 00:46:25.245 starting in the wrong place.

NOTE Confidence: 0.935880555555556
00:46:25.250 --> 00:46:28.080 Starting one step two up,
NOTE Confidence: 0.935880555555556
00:46:28.080 --> 00:46:29.348 the causal chain potentially,
NOTE Confidence: 0.935880555555556
00:46:29.350 --> 00:46:31.618 even though it may not be causal,
NOTE Confidence: 0.935880555555556
00:46:31.620 --> 00:46:32.564 I'm not really sure,
NOTE Confidence: 0.935880555555556
00:46:32.564 --> 00:46:33.980 but that's as you were talking.
NOTE Confidence: 0.935880555555556
00:46:33.980 --> 00:46:37.050 I just kept thinking this is both.
NOTE Confidence: 0.935880555555556
00:46:37.050 --> 00:46:39.374 Really interesting from a
NOTE Confidence: 0.935880555555556
00:46:39.374 --> 00:46:40.536 philosophical perspective,
NOTE Confidence: 0.935880555555556
00:46:40.540 --> 00:46:43.580 potentially from a therapeutic perspective,
NOTE Confidence: 0.935880555555556
00:46:43.580 --> 00:46:44.880 although I think that had
NOTE Confidence: 0.935880555555556
00:46:44.880 --> 00:46:46.440 would have to get worked out.
NOTE Confidence: 0.935880555555556
00:46:46.440 --> 00:46:49.010 Pretty washed out more.
NOTE Confidence: 0.86093735
00:46:51.600 --> 00:46:53.868 Yeah, I wonder. As you're talking,
NOTE Confidence: 0.86093735
00:46:53.870 --> 00:46:56.286 I'm thinking about how much the field of NOTE Confidence: 0.86093735

00:46:56.286 --> 00:46:58.548 mental health and the treatment of mental NOTE Confidence: 0.86093735

00:46:58.548 --> 00:47:00.540 illness has itself been brain bound.
NOTE Confidence: 0.86093735
00:47:00.540 --> 00:47:02.340 I mean all the people on this call
NOTE Confidence: 0.86093735
00:47:02.340 --> 00:47:04.167 will know more about this than I do, NOTE Confidence: 0.86093735

00:47:04.170 --> 00:47:07.094 but it strikes me that not just
NOTE Confidence: 0.86093735
00:47:07.094 --> 00:47:08.270 intelligence and thinking,
NOTE Confidence: 0.86093735
00:47:08.270 --> 00:47:10.790 but also mental conditions and mental
NOTE Confidence: 0.86093735
00:47:10.790 --> 00:47:13.168 illness have been assumed to originate
NOTE Confidence: 0.86093735
00:47:13.168 --> 00:47:15.672 in in the in the inside the skull,
NOTE Confidence: 0.86093735
00:47:15.680 --> 00:47:18.628 when really, you know.
NOTE Confidence: 0.86093735
00:47:18.630 --> 00:47:21.898 And this is not, you know, not new to me,
NOTE Confidence: 0.86093735
00:47:21.898 --> 00:47:25.550 but the the the, these extra neural, UM?
NOTE Confidence: 0.86093735
00:47:25.550 --> 00:47:27.750 Factors are an enormously important
NOTE Confidence: 0.86093735
00:47:27.750 --> 00:47:30.259 part of what contributes to mental
NOTE Confidence: 0.86093735
00:47:30.259 --> 00:47:32.670 health and mental illness as well,
NOTE Confidence: 0.86093735
00:47:32.670 --> 00:47:34.287 I mean, and I'm thinking in I'll,
NOTE Confidence: 0.86093735
00:47:34.290 --> 00:47:35.605 I'll just mention two examples

NOTE Confidence: 0.86093735
00:47:35.605 --> 00:47:36.920 that I've come across recently.
NOTE Confidence: 0.86093735
00:47:36.920 --> 00:47:40.112 One is that an interception and faulty
NOTE Confidence: 0.86093735
00:47:40.112 --> 00:47:42.538 Intraception has is increasingly being NOTE Confidence: 0.86093735

00:47:42.538 --> 00:47:45.947 recognized as a contributor to all kinds
NOTE Confidence: 0.86093735
00:47:45.947 --> 00:47:49.667 of mental conditions like eating disorders,
NOTE Confidence: 0.86093735
00:47:49.670 --> 00:47:51.342 depression, anxiety,
NOTE Confidence: 0.86093735
00:47:51.342 --> 00:47:53.850 panic attacks, addiction,
NOTE Confidence: 0.86093735
00:47:53.850 --> 00:47:55.574 and that's a recognition
NOTE Confidence: 0.86093735
00:47:55.574 --> 00:47:58.160 of the role of the body.
NOTE Confidence: 0.86093735
00:47:58.160 --> 00:48:00.344 In in these conditions that maybe was NOTE Confidence: 0.86093735

00:48:00.344 --> 00:48:02.561 not fully present before and then the NOTE Confidence: 0.86093735

00:48:02.561 --> 00:48:04.397 other thing I'm thinking about is,
NOTE Confidence: 0.86093735
00:48:04.400 --> 00:48:07.796 is Alzheimer's and other kinds of
NOTE Confidence: 0.86093735
00:48:07.796 --> 00:48:10.060 dementia and cognitive decline?
NOTE Confidence: 0.86093735
00:48:10.060 --> 00:48:12.616 And how much caregivers become and
NOTE Confidence: 0.86093735

00:48:12.616 --> 00:48:14.799 even the physical environment for NOTE Confidence: 0.86093735

00:48:14.799 --> 00:48:16.423 people suffering from Alzheimer's
NOTE Confidence: 0.86093735
00:48:16.423 --> 00:48:19.459 becomes a part of their extended mind, NOTE Confidence: 0.86093735

00:48:19.460 --> 00:48:22.136 and that that's that's kind of
NOTE Confidence: 0.86093735
00:48:22.136 --> 00:48:23.474 potentially revolutionary and
NOTE Confidence: 0.86093735
00:48:23.474 --> 00:48:25.739 thinking about the ethics and the
NOTE Confidence: 0.86093735
00:48:25.739 --> 00:48:27.972 treatment of people with with these NOTE Confidence: 0.86093735

00:48:27.972 --> 00:48:30.468 conditions to to understand that there.
NOTE Confidence: 0.86093735
00:48:30.470 --> 00:48:32.414 That their minds don't just exist
NOTE Confidence: 0.86093735
00:48:32.414 --> 00:48:33.386 in their skulls,
NOTE Confidence: 0.86093735
00:48:33.390 --> 00:48:35.934 but are extend outside of them to their
NOTE Confidence: 0.86093735
00:48:35.934 --> 00:48:37.918 relationships and their physical setting.
NOTE Confidence: 0.960915165714286
00:48:39.120 --> 00:48:41.388 Yeah, I I. I think that's true.
NOTE Confidence: 0.960915165714286
00:48:41.390 --> 00:48:43.176 I just think we have to be I I
NOTE Confidence: 0.960915165714286
00:48:43.176 --> 00:48:45.235 want to be like I I think we can
NOTE Confidence: 0.960915165714286
00:48:45.235 --> 00:48:47.185 go too far sometimes with with.

NOTE Confidence: 0.913551041818182
00:48:49.590 --> 00:48:51.284 I want to be careful I'm in
NOTE Confidence: 0.913551041818182
00:48:51.284 --> 00:48:52.890 a room with psychiatrist.
NOTE Confidence: 0.913551041818182
00:48:52.890 --> 00:48:55.041 I think that I think I think we actually NOTE Confidence: 0.913551041818182

00:48:55.041 --> 00:48:56.689 give more credit than we realize.
NOTE Confidence: 0.913551041818182
00:48:56.690 --> 00:48:59.050 Sometimes two external factors now,
NOTE Confidence: 0.913551041818182
00:48:59.050 --> 00:49:01.340 like I think the I think psychiatry
NOTE Confidence: 0.913551041818182
00:49:01.340 --> 00:49:03.138 has a sophistication that doesn't
NOTE Confidence: 0.913551041818182
00:49:03.138 --> 00:49:05.554 always get translated out to the world.
NOTE Confidence: 0.913551041818182
00:49:05.554 --> 00:49:07.602 Sometimes I also think it can be
NOTE Confidence: 0.913551041818182
00:49:07.602 --> 00:49:09.520 very destructive and very healing.
NOTE Confidence: 0.92705548
00:49:11.890 --> 00:49:14.190 So I just want but I II I
NOTE Confidence: 0.92705548
00:49:14.190 --> 00:49:16.065 don't doubt any of that.
NOTE Confidence: 0.92705548
00:49:16.070 --> 00:49:17.550 I think it's and I think what I
NOTE Confidence: 0.92705548
00:49:17.550 --> 00:49:18.898 what I really heard from you is NOTE Confidence: 0.92705548

00:49:18.898 --> 00:49:20.998 it's the ethics of it. Actually, NOTE Confidence: 0.821334311428571

00:49:21.260 --> 00:49:24.000 like what the ethics are huge yeah, that NOTE Confidence: 0.936765971428571

00:49:24.010 --> 00:49:25.564 to me is what this challenge is.
NOTE Confidence: 0.936765971428571
00:49:25.570 --> 00:49:27.660 It's the ethics of what we do and why we NOTE Confidence: 0.936765971428571

