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

 $00:00:02.580 \rightarrow 00:00:06.610$ 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

 $00:00:08.434 \longrightarrow 00:00:10.340$ all for coming today. Up to

NOTE Confidence: 0.695774615

 $00:00:10.350 \longrightarrow 00:00:12.978$ 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

 $00{:}00{:}16.870 \dashrightarrow 00{:}00{:}20.760$ fellowship and journalism sponsored grand

NOTE Confidence: 0.828168238333333

 $00{:}00{:}20{.}760 \dashrightarrow 00{:}00{:}24{.}644$ rounds in this has been able to fund us

NOTE Confidence: 0.828168238333333

 $00:00:24.650 \rightarrow 00:00:26.768$ for this and several other presentations

NOTE Confidence: 0.828168238333333

 $00{:}00{:}26.768 \dashrightarrow 00{:}00{:}28.874$ throughout the years and always a

NOTE Confidence: 0.828168238333333

 $00:00:28.874 \rightarrow 00:00:30.788$ wonderful opportunity to hear from us,

NOTE Confidence: 0.828168238333333

 $00:00:30.790 \longrightarrow 00:00:32.690$ from journalists and people.

NOTE Confidence: 0.828168238333333

00:00:32.690 --> 00:00:33.988 For writing, I said.

 $00:00:33.988 \longrightarrow 00:00:35.206$ I would not want to thank them.

NOTE Confidence: 0.828168238333333

 $00{:}00{:}35{.}210 \dashrightarrow 00{:}00{:}36{.}680$ I also want to thank the CMHC

NOTE Confidence: 0.828168238333333

 $00:00:36.680 \dashrightarrow 00:00:37.810$ Foundation for their support.

NOTE Confidence: 0.828168238333333

 $00:00:37.810 \longrightarrow 00:00:40.079$ For the grand rounds today,

NOTE Confidence: 0.828168238333333

 $00{:}00{:}40.080 \dashrightarrow 00{:}00{:}42.210$ and I want a special shout

NOTE Confidence: 0.828168238333333

 $00:00:42.210 \longrightarrow 00:00:44.370$ out to Kyle Peterson.

NOTE Confidence: 0.828168238333333

 $00:00:44.370 \longrightarrow 00:00:46.786$ Not only is the director of the foundation,

NOTE Confidence: 0.828168238333333

 $00{:}00{:}46.790 \dashrightarrow 00{:}00{:}50.021$ 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

 $00{:}00{:}53.305 \dashrightarrow 00{:}00{:}55.795$ the most interesting voices in journalism.

NOTE Confidence: 0.828168238333333

 $00:00:55.800 \rightarrow 00:00:58.668$ It's an extraordinary opportunity for me,

NOTE Confidence: 0.828168238333333

 $00:00:58.670 \rightarrow 00:01:02.331$ and Kyle is so thoughtful in his

NOTE Confidence: 0.828168238333333

 $00:01:02.331 \rightarrow 00:01:05.184$ selections and reaching out to people.

NOTE Confidence: 0.828168238333333

 $00:01:05.184 \longrightarrow 00:01:07.061$ 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
- $00{:}01{:}11{.}590 \dashrightarrow 00{:}01{:}13{.}578$ She's an acclaimed science writer whose work

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

 $00:01:16.468 \rightarrow 00:01:19.012$ and the best American Science writing

NOTE Confidence: 0.828168238333333

 $00:01:19.012 \rightarrow 00:01:21.090$ among many other publications.

NOTE Confidence: 0.828168238333333

 $00:01:21.090 \dashrightarrow 00:01:23.827$ Her latest book is the Extended Mind,

NOTE Confidence: 0.828168238333333

 $00:01:23.830 \longrightarrow 00:01:26.175$ the power of thinking outside the brain.

NOTE Confidence: 0.828168238333333

 $00:01:26.180 \longrightarrow 00:01:28.856$ So this was published in June of 2021,

NOTE Confidence: 0.828168238333333

 $00:01:28.856 \dashrightarrow 00:01:30.636$ and it's already been selected

NOTE Confidence: 0.828168238333333

 $00{:}01{:}30.636 \dashrightarrow 00{:}01{:}32.754$ as Amazon editors pick for Best

NOTE Confidence: 0.828168238333333

 $00:01:32.754 \dashrightarrow 00:01:34.638$ 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

 $00:01:36.960 \longrightarrow 00:01:38.658$ She's also the author of Origins,

NOTE Confidence: 0.828168238333333

 $00{:}01{:}38.660 \dashrightarrow 00{:}01{:}40.118$ named by the New York Times

NOTE Confidence: 0.828168238333333

 $00{:}01{:}40{.}118 \dashrightarrow 00{:}01{:}41{.}834$ Book Review as a notable book.

 $00:01:41.840 \longrightarrow 00:01:43.610$ 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

 $00:01:45.900 \longrightarrow 00:01:47.880$ is a fascinating new book.

NOTE Confidence: 0.828168238333333

 $00:01:47.880 \longrightarrow 00:01:50.176$ Her Ted talk has been viewed by

NOTE Confidence: 0.828168238333333

 $00{:}01{:}50{.}176 \dashrightarrow 00{:}01{:}52{.}406$ more than two more than 2.6 million

NOTE Confidence: 0.828168238333333

 $00:01:52.406 \longrightarrow 00:01:54.138$ times at this point.

NOTE Confidence: 0.828168238333333

 $00{:}01{:}54{.}140 \dashrightarrow 00{:}01{:}56{.}303$ 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

 $00{:}01{:}58{.}440 \dashrightarrow 00{:}02{:}00{.}208$ 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

 $00:02:02.418 \dashrightarrow 00:02:04.567$ Schwartz Fellowship at New America.

NOTE Confidence: 0.828168238333333

 $00{:}02{:}04.570 \dashrightarrow 00{:}02{:}06.838$ 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

 $00:02:10.920 \rightarrow 00:02:13.355$ and she's currently Learning Sciences

NOTE Confidence: 0.828168238333333

 $00:02:13.355 \dots > 00:02:15.790$ exchange fellow at New America.

00:02:15.790 --> 00:02:18.240 So I I like you all,

NOTE Confidence: 0.828168238333333

 $00{:}02{:}18.240 \dashrightarrow 00{:}02{:}21.758$ join me in welcoming her and Kyle will

NOTE Confidence: 0.828168238333333

 $00:02:21.758 \rightarrow 00:02:24.890$ also be participating in this grand rounds.

NOTE Confidence: 0.828168238333333

 $00:02:24.890 \rightarrow 00:02:27.536$ 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

 $00:02:29.390 \longrightarrow 00:02:30.990$ 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

 $00:02:32.806 \rightarrow 00:02:34.630$ kind of like your life passing before you.

NOTE Confidence: 0.91030053

 $00{:}02{:}34{.}630 \dashrightarrow 00{:}02{:}37{.}640$ But thanks so much for that introduction.

NOTE Confidence: 0.91030053

 $00:02:37.640 \longrightarrow 00:02:39.080$ Thanks for inviting me to

NOTE Confidence: 0.91030053

 $00:02:39.080 \longrightarrow 00:02:40.232$ speak at grand Rounds.

NOTE Confidence: 0.91030053

 $00{:}02{:}40{.}240 \dashrightarrow 00{:}02{:}41{.}850$ I've certainly never done anything

NOTE Confidence: 0.91030053

 $00{:}02{:}41.850 \dashrightarrow 00{:}02{:}44.075$ 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

 $00{:}02{:}45{.}928 \dashrightarrow 00{:}02{:}47{.}601$ want this to be a lecture where

00:02:47.601 --> 00:02:49.289 I'm just talking at you guys.

NOTE Confidence: 0.91030053

 $00{:}02{:}49{.}290 \dashrightarrow 00{:}02{:}51{.}369$ I love a conversation and a back and forth,

NOTE Confidence: 0.91030053

 $00{:}02{:}51{.}370 \dashrightarrow 00{:}02{:}53{.}519$ so I encourage everyone who's here to

NOTE Confidence: 0.91030053

 $00:02:53.519 \rightarrow 00:02:55.507$ post questions in the chat and I'll.

NOTE Confidence: 0.91030053

 $00:02:55.510 \longrightarrow 00:02:57.460$ I'll pause and look over there

NOTE Confidence: 0.91030053

 $00:02:57.460 \rightarrow 00:02:58.435$ and hopefully come.

NOTE Confidence: 0.91030053

 $00{:}02{:}58{.}440 \dashrightarrow 00{:}03{:}00{.}638$ Mike and Tricia and Chris and Kyle

NOTE Confidence: 0.91030053

 $00:03:00.638 \dashrightarrow 00:03:02.676$ 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

 $00{:}03{:}04{.}400 \dashrightarrow 00{:}03{:}07{.}072$ I do want to thank Kyle for bringing

NOTE Confidence: 0.91030053

 $00{:}03{:}07{.}072 \dashrightarrow 00{:}03{:}09{.}171$ 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

 $00:03:11.253 \dashrightarrow 00:03:13.166$ because we're baseball, parents,

NOTE Confidence: 0.91030053

00:03:13.166 --> 00:03:14.774 fellow baseball parents.

NOTE Confidence: 0.91030053

 $00:03:14.774 \longrightarrow 00:03:17.500$ So just goes to show you these.

NOTE Confidence: 0.91030053

 $00:03:17.500 \rightarrow 00:03:20.542$ New Haven connections really can be

- NOTE Confidence: 0.91030053
- $00{:}03{:}20{.}542 \dashrightarrow 00{:}03{:}23{.}630$ very fruitful and many directions,

 $00:03:23.630 \longrightarrow 00:03:26.156$ 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

 $00:03:26.634 \rightarrow 00:03:28.530$ I thought maybe I'd tell you a little

NOTE Confidence: 0.91030053

 $00{:}03{:}28{.}585 \dashrightarrow 00{:}03{:}30{.}314$ bit of a little bit of background

NOTE Confidence: 0.91030053

 $00:03:30.314 \longrightarrow 00:03:32.148$ about me that helps can help you

NOTE Confidence: 0.91030053

 $00:03:32.148 \dashrightarrow 00:03:34.484$ understand how I came to write this book.