00:49:27.719 --> 00:49:29.708 do it more than the the science of it.
NOTE Confidence: 0.936765971428571
00:49:29.710 --> 00:49:31.362 Because I don't think I fear the
NOTE Confidence: 0.936765971428571
00:49:31.362 --> 00:49:33.257 day where we think we've become
NOTE Confidence: 0.936765971428571
00:49:33.257 --> 00:49:34.946 transparent to ourselves like I
NOTE Confidence: 0.936765971428571
00:49:34.946 --> 00:49:37.170 think that is a not a goal worth
NOTE Confidence: 0.936765971428571
00:49:37.247 --> 00:49:39.380 chasing when when human beings try
NOTE Confidence: 0.936765971428571
00:49:39.380 --> 00:49:40.644 to understand themselves completely.
NOTE Confidence: 0.936765971428571
00:49:40.644 --> 00:49:42.579 But that's a philosophical conversation.
NOTE Confidence: 0.926756102857143
00:49:42.980 --> 00:49:44.800 But it plays into how we proceed
NOTE Confidence: 0.926756102857143
00:49:44.800 --> 00:49:46.115 with our research and the
NOTE Confidence: 0.926756102857143
00:49:46.115 --> 00:49:47.410 questions we ask and what we're
NOTE Confidence: 0.926756102857143
00:49:47.410 --> 00:49:48.990 willing to listen to and hear.
NOTE Confidence: 0.926756102857143
00:49:48.990 --> 00:49:50.196 And that's where I think this

NOTE Confidence: 0.926756102857143
00:49:50.200 --> 00:49:53.363 may have a really big impact on
NOTE Confidence: 0.926756102857143
00:49:53.363 --> 00:49:56.150 sort of deepening conversations
NOTE Confidence: 0.90368944
00:49:56.160 --> 00:49:58.665 that. Sometimes with a computational NOTE Confidence: 0.90368944

00:49:58.665 --> 00:50:00.178 model, we run away from
NOTE Confidence: 0.73159015
00:50:00.430 --> 00:50:02.866 me, but I don't have the ethics.
NOTE Confidence: 0.73159015
00:50:02.870 --> 00:50:05.873 You know, this has become a really
NOTE Confidence: 0.73159015
00:50:05.873 --> 00:50:08.798 active piece of the extended mind.
NOTE Confidence: 0.73159015
00:50:08.800 --> 00:50:11.418 Literature and research is on the what.
NOTE Confidence: 0.73159015
00:50:11.420 --> 00:50:15.422 What are the implications for the
NOTE Confidence: 0.73159015
00:50:15.422 --> 00:50:18.130 ethics of dealing with people when we NOTE Confidence: 0.73159015

00:50:18.130 --> 00:50:20.218 once we start thinking of their their NOTE Confidence: 0.73159015

00:50:20.218 --> 00:50:22.198 minds is extending beyond their brains.
NOTE Confidence: 0.73159015
00:50:22.200 --> 00:50:26.008 For example, if someone hacks your iPhone,
NOTE Confidence: 0.73159015
00:50:26.010 --> 00:50:29.458 is that simply a kind of property crime, NOTE Confidence: 0.73159015

00:50:29.460 --> 00:50:32.524 or is it now almost like a kind
NOTE Confidence: 0.73159015

00:50:32.524 --> 00:50:34.090 of violation of your person?
NOTE Confidence: 0.73159015
00:50:34.090 --> 00:50:36.253 You know if that if your thoughts
NOTE Confidence: 0.73159015
00:50:36.253 --> 00:50:38.528 and your your mind is to some NOTE Confidence: 0.73159015

00:50:38.528 --> 00:50:40.130 extent contained in that device.
NOTE Confidence: 0.73159015
00:50:40.130 --> 00:50:41.588 That's a whole different way of NOTE Confidence: 0.73159015

00:50:41.588 --> 00:50:43.030 looking at what what happened.
NOTE Confidence: 0.73159015
00:50:43.030 --> 00:50:44.846 What has happened to you and how we NOTE Confidence: 0.73159015

00:50:44.846 --> 00:50:46.459 should deal with that as a society.
NOTE Confidence: 0.6285727
00:50:48.470 --> 00:50:50.724 Kyle, did you? Did you see somebody
NOTE Confidence: 0.6285727
00:50:50.724 --> 00:50:53.280 somebody else with the question there we
NOTE Confidence: 0.862259455333333
00:50:53.290 --> 00:50:56.170 have some more questions in the NOTE Confidence: 0.862259455333333

00:50:56.170 --> 00:50:58.090 chat was wonderful conversation
NOTE Confidence: 0.862259455333333
00:50:58.170 --> 00:51:00.000 on on the extended mind.
NOTE Confidence: 0.862259455333333
00:51:00.000 --> 00:51:02.220 You can contribute to the conversation
NOTE Confidence: 0.862259455333333
00:51:02.220 --> 00:51:04.554 by raising your hand in the chat NOTE Confidence: 0.862259455333333

00:51:04.554 --> 00:51:06.395 and and joining us that way or

NOTE Confidence: 0.862259455333333
00:51:06.463 --> 00:51:07.802 by putting your question in the
NOTE Confidence: 0.862259455333333
00:51:07.802 --> 00:51:09.110 chat and I'll read it out loud.
NOTE Confidence: 0.862259455333333
00:51:09.110 --> 00:51:11.070 So I've got a couple more from
NOTE Confidence: 0.862259455333333
00:51:11.070 --> 00:51:13.310 the chat to read to any first one.
NOTE Confidence: 0.862259455333333
00:51:13.310 --> 00:51:15.980 Is this sorry I haven't read your book yet,
NOTE Confidence: 0.862259455333333
00:51:15.980 --> 00:51:18.140 so I think that it's in the 60s.
NOTE Confidence: 0.862259455333333
00:51:18.140 --> 00:51:20.720 Failed to explain. How cognition works.
NOTE Confidence: 0.862259455333333
00:51:20.720 --> 00:51:22.952 But BCL biological computing
NOTE Confidence: 0.862259455333333
00:51:22.952 --> 00:51:25.742 laboratory in technical Report number
NOTE Confidence: 0.862259455333333
00:51:25.742 --> 00:51:29.018 9 the neurophysiology of cognition
NOTE Confidence: 0.862259455333333
00:51:29.020 --> 00:51:31.195 plays an interesting idea about
NOTE Confidence: 0.862259455333333
00:51:31.195 --> 00:51:33.370 cognition being modulated by the
NOTE Confidence: 0.862259455333333
00:51:33.444 --> 00:51:35.688 interaction with the environment.
NOTE Confidence: 0.862259455333333
00:51:35.690 --> 00:51:38.312 How do you think that education is NOTE Confidence: 0.862259455333333

00:51:38.312 --> 00:51:40.444 modulated for the interaction between NOTE Confidence: 0.862259455333333

00:51:40.444 --> 00:51:43.060 teacher and student brain flash body?
NOTE Confidence: 0.956934438
00:51:44.700 --> 00:51:45.420 That's so interesting.
NOTE Confidence: 0.956934438
00:51:45.420 --> 00:51:47.364 I mean, I think that's something NOTE Confidence: 0.956934438

00:51:47.364 --> 00:51:49.194 we're just beginning to explore,
NOTE Confidence: 0.956934438
00:51:49.200 --> 00:51:50.820 at least on a neuroscientific level.
NOTE Confidence: 0.956934438
00:51:50.820 --> 00:51:53.291 And I thought of this with when
NOTE Confidence: 0.956934438
00:51:53.291 --> 00:51:55.439 Kendall was speaking a moment ago
NOTE Confidence: 0.956934438
00:51:55.439 --> 00:51:57.812 that we were starting to get evidence
NOTE Confidence: 0.956934438
00:51:57.888 --> 00:52:00.050 that when two people are In Sync,
NOTE Confidence: 0.956934438
00:52:00.050 --> 00:52:01.765 including and some of these
NOTE Confidence: 0.956934438
00:52:01.765 --> 00:52:03.137 experiments have been carried
NOTE Confidence: 0.956934438
00:52:03.137 --> 00:52:04.840 out in a classroom setting.
NOTE Confidence: 0.956934438
00:52:04.840 --> 00:52:06.370 When people are In Sync,
NOTE Confidence: 0.956934438
00:52:06.370 --> 00:52:07.750 are on the same page,
NOTE Confidence: 0.956934438
00:52:07.750 --> 00:52:10.270 there is a kind of neural synchrony
NOTE Confidence: 0.956934438
00:52:10.270 --> 00:52:13.054 that's that's happening that their

NOTE Confidence: 0.956934438
00:52:13.054 --> 00:52:15.118 their people's brain waves are kind of.
NOTE Confidence: 0.956934438
00:52:15.120 --> 00:52:17.682 Syncing up in a way that is
NOTE Confidence: 0.956934438
00:52:17.682 --> 00:52:20.120 is is visible or measurable,
NOTE Confidence: 0.956934438
00:52:20.120 --> 00:52:24.176 which is such a sort of lovely UM
NOTE Confidence: 0.956934438
00:52:24.180 --> 00:52:26.250 confirmation in a way of of the feeling of
NOTE Confidence: 0.956934438
00:52:26.250 --> 00:52:28.440 the sense that we have when we're kind of.
NOTE Confidence: 0.956934438
00:52:28.440 --> 00:52:29.476 When were, you know,
NOTE Confidence: 0.956934438
00:52:29.476 --> 00:52:31.548 we feel like we're on the same page
NOTE Confidence: 0.956934438
00:52:31.548 --> 00:52:33.340 or our brains are firing in the
NOTE Confidence: 0.956934438
00:52:33.340 --> 00:52:35.100 same pattern as as another person,
NOTE Confidence: 0.956934438
00:52:35.100 --> 00:52:38.418 but what's you know what?
NOTE Confidence: 0.956934438
00:52:38.418 --> 00:52:40.866 What's interesting to me or what
NOTE Confidence: 0.956934438
00:52:40.866 --> 00:52:42.667 what's what's iaccessible at this
NOTE Confidence: 0.956934438
00:52:42.667 --> 00:52:44.707 point in terms of what we can do
NOTE Confidence: 0.956934438
00:52:44.772 --> 00:52:46.746 to get people on the same page?
NOTE Confidence: 0.956934438

00:52:46.750 --> 00:52:49.606 Including teachers and students you know, NOTE Confidence: 0.956934438

00:52:49.610 --> 00:52:52.736 I write in the chapter about
NOTE Confidence: 0.956934438
00:52:52.736 --> 00:52:55.296 thinking with groups about how
NOTE Confidence: 0.956934438
00:52:55.296 --> 00:52:58.036 do you create a sense of you?
NOTE Confidence: 0.956934438
00:52:58.036 --> 00:52:59.434 Know what psychologists
NOTE Confidence: 0.956934438
00:52:59.434 --> 00:53:01.298 called call entitativity like?
NOTE Confidence: 0.956934438
00:53:01.300 --> 00:53:03.610 How does a group of individuals come
NOTE Confidence: 0.956934438
00:53:03.610 --> 00:53:06.227 to feel like an entity like a group,
NOTE Confidence: 0.956934438
00:53:06.230 --> 00:53:08.564 like something like a more than
NOTE Confidence: 0.956934438
00:53:08.564 --> 00:53:10.525 a collection of individuals but
NOTE Confidence: 0.956934438
00:53:10.525 --> 00:53:12.541 actually a a coherent group and NOTE Confidence: 0.956934438

00:53:12.541 --> 00:53:15.143 another sort of catchy or word that
NOTE Confidence: 0.956934438
00:53:15.143 --> 00:53:17.048 psychologists use is group INAS?
NOTE Confidence: 0.956934438
00:53:17.050 --> 00:53:18.290 Literally like how do you.
NOTE Confidence: 0.956934438
00:53:18.290 --> 00:53:20.999 How do you cultivate a sense of group enus?
NOTE Confidence: 0.956934438
00:53:21.000 --> 00:53:23.261 And there are some very old and

NOTE Confidence: 0.956934438
00:53:23.261 --> 00:53:25.785 and familiar or sort of hacks that
NOTE Confidence: 0.956934438
00:53:25.785 --> 00:53:28.011 people over the centuries have used
NOTE Confidence: 0.956934438
00:53:28.084 --> 00:53:30.500 to get to get a group of people
NOTE Confidence: 0.956934438
00:53:30.500 --> 00:53:32.890 feeling like a collective one of
NOTE Confidence: 0.956934438
00:53:32.890 --> 00:53:34.670 those is synchronous movement.
NOTE Confidence: 0.956934438
00:53:34.670 --> 00:53:35.632 You know,
NOTE Confidence: 0.956934438
00:53:35.632 --> 00:53:38.518 if you think about armies marching
NOTE Confidence: 0.956934438
00:53:38.518 --> 00:53:41.030 together or even in churches,
NOTE Confidence: 0.956934438
00:53:41.030 --> 00:53:43.616 people engaging in rituals where they're
NOTE Confidence: 0.956934438
00:53:43.616 --> 00:53:47.198 sort of moving as one or even like like a.
NOTE Confidence: 0.956934438
00:53:47.200 --> 00:53:49.482 Rave like when people dance and get
NOTE Confidence: 0.956934438
00:53:49.482 --> 00:53:51.581 this feeling that this ecstatic kind
NOTE Confidence: 0.956934438
00:53:51.581 --> 00:53:54.038 of feeling of being not an individual,
NOTE Confidence: 0.956934438
00:53:54.040 --> 00:53:55.980 but part of a group.
NOTE Confidence: 0.956934438
00:53:55.980 --> 00:54:00.000 That's like a very old visceral
NOTE Confidence: 0.956934438

00:54:00.000 --> 00:54:02.010 kind of primitive.
NOTE Confidence: 0.956934438
00:54:02.010 --> 00:54:02.479 Human,
NOTE Confidence: 0.956934438
00:54:02.479 --> 00:54:05.293 it's almost like a technology of NOTE Confidence: 0.956934438

00:54:05.293 --> 00:54:07.470 group group biotechnology of group
NOTE Confidence: 0.956934438
00:54:07.470 --> 00:54:09.892 formation that when we move in the
NOTE Confidence: 0.956934438
00:54:09.892 --> 00:54:12.989 same way at the same time as other people,
NOTE Confidence: 0.956934438
00:54:12.990 --> 00:54:15.252 there's a a cognitive change that NOTE Confidence: 0.956934438

00:54:15.252 --> 00:54:17.638 we kind of we come to understand
NOTE Confidence: 0.956934438
00:54:17.638 --> 00:54:19.849 ourselves as as being in a way
NOTE Confidence: 0.956934438
00:54:19.849 --> 00:54:21.725 like them or or part of them,
NOTE Confidence: 0.956934438
00:54:21.730 --> 00:54:23.994 or part of a whole and that makes
NOTE Confidence: 0.956934438
00:54:23.994 --> 00:54:26.211 it easier for us to cooperate and
NOTE Confidence: 0.956934438
00:54:26.211 --> 00:54:28.390 to think together so you know it.
NOTE Confidence: 0.956934438
00:54:28.390 --> 00:54:31.414 It often strikes me that human beings are.
NOTE Confidence: 0.956934438
00:54:31.420 --> 00:54:32.720 We've evolved to think.
NOTE Confidence: 0.956934438
00:54:32.720 --> 00:54:34.020 Together and work together,

NOTE Confidence: 0.956934438
00:54:34.020 --> 00:54:34.782 you know,
NOTE Confidence: 0.956934438
00:54:34.782 --> 00:54:38.213 to work in isolation or alone is not at
NOTE Confidence: 0.956934438
00:54:38.213 --> 00:54:40.946 all was not at all the the way we evolved.
NOTE Confidence: 0.956934438
00:54:40.946 --> 00:54:42.776 And yet we find it so difficult
NOTE Confidence: 0.956934438
00:54:42.776 --> 00:54:45.079 often to work in groups and people.
NOTE Confidence: 0.947282109166667
00:54:45.080 --> 00:54:47.216 So often you know, students resist
NOTE Confidence: 0.947282109166667
00:54:47.216 --> 00:54:49.360 group work and teams are often, NOTE Confidence: 0.947282109166667

00:54:49.360 --> 00:54:52.664 like other people are often the like most
NOTE Confidence: 0.947282109166667
00:54:52.664 --> 00:54:55.087 difficult parts of doing a job right?
NOTE Confidence: 0.947282109166667
00:54:55.090 --> 00:54:57.288 And so, and my view about that
NOTE Confidence: 0.947282109166667
00:54:57.288 --> 00:55:00.610 is that we have all these very
NOTE Confidence: 0.947282109166667
00:55:00.610 --> 00:55:02.910 individualistic practices and protocols.
NOTE Confidence: 0.947282109166667
00:55:02.910 --> 00:55:04.998 Ways of working that are arranged
NOTE Confidence: 0.947282109166667
00:55:04.998 --> 00:55:06.390 around being an individual,
NOTE Confidence: 0.947282109166667
00:55:06.390 --> 00:55:08.854 thinking alone and we need to invent
NOTE Confidence: 0.947282109166667

00:55:08.854 --> 00:55:11.197 and implement a whole new array
NOTE Confidence: 0.947282109166667
00:55:11.197 --> 00:55:13.227 of practices and protocols that
NOTE Confidence: 0.947282109166667
00:55:13.227 --> 00:55:15.822 are oriented towards getting us to NOTE Confidence: 0.947282109166667

00:55:15.822 --> 00:55:17.962 think together and productive ways.
NOTE Confidence: 0.947282109166667
00:55:17.970 --> 00:55:19.406 And you know, interestingly,
NOTE Confidence: 0.947282109166667
00:55:19.406 --> 00:55:21.201 there are industries that are
NOTE Confidence: 0.947282109166667
00:55:21.201 --> 00:55:22.709 kind of leading the way,
NOTE Confidence: 0.947282109166667
00:55:22.710 --> 00:55:27.130 UM, things like often wear.
NOTE Confidence: 0.947282109166667
00:55:27.130 --> 00:55:28.624 In industries and fields where it's
NOTE Confidence: 0.947282109166667
00:55:28.624 --> 00:55:30.388 like a matter of life and death,
NOTE Confidence: 0.947282109166667
00:55:30.390 --> 00:55:32.420 things like airplane pilots or
NOTE Confidence: 0.947282109166667
00:55:32.420 --> 00:55:35.286 I think I think even you know,
NOTE Confidence: 0.947282109166667
00:55:35.286 --> 00:55:36.122 in medicine,
NOTE Confidence: 0.947282109166667
00:55:36.122 --> 00:55:38.212 surgical teams are often very
NOTE Confidence: 0.947282109166667
00:55:38.212 --> 00:55:40.169 skilled at thinking together,
NOTE Confidence: 0.947282109166667
00:55:40.170 --> 00:55:42.230 and so we know how to do this in a way,

NOTE Confidence: 0.947282109166667
00:55:42.230 --> 00:55:45.174 it's just that we haven't put as much NOTE Confidence: 0.947282109166667

00:55:45.174 --> 00:55:47.209 energy and thought and intention NOTE Confidence: 0.947282109166667

00:55:47.209 --> 00:55:50.689 into it as we should because we are NOTE Confidence: 0.947282109166667