NOTE Confidence: 0.91030053

 $00{:}03{:}34{.}484 \dashrightarrow 00{:}03{:}36{.}611$ The extended mind I went to

NOTE Confidence: 0.91030053

 $00{:}03{:}36{.}611 \dashrightarrow 00{:}03{:}37{.}879$ Yale as an undergraduate.

NOTE Confidence: 0.91030053

 $00{:}03{:}37{.}880 \dashrightarrow 00{:}03{:}38{.}966$ I was dumb.

NOTE Confidence: 0.91030053

 $00{:}03{:}38{.}966 \dashrightarrow 00{:}03{:}41{.}138$ 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

 $00:03:43.940 \longrightarrow 00:03:45.856$ 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

 $00{:}03{:}48.730 \dashrightarrow 00{:}03{:}50.434$ was not like the novels that I that

 $00:03:50.434 \rightarrow 00:03:52.157$ I loved as a high school student.

NOTE Confidence: 0.91030053

 $00{:}03{:}52{.}160 \dashrightarrow 00{:}03{:}53{.}462$ When I was planning on being

NOTE Confidence: 0.91030053

 $00:03:53.462 \longrightarrow 00:03:54.113$ an English major.

NOTE Confidence: 0.91030053

 $00{:}03{:}54{.}120 \dashrightarrow 00{:}03{:}56{.}040$ 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

 $00:03:57.000 \rightarrow 00:03:59.000$ 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

 $00:04:00.440 \longrightarrow 00:04:02.450$ and I found it because,

NOTE Confidence: 0.91030053

 $00{:}04{:}02{.}450 \dashrightarrow 00{:}04{:}03{.}920$ you know, back in those days,

NOTE Confidence: 0.91030053

 $00{:}04{:}03{.}920 \dashrightarrow 00{:}04{:}07{.}301$ there was a hard copy course catalog

NOTE Confidence: 0.91030053

00:04:07.301 $\operatorname{-->}$ 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

 $00{:}04{:}12.846 \dashrightarrow 00{:}04{:}15.031$ 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

 $00:04:17.359 \dashrightarrow 00:04:19.470$ 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
- $00:04:23.400 \longrightarrow 00:04:26.050$ but it what did turn out to be a good
- NOTE Confidence: 0.91030053
- $00:04:26.129 \rightarrow 00:04:28.367$ preparation for being a journalist in
- NOTE Confidence: 0.91030053
- $00:04:28.367 \rightarrow 00:04:31.660$ 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
- $00:04:34.628 \dashrightarrow 00:04:37.179$ journalist involves a lot of pulling
- NOTE Confidence: 0.91030053
- $00{:}04{:}37.180 \dashrightarrow 00{:}04{:}38.600$ thread strands from different
- NOTE Confidence: 0.91030053
- $00:04:38.600 \rightarrow 00:04:40.375$ 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
- $00{:}04{:}41{.}372 \dashrightarrow 00{:}04{:}43{.}991$ Learn how to do that as an American
- NOTE Confidence: 0.91030053
- $00{:}04{:}43{.}991 \dashrightarrow 00{:}04{:}46{.}733$ studies major as a Yale undergraduate.
- NOTE Confidence: 0.91030053
- $00{:}04{:}46{.}740 \dashrightarrow 00{:}04{:}48{.}021$ So I graduated,
- NOTE Confidence: 0.91030053
- $00:04:48.021 \dashrightarrow 00:04:51.891$ my first job was at Yale's Alumni magazine,
- NOTE Confidence: 0.91030053
- $00{:}04{:}51.891 \dashrightarrow 00{:}04{:}55.353$ where I got to interview and
- NOTE Confidence: 0.91030053
- $00:04:55.353 \rightarrow 00:04:58.120$ write about a lot of yells,
- NOTE Confidence: 0.91030053

- $00:04:58.120 \rightarrow 00:04:59.842$ researchers and professors,
- NOTE Confidence: 0.91030053
- $00{:}04{:}59{.}842 \dashrightarrow 00{:}05{:}04{.}420$ and that's when I began to realize that.
- NOTE Confidence: 0.91030053
- $00{:}05{:}04.420 \dashrightarrow 00{:}05{:}05.686$ This is the kind of journalism
- NOTE Confidence: 0.91030053
- $00{:}05{:}05{.}686 \dashrightarrow 00{:}05{:}06{.}720$ that I love to do.
- NOTE Confidence: 0.91030053
- 00:05:06.720 --> 00:05:07.156 You know,
- NOTE Confidence: 0.91030053
- $00{:}05{:}07{.}156 \dashrightarrow 00{:}05{:}09{.}269$ I think I I at least had the impression
- NOTE Confidence: 0.91030053
- $00:05:09.269 \rightarrow 00:05:11.439$ that a journalist is someone who goes
- NOTE Confidence: 0.91030053
- $00:05:11.439 \rightarrow 00:05:13.839$ up to people on the street and says,
- NOTE Confidence: 0.91030053
- $00{:}05{:}13.840 \dashrightarrow 00{:}05{:}14.900$ what do you think about,
- NOTE Confidence: 0.91030053
- $00:05:14.900 \rightarrow 00:05:17.930$ you know yesterday's election or whatever,
- NOTE Confidence: 0.91030053
- $00{:}05{:}17.930 \dashrightarrow 00{:}05{:}19.255$ 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
- $00:05:20.580 \rightarrow 00:05:23.639$ I wanted to write about big ideas.
- NOTE Confidence: 0.948654162857143
- $00:05:23.640 \dashrightarrow 00:05:25.356$ 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
- $00:05:27.840 \longrightarrow 00:05:30.320$ who had listed phone numbers.

00:05:30.320 --> 00:05:35.128 You know, it's a very different kind of.

NOTE Confidence: 0.948654162857143

 $00:05:35.130 \longrightarrow 00:05:37.110$ Journalism then say the more

NOTE Confidence: 0.948654162857143

 $00:05:37.110 \longrightarrow 00:05:38.694$ adverse aerial journalism that

NOTE Confidence: 0.948654162857143

 $00:05:38.694 \rightarrow 00:05:40.518$ happens in the political realm.

NOTE Confidence: 0.948654162857143

 $00:05:40.520 \rightarrow 00:05:44.069$ I actually see my work with scientists

NOTE Confidence: 0.948654162857143

 $00{:}05{:}44.069 \dashrightarrow 00{:}05{:}46.515$ interviewing an writing about the work of

NOTE Confidence: 0.948654162857143

 $00{:}05{:}46.515 \dashrightarrow 00{:}05{:}48.780$ scientists as more like a collaboration.

NOTE Confidence: 0.948654162857143

 $00:05:48.780 \longrightarrow 00:05:51.462$ It's it's really important for me

NOTE Confidence: 0.948654162857143

 $00:05:51.462 \longrightarrow 00:05:54.630$ to get their input and their help,

NOTE Confidence: 0.948654162857143

 $00:05:54.630 \rightarrow 00:05:56.492$ and making sure that I get the

NOTE Confidence: 0.948654162857143

 $00:05:56.492 \rightarrow 00:05:58.150$ details right about their research.

NOTE Confidence: 0.948654162857143

 $00{:}05{:}58{.}150 \dashrightarrow 00{:}05{:}59{.}490$ They they are the experts.

NOTE Confidence: 0.948654162857143

 $00:05:59.490 \dashrightarrow 00:06:02.226$ I'm the person who's translating that

NOTE Confidence: 0.948654162857143

 $00{:}06{:}02.226 \dashrightarrow 00{:}06{:}05.688$ research for a for a broader audience.

NOTE Confidence: 0.948654162857143

 $00:06:05.690 \rightarrow 00:06:09.210$ So after two years at the Alumni magazine,

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

 $00{:}06{:}15{.}150 \dashrightarrow 00{:}06{:}18{.}750$ and that's when I sort of further refined my

NOTE Confidence: 0.948654162857143

 $00:06:18.750 \rightarrow 00:06:22.278$ interests and my my beat as a journalist.

NOTE Confidence: 0.948654162857143

 $00:06:22.280 \longrightarrow 00:06:23.804$ 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

 $00:06:24.570 \longrightarrow 00:06:26.850$ 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

 $00:06:30.138 \rightarrow 00:06:32.286$ endlessly interesting human behavior,

NOTE Confidence: 0.948654162857143

00:06:32.290 --> 00:06:32.870 endlessly interesting,

NOTE Confidence: 0.948654162857143

 $00:06:32.870 \dashrightarrow 00:06:35.190$ and I'm sure those of you who have

NOTE Confidence: 0.948654162857143

 $00:06:35.241 \rightarrow 00:06:36.915$ chosen to go into psychiatry can.

NOTE Confidence: 0.948654162857143

 $00:06:36.920 \rightarrow 00:06:38.684$ Can understand that, UM.

NOTE Confidence: 0.948654162857143

00:06:38.684 --> 00:06:42.270 So after two years at Psychology Today I

 $00:06:42.270 \longrightarrow 00:06:44.850$ went freelance and I've been freelance

NOTE Confidence: 0.948654162857143

 $00:06:44.850 \longrightarrow 00:06:47.560$ for the last 20 something years.

NOTE Confidence: 0.948654162857143

 $00{:}06{:}47.560 \dashrightarrow 00{:}06{:}48.687$ I don't even really want to think

NOTE Confidence: 0.948654162857143

 $00:06:48.687 \rightarrow 00:06:50.166$ about how long it's been, but, uh,

NOTE Confidence: 0.948654162857143

 $00{:}06{:}50{.}166 \dashrightarrow 00{:}06{:}52{.}670$ I've been on my own in the sense

NOTE Confidence: 0.948654162857143

 $00:06:52.747 \longrightarrow 00:06:54.577$ that I've been out here,

NOTE Confidence: 0.948654162857143

 $00:06:54.580 \rightarrow 00:06:59.188$ writing magazine articles and writing books.