00:55:50.689 --> 00:55:52.897 such an individualistic culture.
NOTE Confidence: 0.947282109166667
00:55:52.900 --> 00:55:54.890 That was a long answer, sorry,
NOTE Confidence: 0.947282109166667
00:55:54.930 --> 00:55:56.850 yeah.
NOTE Confidence: 0.854478443333333
00:55:56.850 --> 00:55:58.488 We've got a few more in the chat anti,
NOTE Confidence: 0.854478443333333
00:55:58.490 --> 00:56:00.037 so I'll take the next one here.
NOTE Confidence: 0.854478443333333
00:56:00.040 --> 00:56:02.816 How does the mind extended for people who
NOTE Confidence: 0.854478443333333
00:56:02.816 --> 00:56:05.392 are creative and are working in art or NOTE Confidence: 0.854478443333333

00:56:05.392 --> 00:56:07.700 using colors in their day-to-day life?
NOTE Confidence: 0.67961695
00:56:09.510 --> 00:56:13.122 Oh gosh. That's a beautiful question,
NOTE Confidence: 0.67961695
00:56:13.122 --> 00:56:15.249 but I'm not sure I can answer that.
NOTE Confidence: 0.67961695
00:56:15.250 --> 00:56:17.302 Uhm, I'd love to think of NOTE Confidence: 0.67961695

00:56:17.302 --> 00:56:19.849 color as a kind of extension.
NOTE Confidence: 0.67961695

00:56:19.850 --> 00:56:22.865 I you know, again, I find the the brain NOTE Confidence: 0.67961695

00:56:22.865 --> 00:56:25.985 bound model of just using the brain so NOTE Confidence: 0.67961695

00:56:25.985 --> 00:56:28.488 impoverished and so sterile in a way.
NOTE Confidence: 0.67961695
00:56:28.490 --> 00:56:30.317 I mean again, I have this image of us
NOTE Confidence: 0.67961695
00:56:30.317 --> 00:56:32.301 all just sitting in front of our screens NOTE Confidence: 0.67961695

00:56:32.301 --> 00:56:34.389 for hours and hours during the pandemic.
NOTE Confidence: 0.67961695
00:56:34.390 --> 00:56:36.819 You know, so much of the richness NOTE Confidence: 0.67961695

00:56:36.819 --> 00:56:39.344 of our thoughts and our imagination
NOTE Confidence: 0.67961695
00:56:39.344 --> 00:56:41.684 and our creativity comes from
NOTE Confidence: 0.67961695
00:56:41.684 --> 00:56:43.550 experiencing and sensing and.
NOTE Confidence: 0.67961695
00:56:43.550 --> 00:56:45.730 Interacting with the world, NOTE Confidence: 0.67961695

00:56:45.730 --> 00:56:48.748 and so you know when I hear Mark
NOTE Confidence: 0.67961695
00:56:48.748 --> 00:56:50.138 Zuckerberg talked about the metaverse
NOTE Confidence: 0.67961695
00:56:50.138 --> 00:56:52.354 and how we're all going to be living
NOTE Confidence: 0.67961695
00:56:52.354 --> 00:56:53.669 like these virtual lives online.
NOTE Confidence: 0.67961695
00:56:53.670 --> 00:56:55.308 I'm like, please now we need

NOTE Confidence: 0.67961695
00:56:55.308 --> 00:56:57.040 to go the opposite direction.
NOTE Confidence: 0.67961695
00:56:57.040 --> 00:56:59.512 We need to remember that where bodies in NOTE Confidence: 0.67961695

00:56:59.512 --> 00:57:01.828 physical space interacting with real people, NOTE Confidence: 0.67961695

00:57:01.830 --> 00:57:02.748 please can we?
NOTE Confidence: 0.67961695
00:57:02.748 --> 00:57:04.890 Whatever the opposite of the metaverse is.
NOTE Confidence: 0.67961695
00:57:04.890 --> 00:57:07.018 Please, let's like, let's retreat to that.
NOTE Confidence: 0.875509194444444
00:57:10.670 --> 00:57:11.921 Here's another question.
NOTE Confidence: 0.875509194444444
00:57:11.921 --> 00:57:14.423 Are there implications for re framing?
NOTE Confidence: 0.875509194444444
00:57:14.430 --> 00:57:16.910 Are diagnostics of some systems,
NOTE Confidence: 0.875509194444444
00:57:16.910 --> 00:57:19.925 for example schizophrenia and hallucinations NOTE Confidence: 0.875509194444444

00:57:19.925 --> 00:57:23.296 are a dissonance between body flash
NOTE Confidence: 0.875509194444444
00:57:23.296 --> 00:57:25.788 perception and mind or autism is a
NOTE Confidence: 0.875509194444444
00:57:25.788 --> 00:57:28.292 breakdown in the body's capacity to
NOTE Confidence: 0.875509194444444
00:57:28.292 --> 00:57:33.100 read the social environment, etc. Yeah, NOTE Confidence: 0.8702292505

00:57:33.110 --> 00:57:35.435 I mean I I you all are are more much more NOTE Confidence: 0.8702292505

00:57:35.435 --> 00:57:37.658 expert in this kind of thing than I am.
NOTE Confidence: 0.8702292505
00:57:37.660 --> 00:57:40.985 I would just suggest or or.
NOTE Confidence: 0.8702292505
00:57:40.985 --> 00:57:44.030 Note that I have seen more and NOTE Confidence: 0.8702292505

00:57:44.132 --> 00:57:48.150 more emphasis in what I have read.
NOTE Confidence: 0.8702292505
00:57:48.150 --> 00:57:51.633 Ah, in the literatures that I have read on.
NOTE Confidence: 0.8702292505
00:57:51.640 --> 00:57:53.986 The body, the role of the
NOTE Confidence: 0.8702292505
00:57:53.986 --> 00:57:56.101 body in in mental conditions,
NOTE Confidence: 0.8702292505
00:57:56.101 --> 00:57:58.856 the role of physical space,
NOTE Confidence: 0.8702292505
00:57:58.860 --> 00:58:02.273 the role of of relationships that
NOTE Confidence: 0.8702292505
00:58:02.273 --> 00:58:03.688 all these things are constituent,
NOTE Confidence: 0.8702292505
00:58:03.690 --> 00:58:06.042 if not only of our thinking but of NOTE Confidence: 0.8702292505

00:58:06.042 --> 00:58:08.524 our our mental health and the ways
NOTE Confidence: 0.8702292505
00:58:08.524 --> 00:58:11.049 our mental health can can go wrong.
NOTE Confidence: 0.8702292505
00:58:11.050 --> 00:58:13.648 And that this again this this
NOTE Confidence: 0.8702292505
00:58:13.648 --> 00:58:14.947 it's so pervasive.
NOTE Confidence: 0.8702292505
00:58:14.950 --> 00:58:17.554 It's so baked into our culture again,

NOTE Confidence: 0.8702292505
00:58:17.560 --> 00:58:19.395 the separation between mind and NOTE Confidence: 0.8702292505

00:58:19.395 --> 00:58:22.290 body is just so it's insupportable, NOTE Confidence: 0.8702292505

00:58:22.290 --> 00:58:22.944 you know, NOTE Confidence: 0.8702292505

00:58:22.944 --> 00:58:25.233 and it's it has dictated so much
NOTE Confidence: 0.8702292505
00:58:25.233 --> 00:58:27.666 of what we do and how we do it,
NOTE Confidence: 0.8702292505
00:58:27.670 --> 00:58:29.248 including in the mental health field.
NOTE Confidence: 0.8702292505
00:58:29.250 --> 00:58:30.204 And I I,
NOTE Confidence: 0.8702292505
00:58:30.204 --> 00:58:31.476 the more that come.
NOTE Confidence: 0.938716235652174
00:58:33.930 --> 00:58:35.665 An integrative kind of holistic
NOTE Confidence: 0.938716235652174
00:58:35.665 --> 00:58:37.786 approach is is one that's going
NOTE Confidence: 0.938716235652174
00:58:37.786 --> 00:58:40.005 to be the most accurate in terms
NOTE Confidence: 0.938716235652174
00:58:40.005 --> 00:58:41.679 of describing any human being,
NOTE Confidence: 0.938716235652174
00:58:41.680 --> 00:58:43.144 and any problems that a human
NOTE Confidence: 0.938716235652174
00:58:43.144 --> 00:58:44.120 being is struggling with.
NOTE Confidence: 0.850322621818182
00:58:48.650 --> 00:58:50.115 There's a comment here from
NOTE Confidence: 0.850322621818182

00:58:50.115 --> 00:58:51.580 Doctor Crystal two that Doctor NOTE Confidence: 0.850322621818182

00:58:51.631 --> 00:58:53.599 Morris Bell in our department has NOTE Confidence: 0.850322621818182

00:58:53.599 --> 00:58:54.911 been developing assessments and NOTE Confidence: 0.850322621818182

00:58:54.965 --> 00:58:56.747 rehabilitative interventions based
NOTE Confidence: 0.850322621818182
00:58:56.747 --> 00:58:58.949 on the notion of embodied cognition
NOTE Confidence: 0.7951513675
00:58:59.440 --> 00:59:02.008 that's so fascinating, huh?
NOTE Confidence: 0.924877761176471
00:59:04.070 --> 00:59:06.898 Yeah, I mean when you think about NOTE Confidence: 0.924877761176471

00:59:06.898 --> 00:59:09.800 assessments and how and what kinds of
NOTE Confidence: 0.924877761176471
00:59:09.800 --> 00:59:12.180 questions are asked are people are NOTE Confidence: 0.924877761176471

00:59:12.180 --> 00:59:14.520 people being or patients being asked
NOTE Confidence: 0.924877761176471
00:59:14.520 --> 00:59:15.990 about their physical environment?
NOTE Confidence: 0.924877761176471
00:59:15.990 --> 00:59:17.790 Are they being asked about?
NOTE Confidence: 0.924877761176471
00:59:17.790 --> 00:59:18.855 Yes, they're being asked about
NOTE Confidence: 0.924877761176471
00:59:18.855 --> 00:59:20.050 their social relationships,
NOTE Confidence: 0.924877761176471
00:59:20.050 --> 00:59:23.194 but I just I wonder how much more
NOTE Confidence: 0.924877761176471
00:59:23.194 --> 00:59:25.932 we could broaden those questions

NOTE Confidence: 0.924877761176471
00:59:25.932 --> 00:59:28.055 and those those inquiries to
NOTE Confidence: 0.924877761176471
00:59:28.055 --> 00:59:29.825 include the the whole world of
NOTE Confidence: 0.924877761176471
00:59:29.825 --> 00:59:31.847 the patient and not just you know, NOTE Confidence: 0.924877761176471

00:59:31.850 --> 00:59:35.398 not just their biochemistry.
NOTE Confidence: 0.924877761176471
00:59:35.400 --> 00:59:36.450 I'd love to hear more about them
NOTE Confidence: 0.917020345
00:59:36.460 --> 00:59:38.773 here. Here's another
NOTE Confidence: 0.917020345
00:59:38.773 --> 00:59:41.086 really wonderful question.
NOTE Confidence: 0.917020345
00:59:41.090 --> 00:59:43.410 Thank you very much for the informative talk.
NOTE Confidence: 0.917020345
00:59:43.410 --> 00:59:46.567 Do you think that people need some
NOTE Confidence: 0.917020345
00:59:46.567 --> 00:59:48.989 training flash education to use slash?
NOTE Confidence: 0.917020345
00:59:48.990 --> 00:59:51.645 Activate the extended brain in
NOTE Confidence: 0.917020345
00:59:51.645 --> 00:59:53.769 Eastern traditions and philosophy.
NOTE Confidence: 0.917020345
00:59:53.770 --> 00:59:57.010 Mind body space are never separated.
NOTE Confidence: 0.917020345
00:59:57.010 --> 00:59:58.886 When I present this idea for my
NOTE Confidence: 0.917020345
00:59:58.886 --> 01:00:00.549 research and practice of architecture,
NOTE Confidence: 0.917020345

01:00:00.550 --> 01:00:01.753 I'm an architect.
NOTE Confidence: 0.917020345
01:00:01.753 --> 01:00:03.758 I sometimes meet the resistance
NOTE Confidence: 0.917020345
01:00:03.758 --> 01:00:05.605 in which people imply that NOTE Confidence: 0.917020345

01:00:05.605 --> 01:00:07.880 it is hard to feel the space.
NOTE Confidence: 0.917020345
01:00:07.880 --> 01:00:10.211 As your extended brain when they were
NOTE Confidence: 0.917020345
01:00:10.211 --> 01:00:12.460 grown up with Western tradition?
NOTE Confidence: 0.917020345
01:00:12.460 --> 01:00:13.170 Yeah,
NOTE Confidence: 0.9357484575
01:00:13.830 --> 01:00:15.171 that's so interesting.
NOTE Confidence: 0.9357484575
01:00:15.171 --> 01:00:17.857 I do see this very rigid
NOTE Confidence: 0.9357484575
01:00:17.857 --> 01:00:20.986 separation of mind and body as a
NOTE Confidence: 0.9357484575
01:00:20.986 --> 01:00:22.799 particularly Western kind of UM, NOTE Confidence: 0.9357484575

01:00:22.800 --> 01:00:25.336 motif and and one that is not as
NOTE Confidence: 0.9357484575
01:00:25.336 --> 01:00:27.643 enforced and as far as I've been able
NOTE Confidence: 0.9357484575
01:00:27.643 --> 01:00:30.338 to tell in in many Eastern cultures,
NOTE Confidence: 0.9357484575
01:00:30.340 --> 01:00:32.902 I'm really interested to that the NOTE Confidence: 0.9357484575

01:00:32.902 --> 01:00:35.220 speaker is an architect because

NOTE Confidence: 0.9357484575
01:00:35.220 --> 01:00:36.660 to answer the first question,
NOTE Confidence: 0.9357484575
01:00:36.660 --> 01:00:37.940 yes, I really do think.
NOTE Confidence: 0.9357484575
01:00:37.940 --> 01:00:40.719 That we need essentially a second education.
NOTE Confidence: 0.9357484575
01:00:40.720 --> 01:00:43.065 You know, our first education has been
NOTE Confidence: 0.9357484575
01:00:43.065 --> 01:00:45.338 so oriented to training the brain.
NOTE Confidence: 0.9357484575
01:00:45.340 --> 01:00:49.203 We now need a second education to give
NOTE Confidence: 0.9357484575
01:00:49.203 --> 01:00:52.024 us the skills to to effectively and NOTE Confidence: 0.9357484575

01:00:52.024 --> 01:00:54.600 skillfully use extra neural resources,
NOTE Confidence: 0.9357484575
01:00:54.600 --> 01:00:56.448 which is not an education that we get.
NOTE Confidence: 0.9357484575
01:00:56.450 --> 01:00:58.040 We're not really taught taught
NOTE Confidence: 0.9357484575
01:00:58.040 --> 01:01:00.317 how to use our bodies to think
NOTE Confidence: 0.9357484575
01:01:00.317 --> 01:01:02.189 how to arrange our our physical
NOTE Confidence: 0.9357484575
01:01:02.189 --> 01:01:04.218 setting in order to think better.
NOTE Confidence: 0.9357484575
01:01:04.220 --> 01:01:06.278 How, how, to as I was saying, NOTE Confidence: 0.9357484575

01:01:06.280 --> 01:01:08.936 how to use the minds of other people.
NOTE Confidence: 0.9357484575

01:01:08.940 --> 01:01:09.777 To think better,
NOTE Confidence: 0.9357484575
01:01:09.777 --> 01:01:12.560 but I do think that there are spots like NOTE Confidence: 0.9357484575

01:01:12.560 --> 01:01:14.852 bright spots in various industries in NOTE Confidence: 0.9357484575

01:01:14.852 --> 01:01:17.070 various fields or people are already
NOTE Confidence: 0.9357484575
01:01:17.070 --> 01:01:19.146 doing this and architecture is one.
NOTE Confidence: 0.9357484575
01:01:19.150 --> 01:01:22.132 You know when you think about how much
NOTE Confidence: 0.9357484575
01:01:22.132 --> 01:01:24.738 we try to do in our heads and how much NOTE Confidence: 0.9357484575

01:01:24.738 --> 01:01:26.682 more effective and efficient it would
NOTE Confidence: 0.9357484575
01:01:26.682 --> 01:01:29.444 be to do our thinking out in the world.
NOTE Confidence: 0.9357484575
01:01:29.450 --> 01:01:31.140 Architects are already doing that.
NOTE Confidence: 0.9357484575
01:01:31.140 --> 01:01:31.860 You know, NOTE Confidence: 0.9357484575

01:01:31.860 --> 01:01:34.380 they build models of a building that
NOTE Confidence: 0.9357484575
01:01:34.380 --> 01:01:36.419 they are thinking about constructing
NOTE Confidence: 0.9357484575
01:01:36.419 --> 01:01:39.469 and not only can they see the the.
NOTE Confidence: 0.9357484575
01:01:39.470 --> 01:01:40.898 Three dimensional kind of NOTE Confidence: 0.9357484575

01:01:40.898 --> 01:01:42.683 affordances of of the model,

NOTE Confidence: 0.9357484575
01:01:42.690 --> 01:01:44.106 when they've, once they've built it,
NOTE Confidence: 0.9357484575
01:01:44.110 --> 01:01:46.000 they can Orient their bodies to it.
NOTE Confidence: 0.9357484575
01:01:46.000 --> 01:01:47.170 They can move around it.
NOTE Confidence: 0.9357484575
01:01:47.170 --> 01:01:49.760 They can manipulate different parts of it,
NOTE Confidence: 0.9357484575
01:01:49.760 --> 01:01:52.558 and all of those are really
NOTE Confidence: 0.9357484575
01:01:52.558 --> 01:01:54.430 effective ways of that.
NOTE Confidence: 0.9357484575
01:01:54.430 --> 01:01:55.650 That is thinking, you know,
NOTE Confidence: 0.9357484575
01:01:55.650 --> 01:01:56.799 when they're moving.
NOTE Confidence: 0.9357484575
01:01:56.799 --> 01:01:59.097 When architects are looking at and
NOTE Confidence: 0.9357484575
01:01:59.097 --> 01:02:01.370 interacting with the model that is thinking, NOTE Confidence: 0.9357484575

01:02:01.370 --> 01:02:04.765 and I think that kind of interactivity
NOTE Confidence: 0.9357484575
01:02:04.770 --> 01:02:06.380 could be incorporated into a
NOTE Confidence: 0.9357484575
01:02:06.380 --> 01:02:08.370 lot of other fields as well.
NOTE Confidence: 0.9357484575
01:02:08.370 --> 01:02:09.550 It always strikes me that.
NOTE Confidence: 0.9357484575
01:02:09.550 --> 01:02:12.280 Like we think it's OK for kindergarteners
NOTE Confidence: 0.9357484575