NOTE Confidence: 0.948654162857143

 $00:06:59.190 \rightarrow 00:07:02.214$ Those were really my only two jobs.

NOTE Confidence: 0.948654162857143

 $00:07:02.220 \longrightarrow 00:07:06.888$ Uhm, and my first book was.

NOTE Confidence: 0.948654162857143

 $00:07:06.890 \rightarrow 00:07:09.946$ 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

 $00{:}07{:}15.830 \dashrightarrow 00{:}07{:}20.310$ which I became fascinated by this idea.

NOTE Confidence: 0.948654162857143

 $00:07:20.310 \dashrightarrow 00:07:23.992$ That test certainly tests have shaped my

NOTE Confidence: 0.948654162857143

 $00:07:23.992 \rightarrow 00:07:28.029$ own academic life and and professional life,

 $00:07:28.030 \rightarrow 00:07:33.154$ but at that a test could sum up a person's

NOTE Confidence: 0.948654162857143

 $00:07:33.154 \rightarrow 00:07:36.250$ character or or describe their personality.

NOTE Confidence: 0.948654162857143

 $00{:}07{:}36.250 \dashrightarrow 00{:}07{:}37.816$ I was skeptical of that idea.

NOTE Confidence: 0.948654162857143

 $00:07:37.820 \longrightarrow 00:07:40.055$ And persuaded of the eventually

NOTE Confidence: 0.948654162857143

00:07:40.055 --> 00:07:41.396 through my research,

NOTE Confidence: 0.948654162857143

 $00:07:41.400 \rightarrow 00:07:44.076$ persuaded of the idea that actually

NOTE Confidence: 0.948654162857143

 $00{:}07{:}44.076 \dashrightarrow 00{:}07{:}46.633$ those tests were capturing more about

NOTE Confidence: 0.948654162857143

 $00{:}07{:}46.633 \dashrightarrow 00{:}07{:}49.401$ the inventors of the tests and of the

NOTE Confidence: 0.948654162857143

 $00{:}07{:}49{.}473 \dashrightarrow 00{:}07{:}52{.}137$ time and the era in which they lived.

NOTE Confidence: 0.948654162857143

 $00:07:52.140 \rightarrow 00:07:54.596$ And then my next book was called Origins.

NOTE Confidence: 0.948654162857143

 $00{:}07{:}54.600 \dashrightarrow 00{:}07{:}57.012$ It was about the science of

NOTE Confidence: 0.948654162857143

 $00:07:57.012 \longrightarrow 00:07:57.816$ prenatal influences.

NOTE Confidence: 0.948654162857143

00:07:57.820 --> 00:07:58.690 And you know,

NOTE Confidence: 0.948654162857143

 $00:07:58.690 \rightarrow 00:08:00.720$ I'd like to say that or journalists

NOTE Confidence: 0.948654162857143

 $00:08:00.779 \longrightarrow 00:08:02.199$ generally like to offer,

NOTE Confidence: 0.948654162857143

 $00:08:02.200 \longrightarrow 00:08:03.740$ will often acknowledge that all

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

NOTE Confidence: 0.948654162857143

 $00:08:05.780 \longrightarrow 00:08:07.530$ and this in the case of origins,

NOTE Confidence: 0.948654162857143

 $00:08:07.530 \longrightarrow 00:08:09.110$ 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

 $00:08:11.553 \rightarrow 00:08:14.307$ child when I was researching and

NOTE Confidence: 0.948654162857143

 $00:08:14.307 \rightarrow 00:08:16.143$ researching and writing origins

NOTE Confidence: 0.948654162857143

 $00{:}08{:}16.150 \dashrightarrow 00{:}08{:}18.285$ and so you know that the research

NOTE Confidence: 0.948654162857143

 $00:08:18.285 \longrightarrow 00:08:20.249$ for that book often found me,

NOTE Confidence: 0.948654162857143

00:08:20.250 --> 00:08:20.896 you know,

NOTE Confidence: 0.948654162857143

 $00:08:20.896 \rightarrow 00:08:22.511$ eight months pregnant like heading

NOTE Confidence: 0.948654162857143

 $00{:}08{:}22.511 \dashrightarrow 00{:}08{:}24.981$ into a lab to talk to a scientist

NOTE Confidence: 0.948654162857143

 $00:08:24.981 \longrightarrow 00:08:26.950$ about the science of fetal origins,

NOTE Confidence: 0.948654162857143

 $00{:}08{:}26{.}950 \dashrightarrow 00{:}08{:}29{.}290$ the idea that what of pregnant

NOTE Confidence: 0.948654162857143

 $00{:}08{:}29{.}290 \dashrightarrow 00{:}08{:}31{.}799$ woman feels and eats and experiences

NOTE Confidence: 0.948654162857143

 $00{:}08{:}31.799 \dashrightarrow 00{:}08{:}34.415$ while she's pregnant has an effect

 $00:08:34.415 \longrightarrow 00:08:36.969$ on the fetus and potentially

NOTE Confidence: 0.948654162857143

 $00:08:36.970 \longrightarrow 00:08:39.682$ potentially lasting into that.

NOTE Confidence: 0.948654162857143

 $00:08:39.682 \longrightarrow 00:08:41.038$ Childs life.

NOTE Confidence: 0.948654162857143

 $00:08:41.040 \rightarrow 00:08:41.644$ That dumb,

NOTE Confidence: 0.948654162857143

 $00:08:41.644 \longrightarrow 00:08:42.248$ you know,

NOTE Confidence: 0.948654162857143

 $00{:}08{:}42.248 \dashrightarrow 00{:}08{:}44.060$ those those seem like two very

NOTE Confidence: 0.9094174886666667

 $00:08:44.122 \rightarrow 00:08:45.897$ different topics and they are,

NOTE Confidence: 0.9094174886666667

 $00:08:45.900 \longrightarrow 00:08:47.636$ but to me they're all kinds of,

NOTE Confidence: 0.9094174886666667

 $00:08:47.640 \longrightarrow 00:08:48.690$ they're all. They all kinds.

NOTE Confidence: 0.9094174886666667

 $00:08:48.690 \longrightarrow 00:08:50.783$ They both kind of all my work

NOTE Confidence: 0.9094174886666667

 $00{:}08{:}50{.}783 \dashrightarrow 00{:}08{:}52{.}640$ orbits around the same question,

NOTE Confidence: 0.9094174886666667

 $00:08:52.640 \rightarrow 00:08:55.620$ which is what makes us the way we are and

NOTE Confidence: 0.9094174886666667

 $00{:}08{:}55{.}692 \dashrightarrow 00{:}08{:}58{.}452$ what makes us the way we are. And then,

NOTE Confidence: 0.9094174886666667

 $00:08:58.452 \rightarrow 00:09:00.082$ more recently I've become interested

NOTE Confidence: 0.9094174886666667

 $00:09:00.082 \rightarrow 00:09:02.167$ in the question of how do we change?

NOTE Confidence: 0.9094174886666667

 $00:09:02.170 \rightarrow 00:09:06.130$ How do we move on from what we are?

- NOTE Confidence: 0.9094174886666667
- $00:09:06.130 \rightarrow 00:09:09.002$ But the personality testing book I think came

 $00:09:09.002 \rightarrow 00:09:12.149$ out of an interest in how society shapes.

NOTE Confidence: 0.9094174886666667

 $00:09:12.150 \longrightarrow 00:09:14.319$ Yes, or how society tells us who we are

NOTE Confidence: 0.9094174886666667

 $00:09:14.319 \rightarrow 00:09:16.467$ and what we do with that information.

NOTE Confidence: 0.9094174886666667

 $00:09:16.470 \longrightarrow 00:09:17.655$ The the origins.

NOTE Confidence: 0.9094174886666667

 $00:09:17.655 \dashrightarrow 00:09:20.025$ The book about prenatal influences emerged

NOTE Confidence: 0.9094174886666667

 $00:09:20.025 \dashrightarrow 00:09:22.866$ out of an interest in this nurture nature.

NOTE Confidence: 0.9094174886666667

 $00:09:22.870 \longrightarrow 00:09:23.898$ Question this,

NOTE Confidence: 0.9094174886666667

 $00:09:23.898 \dashrightarrow 00:09:26.982$ you know eternal debate between nature

NOTE Confidence: 0.9094174886666667

 $00:09:26.982 \rightarrow 00:09:30.758$ and nurture and my sense that in our

NOTE Confidence: 0.9094174886666667

 $00{:}09{:}30{.}758 \dashrightarrow 00{:}09{:}33{.}290$ discussions about nature and nurture

NOTE Confidence: 0.9094174886666667

 $00:09:33.290 \rightarrow 00:09:35.313$ there was this nine month gap that

NOTE Confidence: 0.909417488666667

 $00:09:35.313 \dashrightarrow 00:09:36.790$ we weren't necessarily looking at.

NOTE Confidence: 0.9094174886666667

 $00:09:36.790 \longrightarrow 00:09:38.238$ We were, you know,

NOTE Confidence: 0.9094174886666667

 $00{:}09{:}38.238 \dashrightarrow 00{:}09{:}40.410$ concerned with that moment of conception

 $00:09:40.476 \longrightarrow 00:09:42.807$ when the DNA blueprint gets laid down.

NOTE Confidence: 0.9094174886666667

 $00{:}09{:}42.810 \dashrightarrow 00{:}09{:}45.190$ And then we were concerned with nurture

NOTE Confidence: 0.9094174886666667

 $00:09:45.190 \dashrightarrow 00:09:47.776$ as it begins at the moment of birth.

NOTE Confidence: 0.9094174886666667

 $00:09:47.780 \longrightarrow 00:09:50.240$ But there was this very consequential

NOTE Confidence: 0.9094174886666667

 $00:09:50.240 \longrightarrow 00:09:53.014$ time in between that I thought could

NOTE Confidence: 0.9094174886666667

00:09:53.014 --> 00:09:55.130 have something interesting and fresh and NOTE Confidence: 0.9094174886666667

 $00:09:55.130 \longrightarrow 00:09:57.889$ new to say about that nurture nature.

NOTE Confidence: 0.9094174886666667

 $00:09:57.890 \rightarrow 00:10:00.466$ Question what makes us who we are.

NOTE Confidence: 0.9094174886666667

 $00{:}10{:}00{.}470 \dashrightarrow 00{:}10{:}03{.}914$ So then continuing this sort of me

NOTE Confidence: 0.9094174886666667

 $00{:}10{:}03{.}914 \dashrightarrow 00{:}10{:}06{.}860$ search theme those those children that

NOTE Confidence: 0.9094174886666667

 $00{:}10{:}06.860 \dashrightarrow 00{:}10{:}11.010$ I bore when I was writing origins.

NOTE Confidence: 0.9094174886666667

 $00:10:11.010 \dashrightarrow 00:10:12.996$ They grew up, they started school.

NOTE Confidence: 0.9094174886666667

00:10:13.000 --> 00:10:14.680 And I became very interested in

NOTE Confidence: 0.9094174886666667

 $00:10:14.680 \longrightarrow 00:10:15.800$ the science of learning.

NOTE Confidence: 0.9094174886666667

 $00{:}10{:}15{.}800 \dashrightarrow 00{:}10{:}18{.}370$ I was very interested in.

NOTE Confidence: 0.9094174886666667

 $00:10:18.370 \rightarrow 00:10:19.760$ What my children were learning,

 $00:10:19.760 \longrightarrow 00:10:22.172$ how they were learning how their

NOTE Confidence: 0.9094174886666667

 $00:10:22.172 \rightarrow 00:10:24.159$ teachers were teaching them and

NOTE Confidence: 0.9094174886666667

 $00:10:24.159 \longrightarrow 00:10:26.329$ at the same time as a journalist.

NOTE Confidence: 0.9094174886666667

 $00:10:26.330 \rightarrow 00:10:28.731$ I saw that there was a really

NOTE Confidence: 0.9094174886666667

00:10:28.731 --> 00:10:31.041 dynamic and exciting body of growing

NOTE Confidence: 0.9094174886666667

 $00:10:31.041 \rightarrow 00:10:33.061$ body of research about learning

NOTE Confidence: 0.9094174886666667

 $00:10:33.061 \rightarrow 00:10:35.246$ the science of how we learn,

NOTE Confidence: 0.9094174886666667

 $00:10:35.250 \rightarrow 00:10:38.070$ mostly psychology and cognitive science.

NOTE Confidence: 0.9094174886666667

 $00{:}10{:}38.070 \dashrightarrow 00{:}10{:}40.226$ And so I started writing about that,

NOTE Confidence: 0.9094174886666667

 $00:10:40.230 \longrightarrow 00:10:43.282$ writing lots of articles and planned to

NOTE Confidence: 0.9094174886666667

 $00{:}10{:}43.282 \dashrightarrow 00{:}10{:}47.188$ write a book about it that didn't work out.

NOTE Confidence: 0.9094174886666667

00:10:47.190 --> 00:10:48.366 I may yet write a book about

NOTE Confidence: 0.9094174886666667

 $00:10:48.366 \longrightarrow 00:10:49.270$ the science of learning,

NOTE Confidence: 0.9094174886666667

 $00{:}10{:}49{.}270 \dashrightarrow 00{:}10{:}53{.}365$ but my struggle there was that I,

NOTE Confidence: 0.9094174886666667

 $00:10:53.370 \longrightarrow 00:10:54.660$ as I said, I really loved.

 $00:10:54.660 \longrightarrow 00:10:55.950$ I love a big idea.

NOTE Confidence: 0.9094174886666667

00:10:55.950 --> 00:10:58.983 I love a big a big idea that can

NOTE Confidence: 0.9094174886666667

 $00:10:58.983 \rightarrow 00:11:01.419$ transform the way we see something.

NOTE Confidence: 0.9094174886666667

 $00{:}11{:}01{.}420 \dashrightarrow 00{:}11{:}03{.}548$ And I searched and searched for a

NOTE Confidence: 0.9094174886666667

 $00{:}11{:}03.548 \dashrightarrow 00{:}11{:}05.742$ big idea that could kind of unite

NOTE Confidence: 0.9094174886666667

 $00{:}11{:}05{.}742 \dashrightarrow 00{:}11{:}08{.}341$ all the findings that I was all the

NOTE Confidence: 0.9094174886666667

 $00:11:08.341 \rightarrow 00:11:10.116$ very interesting and useful findings

NOTE Confidence: 0.9094174886666667

 $00:11:10.116 \rightarrow 00:11:12.834$ that I was gathering from the science

NOTE Confidence: 0.9094174886666667

 $00{:}11{:}12.834 \dashrightarrow 00{:}11{:}15.300$ of learning and eventually I had

NOTE Confidence: 0.9094174886666667

 $00:11:15.377 \longrightarrow 00:11:17.537$ to kind of concede defeat that.

NOTE Confidence: 0.9094174886666667

 $00{:}11{:}17{.}540 \dashrightarrow 00{:}11{:}19{.}997$ There wasn't a unified theory of learning.

NOTE Confidence: 0.9094174886666667

 $00{:}11{:}20{.}000 \dashrightarrow 00{:}11{:}20{.}780$ I'd be interested.

NOTE Confidence: 0.9094174886666667

 $00{:}11{:}20.780 \dashrightarrow 00{:}11{:}22.600$ Interested to hear what and if you

NOTE Confidence: 0.9094174886666667

 $00:11:22.649 \longrightarrow 00:11:24.224$ have to say about this or what

NOTE Confidence: 0.9094174886666667

 $00:11:24.224 \rightarrow 00:11:25.200$ you think about this,

NOTE Confidence: 0.9094174886666667

 $00:11:25.200 \rightarrow 00:11:28.252$ especially those of you who are really

- NOTE Confidence: 0.9094174886666667
- $00:11:28.252 \rightarrow 00:11:31.780$ involved in educating and education.
- NOTE Confidence: 0.9094174886666667
- $00:11:31.780 \longrightarrow 00:11:33.915$ There is no unified theory of learning.
- NOTE Confidence: 0.9094174886666667
- $00:11:33.920 \longrightarrow 00:11:36.671$ I came to think because the brain
- NOTE Confidence: 0.9094174886666667
- 00:11:36.671 -> 00:11:39.044 is this klugey patched together.
- NOTE Confidence: 0.9094174886666667
- $00:11:39.044 \rightarrow 00:11:43.190$ You know, cobbled together patchwork.
- NOTE Confidence: 0.9094174886666667
- 00:11:43.190 --> 00:11:45.920 That evolved to help us survive,
- NOTE Confidence: 0.9094174886666667
- $00:11:45.920 \rightarrow 00:11:50.048$ 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
- $00:11:52.270 \longrightarrow 00:11:55.054$ in in any coherent way that
- NOTE Confidence: 0.843562053333333
- $00:11:55.054 \rightarrow 00:11:57.353$ could be described in terms
- NOTE Confidence: 0.843562053333333
- $00:11:57.353 \longrightarrow 00:11:59.960$ 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
- $00{:}12{:}03{.}010 \dashrightarrow 00{:}12{:}05{.}982$ so, but in the course of doing all
- NOTE Confidence: 0.843562053333333
- $00{:}12{:}05{.}982 \dashrightarrow 00{:}12{:}07{.}668$ this research and reading that got
- NOTE Confidence: 0.843562053333333
- $00{:}12{:}07.668 \dashrightarrow 00{:}12{:}09.565$ sort of progressively wider in its
- NOTE Confidence: 0.843562053333333

 $00:12:09.565 \longrightarrow 00:12:11.479$ 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

 $00:12:13.270 \rightarrow 00:12:16.926$ I came across an article in a philosophy

NOTE Confidence: 0.843562053333333

 $00:12:16.926 \rightarrow 00:12:19.759$ journal that was published in 1998.

NOTE Confidence: 0.843562053333333

 $00:12:19.759 \longrightarrow 00:12:22.004$ As by the philosophers Andy

NOTE Confidence: 0.843562053333333

 $00{:}12{:}22.004 \dashrightarrow 00{:}12{:}23.800$ Clark and David Chalmers,

NOTE Confidence: 0.843562053333333

 $00{:}12{:}23.800 \dashrightarrow 00{:}12{:}26.579$ it was titled the Extended Mind and

NOTE Confidence: 0.843562053333333

 $00:12:26.579 \rightarrow 00:12:29.118$ the Very first line of it said,

NOTE Confidence: 0.843562053333333

 $00:12:29.120 \longrightarrow 00:12:32.006$ where does the mind stop and

NOTE Confidence: 0.843562053333333

 $00:12:32.006 \rightarrow 00:12:35.360$ the rest of the world began?

NOTE Confidence: 0.843562053333333

 $00:12:35.360 \longrightarrow 00:12:37.745$ 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

 $00:12:39.240 \longrightarrow 00:12:40.434$ a provocative question.

NOTE Confidence: 0.843562053333333

 $00:12:40.434 \rightarrow 00:12:43.220$ 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

 $00:12:45.000 \rightarrow 00:12:49.383$ so obvious that the mind stops at the skull.