01:02:12.280 --> 01:02:15.169 and first graders to use the manipulatives.
NOTE Confidence: 0.9357484575
01:02:15.170 --> 01:02:16.130 You know when they're learning
NOTE Confidence: 0.9357484575
01:02:16.130 --> 01:02:16.706 math or something.
NOTE Confidence: 0.9357484575
01:02:16.710 --> 01:02:17.630 But as you get older,
NOTE Confidence: 0.9357484575
01:02:17.630 --> 01:02:19.520 you really should put away those
NOTE Confidence: 0.9357484575
01:02:19.520 --> 01:02:21.050 those external tools and start
NOTE Confidence: 0.9357484575
01:02:21.050 --> 01:02:22.328 to do it all up here.
NOTE Confidence: 0.9357484575
01:02:22.330 --> 01:02:24.502 And that's actually it's really a
NOTE Confidence: 0.9357484575
01:02:24.502 --> 01:02:26.333 mistaken idea that mature thinkers
NOTE Confidence: 0.9357484575
01:02:26.333 --> 01:02:28.229 always do it in their head.
NOTE Confidence: 0.9357484575
01:02:28.230 --> 01:02:28.990 It's it's.
NOTE Confidence: 0.9357484575
01:02:28.990 --> 01:02:30.510 It's quite the opposite,
NOTE Confidence: 0.9357484575
01:02:30.510 --> 01:02:33.282 and I think we can see that in in
NOTE Confidence: 0.9357484575
01:02:33.282 --> 01:02:35.531 certain professions and certain
NOTE Confidence: 0.9357484575
01:02:35.531 --> 01:02:37.388 industries where externalized
NOTE Confidence: 0.9357484575
01:02:37.388 --> 01:02:39.772 thinking has become, it's it's.

NOTE Confidence: 0.9357484575
01:02:39.772 --> 01:02:40.816 Part of the culture.
NOTE Confidence: 0.82483669625
01:02:43.820 --> 01:02:46.140 Any a couple more things from the chat.
NOTE Confidence: 0.82483669625
01:02:46.140 --> 01:02:49.143 One is someone worked who works with NOTE Confidence: 0.82483669625

01:02:49.143 --> 01:02:52.300 Maurice Bell says knows that she would be.
NOTE Confidence: 0.82483669625
01:02:52.300 --> 01:02:53.455 He would be delighted to
NOTE Confidence: 0.82483669625
01:02:53.455 --> 01:02:54.610 speak with you about Chris
NOTE Confidence: 0.602977595
01:02:54.620 --> 01:02:57.828 working. Yeah yeah, great.
NOTE Confidence: 0.87183683
01:02:57.940 --> 01:02:59.955 And then another yeah and
NOTE Confidence: 0.87183683
01:02:59.955 --> 01:03:01.567 then another question here,
NOTE Confidence: 0.87183683
01:03:01.570 --> 01:03:03.346 particularly in light of what I
NOTE Confidence: 0.87183683
01:03:03.346 --> 01:03:04.977 understand to be the relationship
NOTE Confidence: 0.87183683
01:03:04.977 --> 01:03:06.927 between your thinking on this
NOTE Confidence: 0.87183683
01:03:06.927 --> 01:03:08.934 topic and previous questions
NOTE Confidence: 0.87183683
01:03:08.934 --> 01:03:11.086 about education slash learning.
NOTE Confidence: 0.87183683
01:03:11.090 --> 01:03:13.154 Is it your view that the
NOTE Confidence: 0.87183683

01:03:13.154 --> 01:03:14.186 extended brain thesis?
NOTE Confidence: 0.87183683
01:03:14.190 --> 01:03:16.758 Has implications for contemporary
NOTE Confidence: 0.87183683
01:03:16.758 --> 01:03:19.326 debates surrounding economic inequality?
NOTE Confidence: 0.87183683
01:03:19.330 --> 01:03:22.550 If So what are those implications? Yes,
NOTE Confidence: 0.845375719444444
01:03:22.580 --> 01:03:25.136 thank you to hand staff for
NOTE Confidence: 0.845375719444444
01:03:25.136 --> 01:03:28.884 asking that I I that is a very
NOTE Confidence: 0.845375719444444
01:03:28.884 --> 01:03:31.078 important aspect of this inquiry.
NOTE Confidence: 0.845375719444444
01:03:31.078 --> 01:03:33.142 To me it's something that I write about
NOTE Confidence: 0.845375719444444
01:03:33.142 --> 01:03:35.132 in the book and something that became
NOTE Confidence: 0.845375719444444
01:03:35.132 --> 01:03:37.040 increasingly apparent to me over the
NOTE Confidence: 0.845375719444444
01:03:37.098 --> 01:03:39.000 course of researching and writing it.
NOTE Confidence: 0.845375719444444
01:03:39.000 --> 01:03:43.984 That if we are to understand thinking as.
NOTE Confidence: 0.845375719444444
01:03:43.990 --> 01:03:44.530 Fundamentally,
NOTE Confidence: 0.845375719444444
01:03:44.530 --> 01:03:47.230 including these extra neural resources,
NOTE Confidence: 0.845375719444444
01:03:47.230 --> 01:03:49.869 and in fact depending for its it's
NOTE Confidence: 0.845375719444444
01:03:49.869 --> 01:03:52.490 quality on these external resources,

NOTE Confidence: 0.845375719444444
01:03:52.490 --> 01:03:54.751 then the quality of the resources that NOTE Confidence: 0.845375719444444

01:03:54.751 --> 01:03:56.799 people have access to really matters.
NOTE Confidence: 0.845375719444444
01:03:56.800 --> 01:03:57.442 You know?
NOTE Confidence: 0.845375719444444
01:03:57.442 --> 01:03:59.368 I mean, we have this fiction,
NOTE Confidence: 0.845375719444444
01:03:59.370 --> 01:04:01.428 this myth that all that matters
NOTE Confidence: 0.845375719444444
01:04:01.428 --> 01:04:03.190 is what's inside your head,
NOTE Confidence: 0.845375719444444
01:04:03.190 --> 01:04:05.710 and that a test or an IQ test or some NOTE Confidence: 0.845375719444444

01:04:05.788 --> 01:04:08.044 other kind of achievement test is
NOTE Confidence: 0.845375719444444
01:04:08.044 --> 01:04:10.708 that it's almost like a readout of of.
NOTE Confidence: 0.845375719444444
01:04:10.710 --> 01:04:12.378 It's almost like weighing, you know, NOTE Confidence: 0.845375719444444

01:04:12.380 --> 01:04:14.150 the way the eugenicists used to.
NOTE Confidence: 0.845375719444444
01:04:14.150 --> 01:04:16.255 Used to literally way people's
NOTE Confidence: 0.845375719444444
01:04:16.255 --> 01:04:18.849 brains that it's some kind of
NOTE Confidence: 0.845375719444444
01:04:18.849 --> 01:04:20.468 accurate reading of someone's
NOTE Confidence: 0.845375719444444
01:04:20.468 --> 01:04:22.060 intelligence in someone's potential.
NOTE Confidence: 0.845375719444444

01:04:22.060 --> 01:04:24.970 When you start thinking of.
NOTE Confidence: 0.845375719444444
01:04:24.970 --> 01:04:27.406 Thinking when you when you start
NOTE Confidence: 0.845375719444444
01:04:27.406 --> 01:04:30.732 viewing the process of thinking as a as NOTE Confidence: 0.845375719444444

01:04:30.732 --> 01:04:33.168 really a dynamic process of assembling
NOTE Confidence: 0.845375719444444
01:04:33.246 --> 01:04:35.610 external and internal resources,
NOTE Confidence: 0.845375719444444
01:04:35.610 --> 01:04:38.370 integrating external and internal resources,
NOTE Confidence: 0.845375719444444
01:04:38.370 --> 01:04:41.674 then you then you have to pay
NOTE Confidence: 0.845375719444444
01:04:41.674 --> 01:04:44.110 attention to again the access
NOTE Confidence: 0.845375719444444
01:04:44.110 --> 01:04:46.886 and Equitable Ness of of the raw NOTE Confidence: 0.845375719444444

01:04:46.886 --> 01:04:49.209 materials that people have access to.
NOTE Confidence: 0.845375719444444
01:04:49.210 --> 01:04:51.051 And we know that those raw materials NOTE Confidence: 0.845375719444444

01:04:51.051 --> 01:04:53.389 are in no way equitably distributed.
NOTE Confidence: 0.845375719444444
01:04:53.390 --> 01:04:55.610 People don't have the same.
NOTE Confidence: 0.845375719444444
01:04:55.610 --> 01:04:57.578 Freedom to move their bodies the
NOTE Confidence: 0.845375719444444
01:04:57.578 --> 01:04:59.370 same access to natural spaces.
NOTE Confidence: 0.845375719444444
01:04:59.370 --> 01:05:03.374 The same access to safe and well

NOTE Confidence: 0.845375719444444
01:05:03.374 --> 01:05:06.154 designed interiors or even you know, NOTE Confidence: 0.845375719444444

01:05:06.154 --> 01:05:08.290 access to a quiet place to to work NOTE Confidence: 0.845375719444444