- NOTE Confidence: 0.843562053333333
- $00:12:49.390 \longrightarrow 00:12:51.917$ 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
- $00{:}12{:}54{.}200 \dashrightarrow 00{:}12{:}55{.}888$ that's not the case.
- NOTE Confidence: 0.843562053333333
- $00:12:55.888 \rightarrow 00:12:58.700$ The mind extends beyond the brain to
- NOTE Confidence: 0.843562053333333
- $00:12:58.700 \rightarrow 00:13:00.940$ the rest of our body below the neck,
- NOTE Confidence: 0.843562053333333
- $00:13:00.940 \longrightarrow 00:13:03.264$ to our physical environment,
- NOTE Confidence: 0.843562053333333
- $00:13:03.264 \rightarrow 00:13:06.750$ 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
- $00{:}13{:}07.797 \dashrightarrow 00{:}13{:}10.240$ the focus of their article was on
- NOTE Confidence: 0.843562053333333
- $00:13:10.315 \longrightarrow 00:13:12.387$ how we use tools to extend our
- NOTE Confidence: 0.843562053333333
- $00:13:12.387 \rightarrow 00:13:14.506$ minds and the the principal
- NOTE Confidence: 0.843562053333333
- $00:13:14.506 \longrightarrow 00:13:16.834$ tool that they were writing about.
- NOTE Confidence: 0.843562053333333
- $00:13:16.840 \longrightarrow 00:13:19.070$ And remember this is in 1998 before
- NOTE Confidence: 0.843562053333333
- $00{:}13{:}19{.}070 \dashrightarrow 00{:}13{:}21{.}695$ smartphones became a part of our lives.
- NOTE Confidence: 0.843562053333333
- $00{:}13{:}21.700 \dashrightarrow 00{:}13{:}24.022$ 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

 $00:13:26.187 \longrightarrow 00:13:29.024$ notebook and how when we when?

NOTE Confidence: 0.843562053333333

 $00{:}13{:}29{.}024 \dashrightarrow 00{:}13{:}32{.}079$ 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

 $00{:}13{:}34{.}533 \dashrightarrow 00{:}13{:}37{.}298$ processes is coupled in a consistent way.

NOTE Confidence: 0.843562053333333

 $00:13:37.300 \rightarrow 00:13:39.058$ With our with our thinking processes,

NOTE Confidence: 0.843562053333333

 $00:13:39.060 \longrightarrow 00:13:40.860$ it actually becomes a part

NOTE Confidence: 0.843562053333333

 $00:13:40.860 \rightarrow 00:13:42.300$ of that cognitive loop,

NOTE Confidence: 0.843562053333333

 $00{:}13{:}42{.}300 \dashrightarrow 00{:}13{:}45{.}564$ 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

 $00:13:48.626 \rightarrow 00:13:50.730$ 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

 $00{:}13{:}53{.}556 \dashrightarrow 00{:}13{:}54{.}512$ this article,

NOTE Confidence: 0.843562053333333

 $00:13:54.512 \rightarrow 00:13:57.938$ which subsequently became one of the most

- NOTE Confidence: 0.843562053333333
- $00:13:57.938 \rightarrow 00:14:00.848$ cited articles in the philosophy literature,
- NOTE Confidence: 0.843562053333333
- $00:14:00.850 \rightarrow 00:14:02.905$ was rejected from three journals
- NOTE Confidence: 0.843562053333333
- $00:14:02.905 \rightarrow 00:14:05.442$ before it was finally accepted and
- NOTE Confidence: 0.843562053333333
- $00:14:05.442 \rightarrow 00:14:07.507$ published in the journal Analysis.
- NOTE Confidence: 0.843562053333333
- $00:14:07.510 \longrightarrow 00:14:08.890$ And when it was published,
- NOTE Confidence: 0.843562053333333
- $00{:}14{:}08.890 \dashrightarrow 00{:}14{:}12.066$ 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
- $00{:}14{:}13.966 \dashrightarrow 00{:}14{:}17.368$ sort of ridicule and skepticism from from
- NOTE Confidence: 0.843562053333333
- $00:14:17.368 \longrightarrow 00:14:19.770$ 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
- $00:14:23.620 \longrightarrow 00:14:25.870$ and what's interesting is that
- NOTE Confidence: 0.843562053333333
- $00:14:25.870 \longrightarrow 00:14:28.084$ events kind of overtook the
- NOTE Confidence: 0.843562053333333
- $00:14:28.084 \longrightarrow 00:14:30.144$ the reception of this paper,
- NOTE Confidence: 0.843562053333333

 $00:14:30.150 \longrightarrow 00:14:33.586$ 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

 $00{:}14{:}35{.}826 \dashrightarrow 00{:}14{:}38{.}049$ and all of a sudden.

NOTE Confidence: 0.843562053333333

 $00:14:38.050 \rightarrow 00:14:41.270$ Lots of us were offloading or extending

NOTE Confidence: 0.843562053333333

 $00{:}14{:}41{.}270 \dashrightarrow 00{:}14{:}44{.}840$ our minds by offloading mental functions

NOTE Confidence: 0.843562053333333

 $00{:}14{:}44{.}840 \dashrightarrow 00{:}14{:}47{.}612$ that had previously been performed

NOTE Confidence: 0.843562053333333

 $00:14:47.612 \longrightarrow 00:14:49.724$ by our brains onto our phones.

NOTE Confidence: 0.843562053333333

00:14:49.730 --> 00:14:50.264 You know,

NOTE Confidence: 0.843562053333333

 $00:14:50.264 \rightarrow 00:14:51.866$ like who remembers phone numbers anymore?

NOTE Confidence: 0.843562053333333

 $00:14:51.870 \longrightarrow 00:14:54.528$ Because our phones remember them for

NOTE Confidence: 0.843562053333333

 $00{:}14{:}54{.}528 \dashrightarrow 00{:}14{:}57{.}691$ us and so the use of the smartphone,

NOTE Confidence: 0.843562053333333

 $00{:}14{:}57.691 \dashrightarrow 00{:}15{:}00.568$ which is nothing if not a reliable

NOTE Confidence: 0.843562053333333

 $00:15:00.568 \rightarrow 00:15:02.525$ and consistent present in our

NOTE Confidence: 0.843562053333333

 $00:15:02.525 \rightarrow 00:15:03.949$ presence in our lives,

NOTE Confidence: 0.843562053333333

 $00{:}15{:}03{.}950 \dashrightarrow 00{:}15{:}06{.}525$ became this sort of continual

NOTE Confidence: 0.843562053333333

 $00:15:06.525 \rightarrow 00:15:08.716$ proof of concept, you know.

 $00:15:08.716 \rightarrow 00:15:11.300$ And and every day and every day life

NOTE Confidence: 0.967607791428571

 $00{:}15{:}11{.}300 \dashrightarrow 00{:}15{:}14{.}954$ 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

 $00:15:19.007 \rightarrow 00:15:20.902$ another philosopher named Ned Block

NOTE Confidence: 0.967607791428571

 $00{:}15{:}20{.}902 \dashrightarrow 00{:}15{:}23{.}522$ likes to say that the thesis of

NOTE Confidence: 0.967607791428571

 $00{:}15{:}23.522 \dashrightarrow 00{:}15{:}25.534$ the extended mind, the extended mind

NOTE Confidence: 0.967607791428571

 $00:15:25.534 \rightarrow 00:15:28.110$ thesis was false when it was written,

NOTE Confidence: 0.967607791428571

 $00:15:28.110 \rightarrow 00:15:30.625$ but subsequent subsequently became true

NOTE Confidence: 0.967607791428571

 $00{:}15{:}30{.}625 \dashrightarrow 00{:}15{:}34{.}340$ because of the way that technology has

NOTE Confidence: 0.967607791428571

 $00:15:34.340 \rightarrow 00:15:36.804$ begun to extend our minds in our in

NOTE Confidence: 0.967607791428571

 $00:15:36.804 \rightarrow 00:15:38.897$ 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

 $00{:}15{:}40.664 \dashrightarrow 00{:}15{:}43.310$ I myself and more interest less

NOTE Confidence: 0.967607791428571

 $00{:}15{:}43{.}404 \dashrightarrow 00{:}15{:}46{.}048$ interested in the way that tools

NOTE Confidence: 0.967607791428571

 $00:15:46.048 \dashrightarrow 00:15:48.136$ and technology can extend our mind,

 $00:15:48.140 \longrightarrow 00:15:49.224$ although I think that's

NOTE Confidence: 0.967607791428571

 $00{:}15{:}49{.}224 \dashrightarrow 00{:}15{:}50{.}308$ very interesting as well.

NOTE Confidence: 0.967607791428571

 $00:15:50.310 \dashrightarrow 00:15:53.012$ I'm more interested in the way that

NOTE Confidence: 0.967607791428571

 $00:15:53.012 \rightarrow 00:15:55.718$ our bodies extend our minds through

NOTE Confidence: 0.967607791428571

 $00:15:55.718 \rightarrow 00:15:58.173$ things like our internal sensations,

NOTE Confidence: 0.967607791428571

 $00:15:58.180 \longrightarrow 00:16:00.552$ our movements or gestures.

NOTE Confidence: 0.967607791428571

 $00:16:00.552 \rightarrow 00:16:03.517$ 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

 $00:16:06.700 \rightarrow 00:16:07.640$ natural settings,

NOTE Confidence: 0.967607791428571

 $00{:}16{:}07{.}640 \dashrightarrow 00{:}16{:}10{.}881$ but also built settings and are the

NOTE Confidence: 0.967607791428571

 $00:16:10.881 \rightarrow 00:16:13.310$ places where we learn and work and

NOTE Confidence: 0.967607791428571

 $00{:}16{:}13{.}310 \dashrightarrow 00{:}16{:}15{.}957$ also what I call the space of ideas,

NOTE Confidence: 0.967607791428571

 $00{:}16{:}15{.}960 \dashrightarrow 00{:}16{:}18{.}704$ which is when we do offload our meant

NOTE Confidence: 0.967607791428571

 $00:16:18.704 \longrightarrow 00:16:21.356$ the contents of our minds onto physical

NOTE Confidence: 0.967607791428571

 $00:16:21.356 \rightarrow 00:16:24.140$ space and interact with them in new ways.

- NOTE Confidence: 0.967607791428571
- $00:16:24.140 \longrightarrow 00:16:25.652$ That's another way of
- NOTE Confidence: 0.967607791428571
- $00:16:25.652 \rightarrow 00:16:27.542$ extending the mind with space,
- NOTE Confidence: 0.967607791428571
- $00:16:27.550 \longrightarrow 00:16:29.440$ and then finally the way that we
- NOTE Confidence: 0.967607791428571
- $00:16:29.440 \rightarrow 00:16:31.308$ extend our minds with other people.
- NOTE Confidence: 0.967607791428571
- $00:16:31.310 \rightarrow 00:16:34.340$ With our peers with experts that
- NOTE Confidence: 0.967607791428571
- $00{:}16{:}34{.}340 \dashrightarrow 00{:}16{:}38{.}193$ we learn from and in groups so.
- NOTE Confidence: 0.967607791428571
- $00{:}16{:}38{.}193 \dashrightarrow 00{:}16{:}38{.}606$ B.
- NOTE Confidence: 0.967607791428571
- $00:16:38.606 \longrightarrow 00:16:41.497$ When I read the this article
- NOTE Confidence: 0.967607791428571
- $00:16:41.497 \longrightarrow 00:16:43.780$ 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
- $00:16:47.196 \rightarrow 00:16:52.140$ moment because I had been collecting
- NOTE Confidence: 0.967607791428571
- $00{:}16{:}52{.}140 \dashrightarrow 00{:}16{:}54{.}786$ and and gathering instances of research
- NOTE Confidence: 0.967607791428571
- $00{:}16{:}54.786 \dashrightarrow 00{:}16{:}57.792$ in the science of learning with the
- NOTE Confidence: 0.967607791428571
- $00{:}16{:}57{.}792 \dashrightarrow 00{:}17{:}00{.}501$ idea of writing a book about the
- NOTE Confidence: 0.967607791428571
- $00{:}17{:}00{.}581 \dashrightarrow 00{:}17{:}03{.}131$ science of learning that fell into
- NOTE Confidence: 0.967607791428571

 $00:17:03.131 \longrightarrow 00:17:05.482$ into into three kind of buckets.

NOTE Confidence: 0.967607791428571

 $00{:}17{:}05{.}482 \dashrightarrow 00{:}17{:}08{.}050$ 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

 $00:17:10.135 \rightarrow 00:17:12.379$ It was hard for me to put my finger

NOTE Confidence: 0.967607791428571

 $00:17:12.379 \longrightarrow 00:17:13.899$ 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

 $00{:}17{:}16.552 \dashrightarrow 00{:}17{:}18.222$ about are embodied cognition.

NOTE Confidence: 0.967607791428571

 $00:17:18.222 \rightarrow 00:17:20.959$ This this body of work that

NOTE Confidence: 0.967607791428571

 $00{:}17{:}20.959 \dashrightarrow 00{:}17{:}23.082$ suggests that our bodies are an

NOTE Confidence: 0.967607791428571

 $00:17:23.082 \rightarrow 00:17:25.330$ integral part of the thinking process.

NOTE Confidence: 0.967607791428571

 $00:17:25.330 \longrightarrow 00:17:26.166$ Situated cognition.

NOTE Confidence: 0.967607791428571

 $00:17:26.166 \rightarrow 00:17:29.092$ The idea that where we are really

NOTE Confidence: 0.967607791428571

 $00:17:29.092 \longrightarrow 00:17:31.686$ affects the way we think and

NOTE Confidence: 0.967607791428571

00:17:31.686 --> 00:17:32.528 distributed cognition,

NOTE Confidence: 0.967607791428571

 $00:17:32.530 \rightarrow 00:17:33.700$ socially distributed cognition,

NOTE Confidence: 0.967607791428571

 $00:17:33.700 \longrightarrow 00:17:36.430$ this the idea that we don't just

 $00:17:36.494 \rightarrow 00:17:38.690$ think with our own individual minds,

NOTE Confidence: 0.967607791428571

 $00:17:38.690 \longrightarrow 00:17:40.620$ but we we think with.

NOTE Confidence: 0.967607791428571

 $00{:}17{:}40.620 \dashrightarrow 00{:}17{:}41.340$ 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

 $00:17:44.687 \longrightarrow 00:17:47.168$ or collective intelligence.

NOTE Confidence: 0.967607791428571

 $00:17:47.170 \longrightarrow 00:17:50.390$ So it was really the discovery of

NOTE Confidence: 0.967607791428571

 $00{:}17{:}50{.}390 \dashrightarrow 00{:}17{:}53{.}346$ this article about the extended mind

NOTE Confidence: 0.967607791428571

 $00{:}17{:}53.346 \dashrightarrow 00{:}17{:}56.316$ that allowed me to pull together

NOTE Confidence: 0.967607791428571

 $00:17:56.316 \longrightarrow 00:17:58.710$ those disparate threads and weave

NOTE Confidence: 0.967607791428571

 $00:17:58.710 \dashrightarrow 00:18:03.079$ them into a book that I wanted to bring.

NOTE Confidence: 0.967607791428571

 $00:18:03.079 \longrightarrow 00:18:04.738$ This exciting idea.

NOTE Confidence: 0.967607791428571

 $00{:}18{:}04{.}740 \dashrightarrow 00{:}18{:}07{.}085$ I really find the idea of the

NOTE Confidence: 0.967607791428571

 $00{:}18{:}07{.}085 \dashrightarrow 00{:}18{:}09{.}347$ extended mind really generative and

NOTE Confidence: 0.967607791428571

 $00{:}18{:}09{.}347 \dashrightarrow 00{:}18{:}11{.}564$ really endlessly fascinating, and.

NOTE Confidence: 0.967607791428571

 $00:18:11.564 \longrightarrow 00:18:14.228$ And uhm, fertile as an idea,

 $00:18:14.230 \longrightarrow 00:18:16.924$ but I also really wanted to

NOTE Confidence: 0.967607791428571

 $00{:}18{:}16{.}924 \dashrightarrow 00{:}18{:}19{.}850$ operationalize it in the sense of OK,

NOTE Confidence: 0.967607791428571

 $00:18:19.850 \longrightarrow 00:18:22.286$ 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

 $00:18:24.282 \longrightarrow 00:18:26.354$ we think and are actually a part

NOTE Confidence: 0.967607791428571

 $00:18:26.354 \rightarrow 00:18:28.190$ of the thinking process.

NOTE Confidence: 0.967607791428571

 $00{:}18{:}28{.}190 \dashrightarrow 00{:}18{:}30{.}134$ What does that mean in our

NOTE Confidence: 0.967607791428571

 $00:18:30.134 \rightarrow 00:18:31.430$ 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

 $00{:}18{:}37{.}020 \dashrightarrow 00{:}18{:}39{.}678$ Wanted to take this idea out

NOTE Confidence: 0.967607791428571

 $00:18:39.678 \rightarrow 00:18:41.450$ of the ivory tower

NOTE Confidence: 0.909292874705882

 $00:18:41.547 \longrightarrow 00:18:44.466$ 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

 $00{:}18{:}47{.}314 \dashrightarrow 00{:}18{:}49{.}999$ 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
- $00:18:53.008 \rightarrow 00:18:56.394$ to take advantage of all these all
- NOTE Confidence: 0.909292874705882
- $00{:}18{:}56{.}394 \dashrightarrow 00{:}19{:}00{.}918$ these extra neural resources and and.
- NOTE Confidence: 0.909292874705882
- $00:19:00.920 \longrightarrow 00:19:02.828$ But also how how we could
- NOTE Confidence: 0.909292874705882
- $00:19:02.828 \rightarrow 00:19:04.100$ potentially do that better?
- NOTE Confidence: 0.909292874705882
- $00{:}19{:}04{.}100 \dashrightarrow 00{:}19{:}06{.}578$ 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
- $00:19:08.809 \rightarrow 00:19:10.639$ 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
- $00{:}19{:}12.782 \dashrightarrow 00{:}19{:}15.554$ to be a social critique, you know,
- NOTE Confidence: 0.909292874705882
- $00:19:15.554 \rightarrow 00:19:18.210$ and a critique of the very common
- NOTE Confidence: 0.909292874705882
- $00:19:18.289 \rightarrow 00:19:21.271$ and pervasive ideas about the brain and
- NOTE Confidence: 0.909292874705882
- $00{:}19{:}21{.}271 \dashrightarrow 00{:}19{:}23{.}928$ about thinking that are out there that
- NOTE Confidence: 0.909292874705882
- $00:19:23.930 \rightarrow 00:19:26.540$ you know what Andy Clark, one of the Co Co.
- NOTE Confidence: 0.909292874705882
- $00{:}19{:}26{.}540 \dashrightarrow 00{:}19{:}29{.}810$ Authors of the the extended
- NOTE Confidence: 0.909292874705882
- $00:19:29.810 \longrightarrow 00:19:31.445$ mind paper calls.
- NOTE Confidence: 0.909292874705882

 $00:19:31.450 \longrightarrow 00:19:32.854$ The brain bound mentality.

NOTE Confidence: 0.909292874705882

 $00{:}19{:}32.854 \dashrightarrow 00{:}19{:}33.907$ In other words,

NOTE Confidence: 0.909292874705882

 $00{:}19{:}33{.}910 \dashrightarrow 00{:}19{:}37{.}078$ 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

 $00{:}19{:}38{.}150 \dashrightarrow 00{:}19{:}41{.}678$ so many of our institutions and our practices

NOTE Confidence: 0.909292874705882

 $00{:}19{:}41.678 \dashrightarrow 00{:}19{:}44.610$ are rooted in this brain bound idea.

NOTE Confidence: 0.909292874705882

 $00{:}19{:}44.610 \dashrightarrow 00{:}19{:}47.440$ That thinking is contained within

NOTE Confidence: 0.909292874705882

 $00{:}19{:}47{.}440 \dashrightarrow 00{:}19{:}50{.}631$ the skull that we can evaluate

NOTE Confidence: 0.909292874705882

 $00{:}19{:}50{.}631 \dashrightarrow 00{:}19{:}52{.}797$ and rank people based on how

NOTE Confidence: 0.909292874705882

 $00:19:52.797 \rightarrow 00:19:55.328$ big the lump of intelligence is.