01:05:08.359 --> 01:05:10.487 or a quiet place to sleep at night.
NOTE Confidence: 0.845375719444444
01:05:10.490 --> 01:05:13.325 All these things are they they influence
NOTE Confidence: 0.845375719444444
01:05:13.325 --> 01:05:15.149 our cognition so substantially
NOTE Confidence: 0.845375719444444
01:05:15.149 --> 01:05:16.748 and yet somehow,
NOTE Confidence: 0.845375719444444
01:05:16.750 --> 01:05:19.151 it's like we erased them all when
NOTE Confidence: 0.845375719444444
01:05:19.151 --> 01:05:21.620 we have people take these tests
NOTE Confidence: 0.845375719444444
01:05:21.620 --> 01:05:24.500 that that determines so much of
NOTE Confidence: 0.845375719444444
01:05:24.500 --> 01:05:25.856 of a person's opportunity.
NOTE Confidence: 0.845375719444444
01:05:25.856 --> 01:05:26.542 In life,
NOTE Confidence: 0.845375719444444
01:05:26.542 --> 01:05:29.764 so in the book I write about how we
NOTE Confidence: 0.845375719444444
01:05:29.764 --> 01:05:32.086 should be talking about extension inequality.
NOTE Confidence: 0.845375719444444
01:05:32.090 --> 01:05:33.595 You know the inequality that
NOTE Confidence: 0.845375719444444
01:05:33.595 --> 01:05:35.869 people face in terms of the mental
NOTE Confidence: 0.845375719444444

01:05:35.869 --> 01:05:37.993 extensions that are available to them.
NOTE Confidence: 0.845375719444444
01:05:38.000 --> 01:05:41.696 We should be talking about extension NOTE Confidence: 0.845375719444444

01:05:41.696 --> 01:05:44.160 inequality alongside wealth inequality NOTE Confidence: 0.845375719444444

01:05:44.246 --> 01:05:46.070 or or social capital inequality
NOTE Confidence: 0.845375719444444
01:05:46.070 --> 01:05:47.730 or or income inequality.
NOTE Confidence: 0.845375719444444
01:05:47.730 --> 01:05:49.140 I think it's just as important.
NOTE Confidence: 0.625060626666667
01:05:54.510 --> 01:05:55.770 Older, you're muted.
NOTE Confidence: 0.37709153
01:05:58.410 --> 01:05:59.770 Sorry bout that we have time
NOTE Confidence: 0.37709153
01:05:59.770 --> 01:06:00.790 for a few more questions.
NOTE Confidence: 0.906890609130435
01:06:00.790 --> 01:06:03.618 If you'd like to either raise your
NOTE Confidence: 0.906890609130435
01:06:03.618 --> 01:06:06.514 hand in zoom or add it to the NOTE Confidence: 0.906890609130435

01:06:06.514 --> 01:06:09.229 chat and we can read it out loud.
NOTE Confidence: 0.906890609130435
01:06:09.230 --> 01:06:11.921 Just working, closing in on 11:30,
NOTE Confidence: 0.906890609130435
01:06:11.921 --> 01:06:14.807 I do see another question here.
NOTE Confidence: 0.906890609130435
01:06:14.810 --> 01:06:16.812 How do you see the curriculum of NOTE Confidence: 0.906890609130435

01:06:16.812 --> 01:06:18.743 the extended mind changing the way

NOTE Confidence: 0.906890609130435
01:06:18.743 --> 01:06:20.423 we teach our medical students?
NOTE Confidence: 0.883765233
01:06:20.710 --> 01:06:22.595 Oh, wow. This is something
NOTE Confidence: 0.883765233
01:06:22.595 --> 01:06:24.480 I'd love to think about.
NOTE Confidence: 0.883765233
01:06:24.480 --> 01:06:26.692 I I actually don't know very much
NOTE Confidence: 0.883765233
01:06:26.692 --> 01:06:28.885 about a medical education, UM.
NOTE Confidence: 0.883765233
01:06:28.885 --> 01:06:31.510 Except through some some intriguing
NOTE Confidence: 0.883765233
01:06:31.510 --> 01:06:34.359 things that people have told me.
NOTE Confidence: 0.883765233
01:06:34.360 --> 01:06:36.015 For example, that there's and
NOTE Confidence: 0.883765233
01:06:36.015 --> 01:06:38.439 maybe some of you know about this.
NOTE Confidence: 0.883765233
01:06:38.440 --> 01:06:40.918 There's a a platform that allows medical NOTE Confidence: 0.883765233

01:06:40.918 --> 01:06:43.593 students to to learn all the voluminous NOTE Confidence: 0.883765233

01:06:43.593 --> 01:06:45.909 information that they have to learn
NOTE Confidence: 0.883765233
01:06:45.980 --> 01:06:48.300 through through drawings and sketch,
NOTE Confidence: 0.883765233
01:06:48.300 --> 01:06:49.528 and like a kind.
NOTE Confidence: 0.883765233
01:06:49.528 --> 01:06:51.063 That's the kind of drawing
NOTE Confidence: 0.883765233

01:06:51.063 --> 01:06:53.706 based approach to to memory,
NOTE Confidence: 0.883765233
01:06:53.706 --> 01:06:55.462 which can be very effective,
NOTE Confidence: 0.883765233
01:06:55.462 --> 01:06:58.132 and I think is is a super interesting NOTE Confidence: 0.883765233

01:06:58.132 --> 01:07:01.174 way to externalize thought.
NOTE Confidence: 0.883765233
01:07:01.174 --> 01:07:03.986 And capture capture information
NOTE Confidence: 0.883765233
01:07:03.986 --> 01:07:06.107 that may be very difficult to learn
NOTE Confidence: 0.883765233
01:07:06.107 --> 01:07:07.879 in a more conventional format, NOTE Confidence: 0.883765233

01:07:07.880 --> 01:07:11.201 but so I again I don't know much about
NOTE Confidence: 0.883765233
01:07:11.201 --> 01:07:13.579 medical education in particular.
NOTE Confidence: 0.883765233
01:07:13.580 --> 01:07:16.388 I think in general, if I were to say,
NOTE Confidence: 0.883765233
01:07:16.390 --> 01:07:17.380 you know, yeah,
NOTE Confidence: 0.883765233
01:07:17.380 --> 01:07:18.700 let's reinvent education along
NOTE Confidence: 0.883765233
01:07:18.700 --> 01:07:20.760 the lines of the extended mind.
NOTE Confidence: 0.883765233
01:07:20.760 --> 01:07:21.420 I would.
NOTE Confidence: 0.883765233
01:07:21.420 --> 01:07:23.730 I think you could go through those NOTE Confidence: 0.883765233

01:07:23.730 --> 01:07:26.320 three major categories and say how are

NOTE Confidence: 0.883765233
01:07:26.320 --> 01:07:28.660 we involving the body in learning?
NOTE Confidence: 0.883765233
01:07:28.660 --> 01:07:31.996 How are we giving people embodied
NOTE Confidence: 0.883765233
01:07:31.996 --> 01:07:34.530 experience students embodied experiences of?
NOTE Confidence: 0.883765233
01:07:34.530 --> 01:07:37.128 Of what they're learning in ways
NOTE Confidence: 0.883765233
01:07:37.128 --> 01:07:39.900 that ground abstract ideas in their
NOTE Confidence: 0.883765233
01:07:39.900 --> 01:07:42.275 sort of lived bodily experience.
NOTE Confidence: 0.883765233
01:07:42.280 --> 01:07:45.010 How are we using physical space
NOTE Confidence: 0.883765233
01:07:45.010 --> 01:07:46.830 to support intelligent thought?
NOTE Confidence: 0.883765233
01:07:46.830 --> 01:07:48.864 And how are we cultivating the
NOTE Confidence: 0.883765233
01:07:48.864 --> 01:07:50.840 ability to think as a group?
NOTE Confidence: 0.883765233
01:07:50.840 --> 01:07:52.328 And how are we, you know,
NOTE Confidence: 0.883765233
01:07:52.330 --> 01:07:54.710 one particular aspect of medical
NOTE Confidence: 0.883765233
01:07:54.710 --> 01:07:57.665 education that I think the extended
NOTE Confidence: 0.883765233
01:07:57.665 --> 01:08:01.060 mind could have a helpful influence on,
NOTE Confidence: 0.883765233
01:08:01.060 --> 01:08:02.356 is, you know.
NOTE Confidence: 0.883765233

01:08:02.356 --> 01:08:06.370 As in many other fields in medical education, NOTE Confidence: 0.883765233

01:08:06.370 --> 01:08:10.410 experts teach novices, but experts,
NOTE Confidence: 0.883765233
01:08:10.410 --> 01:08:12.010 by virtue of being experts, NOTE Confidence: 0.883765233

01:08:12.010 --> 01:08:14.956 are often unable literally unable to
NOTE Confidence: 0.883765233
01:08:14.956 --> 01:08:18.759 share all that they know because their
NOTE Confidence: 0.883765233
01:08:18.759 --> 01:08:21.664 knowledge has become so automated.
NOTE Confidence: 0.883765233
01:08:21.670 --> 01:08:24.754 So well practiced that they actually NOTE Confidence: 0.883765233

01:08:24.754 --> 01:08:27.060 don't have conscious access to
NOTE Confidence: 0.883765233
01:08:27.060 --> 01:08:28.356 their their knowledge anymore,
NOTE Confidence: 0.883765233
01:08:28.356 --> 01:08:30.300 and that can be very frustrating
NOTE Confidence: 0.883765233
01:08:30.360 --> 01:08:32.010 for the novice for the beginner, NOTE Confidence: 0.883765233

01:08:32.010 --> 01:08:33.958 because they are still.
NOTE Confidence: 0.883765233
01:08:33.958 --> 01:08:36.880 Learning step by step they have
NOTE Confidence: 0.883765233
01:08:36.973 --> 01:08:39.332 not chunked their their their
NOTE Confidence: 0.883765233
01:08:39.332 --> 01:08:42.314 knowledge the way a an expert has NOTE Confidence: 0.883765233

01:08:42.314 --> 01:08:45.089 and so those the those chunks,

NOTE Confidence: 0.883765233
01:08:45.090 --> 01:08:46.854 those consolidated pieces of NOTE Confidence: 0.883765233