NOTE Confidence: 0.909292874705882

 $00{:}19{:}55{.}330 \dashrightarrow 00{:}19{:}58{.}170$ That's inside there inside their

NOTE Confidence: 0.909292874705882

 $00{:}19{:}58{.}170 \dashrightarrow 00{:}20{:}00{.}610$ heads and that really that there's

NOTE Confidence: 0.909292874705882

 $00{:}20{:}00{.}610 \dashrightarrow 00{:}20{:}02{.}920$ really a kind of blind spot.

NOTE Confidence: 0.909292874705882

 $00:20:02.920 \longrightarrow 00:20:05.069$ For all the ways that the raw

NOTE Confidence: 0.909292874705882

 $00:20:05.069 \rightarrow 00:20:06.653$ 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
- $00:20:10.460 \longrightarrow 00:20:13.309$ the access we have to natural spaces
- NOTE Confidence: 0.909292874705882
- $00{:}20{:}13.309 \dashrightarrow 00{:}20{:}16.124$ or two well designed interiors or
- NOTE Confidence: 0.909292874705882
- $00:20:16.124 \rightarrow 00:20:19.130$ two networks of peers and mentors
- NOTE Confidence: 0.909292874705882
- $00:20:19.130 \longrightarrow 00:20:21.837$ and teachers who can help us.
- NOTE Confidence: 0.909292874705882
- $00:20:21.840 \longrightarrow 00:20:24.024$ All those things are actually a part
- NOTE Confidence: 0.909292874705882
- $00:20:24.024 \rightarrow 00:20:25.891$ of our thinking processes and we
- NOTE Confidence: 0.909292874705882
- $00:20:25.891 \longrightarrow 00:20:28.282$ have a blind spot to those when we
- NOTE Confidence: 0.909292874705882
- $00:20:28.282 \rightarrow 00:20:30.438$ insist on this brain bound model that,
- NOTE Confidence: 0.909292874705882
- $00:20:30.440 \longrightarrow 00:20:32.942$ like all that matters is is.
- NOTE Confidence: 0.909292874705882
- $00:20:32.942 \longrightarrow 00:20:35.038$ It goes on up here in the head,
- NOTE Confidence: 0.909292874705882
- $00{:}20{:}35{.}040 \dashrightarrow 00{:}20{:}38{.}658$ so the book came out in in June this
- NOTE Confidence: 0.909292874705882
- $00:20:38.658 \rightarrow 00:20:42.799$ past June and I've been very gratified by.
- NOTE Confidence: 0.909292874705882
- $00{:}20{:}42{.}800 \dashrightarrow 00{:}20{:}44{.}744$ The reception and surprised by it
- NOTE Confidence: 0.909292874705882
- $00:20:44.744 \rightarrow 00:20:47.551$ in some ways lots of teachers have
- NOTE Confidence: 0.909292874705882

 $00:20:47.551 \rightarrow 00:20:49.475$ really enthusiastically embraced it.

NOTE Confidence: 0.909292874705882

 $00:20:49.480 \longrightarrow 00:20:51.937$ Lots of people in the arts have embraced it,

NOTE Confidence: 0.909292874705882

 $00:20:51.940 \longrightarrow 00:20:54.016$ which when I think about it,

NOTE Confidence: 0.909292874705882

 $00{:}20{:}54.020 \dashrightarrow 00{:}20{:}55.825$ shouldn't surprise me because I

NOTE Confidence: 0.909292874705882

 $00{:}20{:}55.825 \dashrightarrow 00{:}20{:}58.424$ think people in the arts have always

NOTE Confidence: 0.909292874705882

 $00{:}20{:}58{.}424 \dashrightarrow 00{:}21{:}00{.}590$ thought with their bodies and with

NOTE Confidence: 0.909292874705882

 $00:21:00.590 \rightarrow 00:21:03.048$ come with physical spaces and and

NOTE Confidence: 0.909292874705882

 $00:21:03.048 \rightarrow 00:21:05.128$ in collaboration with other people

NOTE Confidence: 0.909292874705882

 $00{:}21{:}05{.}130 \dashrightarrow 00{:}21{:}06{.}562$ and lots of people.

NOTE Confidence: 0.909292874705882

 $00{:}21{:}06.562 \dashrightarrow 00{:}21{:}09.454$ Lots of readers have told me that that

NOTE Confidence: 0.909292874705882

 $00:21:09.454 \rightarrow 00:21:12.366$ they had found their way to these techniques.

NOTE Confidence: 0.909292874705882

 $00{:}21{:}12{.}370 \dashrightarrow 00{:}21{:}14{.}410$ And these insights that I wrote

NOTE Confidence: 0.909292874705882

 $00:21:14.410 \longrightarrow 00:21:15.770$ about in the book,

NOTE Confidence: 0.909292874705882

 $00:21:15.770 \longrightarrow 00:21:17.972$ but that they were very glad

NOTE Confidence: 0.909292874705882

 $00:21:17.972 \longrightarrow 00:21:20.090$ to have the scientific backing,

NOTE Confidence: 0.909292874705882

 $00:21:20.090 \longrightarrow 00:21:22.095$ that that their intuitions or

- NOTE Confidence: 0.909292874705882
- $00{:}21{:}22.095 \dashrightarrow 00{:}21{:}24.100$ their trial and error experiments,
- NOTE Confidence: 0.909292874705882
- $00:21:24.100 \rightarrow 00:21:26.060$ had steered them in the right direction,
- NOTE Confidence: 0.909292874705882
- $00:21:26.060 \longrightarrow 00:21:28.572$ and that they felt seen by this book
- NOTE Confidence: 0.909292874705882
- $00:21:28.572 \rightarrow 00:21:30.948$ in a way that they had not before,
- NOTE Confidence: 0.909292874705882
- $00:21:30.948 \longrightarrow 00:21:32.520$ that they that they used their
- NOTE Confidence: 0.909292874705882
- $00{:}21{:}32{.}574 \dashrightarrow 00{:}21{:}34{.}578$ extended minds in their everyday lives.
- NOTE Confidence: 0.909292874705882
- $00:21:34.580 \rightarrow 00:21:37.086$ 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
- $00:21:38.450 \longrightarrow 00:21:40.508$ 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
- $00:21:42.943 \longrightarrow 00:21:44.714$ what kind of reception your book is
- NOTE Confidence: 0.909292874705882
- $00:21:44.714 \longrightarrow 00:21:46.382$ going to get until it's out there
- NOTE Confidence: 0.909292874705882
- $00{:}21{:}46{.}382 \dashrightarrow 00{:}21{:}47{.}487$ and so that was a
- NOTE Confidence: 0.898079025666667
- $00{:}21{:}47{.}548 \dashrightarrow 00{:}21{:}49{.}384$ very that was a surprising and
- NOTE Confidence: 0.898079025666667

 $00:21:49.384 \rightarrow 00:21:51.459$ gratifying kind of feedback to get up,

NOTE Confidence: 0.898079025666667

 $00:21:51.459 \longrightarrow 00:21:54.259$ so I'll just pause here for a moment and

NOTE Confidence: 0.898079025666667

 $00:21:54.259 \rightarrow 00:21:57.251$ I'll look to see if there's any questions,

NOTE Confidence: 0.898079025666667

 $00:21:57.260 \longrightarrow 00:21:58.736$ 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

 $00{:}22{:}01{.}036 \dashrightarrow 00{:}22{:}04{.}005$ of my book and I I really have

NOTE Confidence: 0.898079025666667

 $00{:}22{:}04.005 \dashrightarrow 00{:}22{:}06.409$ appreciated his enthusiasm and I know

NOTE Confidence: 0.898079025666667

 $00:22:06.409 \rightarrow 00:22:08.773$ 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

 $00:22:10.280 \longrightarrow 00:22:11.280$ 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

 $00:22:15.158 \longrightarrow 00:22:16.277$ here today and for sharing.

NOTE Confidence: 0.894437417142857

 $00:22:16.280 \longrightarrow 00:22:18.116$ You are your work with us,

NOTE Confidence: 0.894437417142857

 $00:22:18.120 \longrightarrow 00:22:19.389$ particularly this book,

NOTE Confidence: 0.894437417142857

 $00{:}22{:}19{.}389 \dashrightarrow 00{:}22{:}21{.}927$ but also how you introduced yourself

 $00{:}22{:}21{.}927 \dashrightarrow 00{:}22{:}24{.}035$ and how you came to come through

NOTE Confidence: 0.894437417142857

 $00{:}22{:}24.035 \dashrightarrow 00{:}22{:}25.805$ the work on the extended mind.

NOTE Confidence: 0.894437417142857

 $00:22:25.810 \longrightarrow 00:22:28.064$ 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

 $00:22:29.770 \longrightarrow 00:22:31.780$ coming around and sort of being

NOTE Confidence: 0.894437417142857

 $00:22:31.780 \longrightarrow 00:22:34.369$ a proof of concept for that that

NOTE Confidence: 0.894437417142857

 $00:22:34.369 \rightarrow 00:22:36.012$ question about the extended mind.

NOTE Confidence: 0.894437417142857

 $00:22:36.012 \longrightarrow 00:22:37.920$ I know that you started this

NOTE Confidence: 0.894437417142857

 $00:22:37.987 \longrightarrow 00:22:39.487$ 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

 $00{:}22{:}42.048 \dashrightarrow 00{:}22{:}45.226$ and I'm wondering what you see in

NOTE Confidence: 0.894437417142857

 $00{:}22{:}45{.}226 \dashrightarrow 00{:}22{:}48{.}254$ the pandemic that illuminates or

NOTE Confidence: 0.894437417142857

 $00{:}22{:}48.254 \dashrightarrow 00{:}22{:}51.353$ helps you understand this work on

NOTE Confidence: 0.894437417142857

 $00{:}22{:}51{.}353 \dashrightarrow 00{:}22{:}54{.}256$ the extended mind and what, UM,

NOTE Confidence: 0.894437417142857

 $00{:}22{:}54{.}256 \dashrightarrow 00{:}22{:}57{.}744$ what applications you might be able to share.