01:08:46.854 --> 01:08:49.059 information used by an expert
NOTE Confidence: 0.883765233
01:08:49.059 --> 01:08:51.180 make no sense to the novice.
NOTE Confidence: 0.883765233
01:08:51.180 --> 01:08:54.138 So I think we need to,
NOTE Confidence: 0.883765233
01:08:54.140 --> 01:08:58.604 as as educators think more about
NOTE Confidence: 0.883765233
01:08:58.604 --> 01:09:01.914 how experts teachers can be
NOTE Confidence: 0.883765233
01:09:01.914 --> 01:09:04.478 more legible models for.
NOTE Confidence: 0.883765233
01:09:04.480 --> 01:09:05.566 Learners, you know,
NOTE Confidence: 0.883765233
01:09:05.566 --> 01:09:08.100 because so much of what we do
NOTE Confidence: 0.883765233
01:09:08.180 --> 01:09:10.216 these days is in internal.
NOTE Confidence: 0.883765233
01:09:10.216 --> 01:09:11.080 You know,
NOTE Confidence: 0.883765233
01:09:11.080 --> 01:09:13.720 in in the days of apprenticeships,
NOTE Confidence: 0.883765233
01:09:13.720 --> 01:09:17.850 where a an apprentice could watch a,
NOTE Confidence: 0.883765233
01:09:17.850 --> 01:09:22.170 a Carpenter or a Taylor do what they do, NOTE Confidence: 0.883765233

01:09:22.170 --> 01:09:26.958 copy it and emulate it and learn that way. NOTE Confidence: 0.883765233

01:09:26.960 --> 01:09:28.899 That's a very effective way of learning,
NOTE Confidence: 0.883765233
01:09:28.900 --> 01:09:30.916 and often and one that's often been used.
NOTE Confidence: 0.883765233
01:09:30.920 --> 01:09:33.504 Of course in in medical education you know NOTE Confidence: 0.883765233

01:09:33.504 --> 01:09:36.276 what's the old saying like come see one.
NOTE Confidence: 0.883765233
01:09:36.276 --> 01:09:38.360 Do one, teach one or whatever you know.
NOTE Confidence: 0.883765233
01:09:38.360 --> 01:09:39.515 But then again,
NOTE Confidence: 0.883765233
01:09:39.515 --> 01:09:41.440 like so many other fields,
NOTE Confidence: 0.883765233
01:09:41.440 --> 01:09:43.848 so much of the work in medicine
NOTE Confidence: 0.883765233
01:09:43.848 --> 01:09:45.820 is now cognitive as internal,
NOTE Confidence: 0.883765233
01:09:45.820 --> 01:09:47.682 and so we need to design kind
NOTE Confidence: 0.883765233
01:09:47.682 --> 01:09:50.794 of a new generation of what are NOTE Confidence: 0.883765233

01:09:50.794 --> 01:09:52.474 called cognitive apprenticeships,
NOTE Confidence: 0.950891729166667
01:09:52.480 --> 01:09:55.112 which is all about making the thought
NOTE Confidence: 0.950891729166667
01:09:55.112 --> 01:09:57.360 processes of the expert visible.
NOTE Confidence: 0.950891729166667
01:09:57.360 --> 01:09:59.520 And legible to the to
NOTE Confidence: 0.950891729166667
01:09:59.520 --> 01:10:01.155 the learner so you know,

NOTE Confidence: 0.950891729166667
01:10:01.155 --> 01:10:02.685 I think there's there's so much
NOTE Confidence: 0.950891729166667
01:10:02.685 --> 01:10:04.368 that could be from the extended
NOTE Confidence: 0.950891729166667
01:10:04.368 --> 01:10:06.479 mind that could be applied to education.
NOTE Confidence: 0.950891729166667
01:10:06.480 --> 01:10:07.785 I really think we're just
NOTE Confidence: 0.950891729166667
01:10:07.785 --> 01:10:08.829 getting started with that.
NOTE Confidence: 0.76865189625
01:10:12.100 --> 01:10:14.050 Andy, I'm gonna invite Doctor
NOTE Confidence: 0.76865189625
01:10:14.050 --> 01:10:15.758 Cernak Mike to come back.
NOTE Confidence: 0.76865189625
01:10:15.758 --> 01:10:18.300 I just want to say thank you so much,
NOTE Confidence: 0.76865189625
01:10:18.300 --> 01:10:20.140 especially for inviting us
NOTE Confidence: 0.76865189625
01:10:20.140 --> 01:10:21.520 into this conversation.
NOTE Confidence: 0.76865189625
01:10:21.520 --> 01:10:23.432 It may sound weird but I I think NOTE Confidence: 0.76865189625

01:10:23.432 --> 01:10:25.289 we were delighted to be part
NOTE Confidence: 0.76865189625
01:10:25.289 --> 01:10:26.934 of your extra neural resources
NOTE Confidence: 0.76865189625
01:10:26.934 --> 01:10:28.699 and we part of yours today.
NOTE Confidence: 0.76865189625
01:10:28.700 --> 01:10:29.950 Yeah, it
NOTE Confidence: 0.854716975

01:10:29.960 --> 01:10:32.066 was a great proof of concept.
NOTE Confidence: 0.854716975
01:10:32.070 --> 01:10:33.162 We've got it. We've got it
NOTE Confidence: 0.854716975
01:10:33.162 --> 01:10:35.200 going on right here. There you NOTE Confidence: 0.896113217142857

01:10:35.210 --> 01:10:37.480 go, so I'll turn it to Mike. So
NOTE Confidence: 0.80895690875
01:10:37.490 --> 01:10:40.394 I would just add my thanks to Kyle,
NOTE Confidence: 0.80895690875
01:10:40.400 --> 01:10:43.316 a very free ranging and freeform
NOTE Confidence: 0.80895690875
01:10:43.316 --> 01:10:45.836 conversation that it's just a
NOTE Confidence: 0.80895690875
01:10:45.836 --> 01:10:48.662 wonderful format and to kind of
NOTE Confidence: 0.80895690875
01:10:48.662 --> 01:10:51.440 have a group pick your brain.
NOTE Confidence: 0.80895690875
01:10:51.440 --> 01:10:53.155 In this very wide ranging
NOTE Confidence: 0.80895690875
01:10:53.155 --> 01:10:54.870 conversation it was just wonderful.
NOTE Confidence: 0.80895690875
01:10:54.870 --> 01:10:58.654 Thank you again and we should again
NOTE Confidence: 0.80895690875
01:10:58.654 --> 01:11:00.559 thank the Pointer Foundation for
NOTE Confidence: 0.80895690875
01:11:00.559 --> 01:11:02.380 bringing people like you to us.
NOTE Confidence: 0.80895690875
01:11:02.380 --> 01:11:06.855 Yes, I'm so great and we hope to check NOTE Confidence: 0.80895690875

01:11:06.855 --> 01:11:09.491 in with you again at some future date to

NOTE Confidence: 0.80895690875
01:11:09.491 --> 01:11:11.771 see how these ideas that have come up.
NOTE Confidence: 0.80895690875
01:11:11.780 --> 01:11:14.540 And there was a a few times or at least
NOTE Confidence: 0.80895690875
01:11:14.615 --> 01:11:17.045 once the question came up was will NOTE Confidence: 0.80895690875

01:11:17.045 --> 01:11:19.670 the recording be shared and it's yes.
NOTE Confidence: 0.80895690875
01:11:19.670 --> 01:11:22.478 And so that would be available on our
NOTE Confidence: 0.80895690875
01:11:22.478 --> 01:11:25.078 website pretty soon after this conclusion.
NOTE Confidence: 0.898251628333333
01:11:25.470 --> 01:11:27.420 And if I could just mention
NOTE Confidence: 0.898251628333333
01:11:27.420 --> 01:11:29.430 if anyone wants to email me,
NOTE Confidence: 0.898251628333333
01:11:29.430 --> 01:11:31.400 I'm at Annie Murphy, Paul
NOTE Confidence: 0.9245411575
01:11:33.450 --> 01:11:33.715 alloneword@gmail.com.
NOTE Confidence: 0.9245411575
01:11:33.715 --> 01:11:35.570 And I'm also really active on Twitter.
NOTE Confidence: 0.9245411575
01:11:35.570 --> 01:11:37.245 If anybody wants to continue
NOTE Confidence: 0.9245411575
01:11:37.245 --> 01:11:38.585 the conversation on Twitter,
NOTE Confidence: 0.9245411575
01:11:38.590 --> 01:11:40.680 my handle is at Annie Murphy, Paul.
NOTE Confidence: 0.8459914
01:11:42.830 --> 01:11:48.220 And I I can make a plug. Thank you,
NOTE Confidence: 0.725500268333333

01:11:48.220 --> 01:11:50.620 shameless plug for any for any NOTE Confidence: 0.725500268333333

01:11:50.620 --> 01:11:53.038 extended mind came out this year.
NOTE Confidence: 0.725500268333333
01:11:53.040 --> 01:11:54.312 Wonderful read. Maybe something NOTE Confidence: 0.725500268333333

01:11:54.312 --> 01:11:55.902 you wanna enjoy with others,
NOTE Confidence: 0.725500268333333
01:11:55.910 --> 01:11:56.770 so hopefully pick it NOTE Confidence: 0.727372925

01:11:56.780 --> 01:11:58.768 up. Thanks, Kyle. Holiday
NOTE Confidence: 0.765402605
01:11:58.780 --> 01:11:59.888 seasons are upon us.
NOTE Confidence: 0.9239874
01:12:01.280 --> 01:12:01.830 Right?
NOTE Confidence: 0.8945892
01:12:03.370 --> 01:12:04.000 OK, thank you.