 $00:22:58.710 \rightarrow 00:23:00.378$ Yeah, that's such an interesting question.

NOTE Confidence: 0.9700307916666667

 $00{:}23{:}00{.}380 \dashrightarrow 00{:}23{:}03{.}266$ Call it the the pandemic was.

NOTE Confidence: 0.970030791666667

00:23:03.270 --> 00:23:03.770 Uhm, happening.

NOTE Confidence: 0.970030791666667

 $00:23:03.770 \rightarrow 00:23:06.037$ 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: 0.9700307916666667

00:23:07.940 --> 00:23:10.537 do I include even a reference to

NOTE Confidence: 0.9700307916666667

 $00:23:10.537 \rightarrow 00:23:12.429$ the pandemic in the book?

NOTE Confidence: 0.9700307916666667

 $00{:}23{:}12{.}430 \dashrightarrow 00{:}23{:}14{.}348$ Because so little was known at that

NOTE Confidence: 0.9700307916666667

 $00{:}23{:}14.348 \dashrightarrow 00{:}23{:}15.859$ point and everything was changing.

NOTE Confidence: 0.9700307916666667

 $00:23:15.860 \rightarrow 00:23:18.290$ 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: 0.9700307916666667

 $00:23:21.802 \longrightarrow 00:23:24.988$ book coming out when it did.

NOTE Confidence: 0.970030791666667

 $00:23:24.990 \longrightarrow 00:23:26.229$ The time I thought it was the

NOTE Confidence: 0.9700307916666667

 $00:23:26.229 \longrightarrow 00:23:27.369$ tail end of the pandemic.

NOTE Confidence: 0.970030791666667

00:23:27.370 --> 00:23:28.426 You remember those brief,

NOTE Confidence: 0.9700307916666667

 $00{:}23{:}28{.}426 \dashrightarrow 00{:}23{:}29{.}746$ glorious moments in the summer

- NOTE Confidence: 0.9700307916666667
- $00:23:29.746 \longrightarrow 00:23:31.229$ when we all thought that it was.
- NOTE Confidence: 0.9700307916666667
- 00:23:31.230 --> 00:23:33.250 It was in in retreat,
- NOTE Confidence: 0.9700307916666667
- $00:23:33.250 \longrightarrow 00:23:35.548$ but that wasn't to be so,
- NOTE Confidence: 0.9700307916666667
- $00:23:35.550 \longrightarrow 00:23:37.190$ but certainly by that point
- NOTE Confidence: 0.9700307916666667
- $00:23:37.190 \longrightarrow 00:23:39.549$ in in June when it came out,
- NOTE Confidence: 0.970030791666667
- $00:23:39.550 \longrightarrow 00:23:41.175$ we'd been through more than
- NOTE Confidence: 0.9700307916666667
- $00:23:41.175 \rightarrow 00:23:43.550$ a year of the pandemic,
- NOTE Confidence: 0.9700307916666667
- $00:23:43.550 \rightarrow 00:23:48.076$ and I really did feel that the pandemic,
- NOTE Confidence: 0.9700307916666667
- 00:23:48.076 --> 00:23:49.252 oddly enough,
- NOTE Confidence: 0.9700307916666667
- $00{:}23{:}49{.}252 \dashrightarrow 00{:}23{:}52{.}192$ was almost like this vast
- NOTE Confidence: 0.9700307916666667
- $00:23:52.192 \rightarrow 00:23:54.735$ natural experiment that exposed.
- NOTE Confidence: 0.9700307916666667
- 00:23:54.735 --> 00:23:55.950 In many ways,
- NOTE Confidence: 0.9700307916666667
- $00{:}23{:}55{.}950 \dashrightarrow 00{:}23{:}57{.}975$ the importance of the extended
- NOTE Confidence: 0.9700307916666667
- $00{:}23{:}57{.}975 \dashrightarrow 00{:}24{:}00{.}478$ mind precisely because it cut off.
- NOTE Confidence: 0.9700307916666667
- $00:24:00.480 \longrightarrow 00:24:04.990$ So for so many of us it cut off from us.
- NOTE Confidence: 0.9700307916666667

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

NOTE Confidence: 0.9700307916666667

 $00{:}24{:}07{.}390 \dashrightarrow 00{:}24{:}09{.}130$ the mental extensions that

NOTE Confidence: 0.970030791666667

 $00:24:09.130 \longrightarrow 00:24:11.740$ usually help us think in everyday

NOTE Confidence: 0.9700307916666667

00:24:11.814 - > 00:24:13.989 pre pandemic life for example.

NOTE Confidence: 0.970030791666667

 $00{:}24{:}13.990 \dashrightarrow 00{:}24{:}16.932$ I mean the most most obvious example is

NOTE Confidence: 0.970030791666667

 $00{:}24{:}16{.}932 \dashrightarrow 00{:}24{:}19{.}939$ that all of the sudden many of our students,

NOTE Confidence: 0.970030791666667

 $00:24:19.940 \longrightarrow 00:24:21.782$ many of our children were not

NOTE Confidence: 0.9700307916666667

 $00:24:21.782 \rightarrow 00:24:23.010$ interacting with their classmates

NOTE Confidence: 0.970030791666667

 $00:24:23.066 \longrightarrow 00:24:24.190$ and teachers in person.

NOTE Confidence: 0.9700307916666667

 $00:24:24.190 \longrightarrow 00:24:25.738$ Many of us were no longer

NOTE Confidence: 0.9700307916666667

 $00{:}24{:}25.738 \dashrightarrow 00{:}24{:}26.770$ interacting with their colleagues.

NOTE Confidence: 0.9700307916666667

 $00{:}24{:}26.770 \dashrightarrow 00{:}24{:}28.961$ At work or even with friends

NOTE Confidence: 0.9700307916666667

00:24:28.961 --> 00:24:30.829 or others outside our household,

NOTE Confidence: 0.9700307916666667

 $00{:}24{:}30{.}830 \dashrightarrow 00{:}24{:}33{.}287$ and I think we really felt the

NOTE Confidence: 0.970030791666667

 $00:24:33.287 \longrightarrow 00:24:35.060$ the contraction you know of

NOTE Confidence: 0.9700307916666667

 $00:24:35.060 \rightarrow 00:24:37.004$ of not having that in person.

- NOTE Confidence: 0.9700307916666667
- $00:24:37.010 \rightarrow 00:24:38.575$ Interaction with other people and
- NOTE Confidence: 0.9700307916666667
- $00:24:38.575 \rightarrow 00:24:41.214$ the way that we can share mine space
- NOTE Confidence: 0.9700307916666667
- $00:24:41.214 \rightarrow 00:24:43.236$ with other people when we're having
- NOTE Confidence: 0.9700307916666667
- $00:24:43.236 \longrightarrow 00:24:45.169$ that face to face conversation,
- NOTE Confidence: 0.9700307916666667
- $00{:}24{:}45{.}170 \dashrightarrow 00{:}24{:}47{.}193$ although of course we all did our
- NOTE Confidence: 0.970030791666667
- $00{:}24{:}47.193 \dashrightarrow 00{:}24{:}49.234$ best with with zoom and these
- NOTE Confidence: 0.9700307916666667
- $00:24:49.234 \rightarrow 00:24:50.347$ these other platforms.
- NOTE Confidence: 0.970030791666667
- $00:24:50.350 \rightarrow 00:24:51.886$ But there are other examples too,
- NOTE Confidence: 0.970030791666667
- $00{:}24{:}51{.}890 \dashrightarrow 00{:}24{:}54{.}162$ like there was a professor who said to
- NOTE Confidence: 0.9700307916666667
- $00:24:54.162 \rightarrow 00:24:56.780$ 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
- $00{:}24{:}58{.}485 \dashrightarrow 00{:}24{:}59{.}849$ all during the pandemic,
- NOTE Confidence: 0.9700307916666667
- $00{:}24{:}59{.}850 \dashrightarrow 00{:}25{:}02{.}362$ all of that had been shut down and
- NOTE Confidence: 0.9700307916666667
- $00{:}25{:}02{.}362 \dashrightarrow 00{:}25{:}04{.}598$ he realized that he had an office
- NOTE Confidence: 0.9700307916666667
- $00{:}25{:}04.598 \dashrightarrow 00{:}25{:}06.931$ full of books that were arranged in
- NOTE Confidence: 0.970030791666667

 $00:25:06.931 \rightarrow 00:25:09.465$ on shelves around him in a specific

NOTE Confidence: 0.9700307916666667

00:25:09.465 --> 00:25:11.455 order and that he actually had

NOTE Confidence: 0.9700307916666667

 $00{:}25{:}11{.}455 \dashrightarrow 00{:}25{:}13{.}466$ become used to using the visual

NOTE Confidence: 0.9700307916666667

 $00{:}25{:}13.466 \dashrightarrow 00{:}25{:}15.692$ cues of the books around him to

NOTE Confidence: 0.970030791666667

 $00{:}25{:}15.692 \dashrightarrow 00{:}25{:}17.858$ shape his thinking or structure.

NOTE Confidence: 0.9700307916666667

 $00{:}25{:}17.860 \dashrightarrow 00{:}25{:}18.440$ H is 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

 $00:25:21.148 \rightarrow 00:25:25.020$ being cut off from this physical setting of,

NOTE Confidence: 0.9700307916666667

 $00{:}25{:}25{.}020 \dashrightarrow 00{:}25{:}25{.}544$ you know,

NOTE Confidence: 0.9700307916666667

 $00{:}25{:}25{.}544 \dashrightarrow 00{:}25{:}27{.}116$ there was some sense in which.

NOTE Confidence: 0.9700307916666667

 $00{:}25{:}27{.}120 \dashrightarrow 00{:}25{:}29{.}824$ His mind was outside his his skull and

NOTE Confidence: 0.9700307916666667

 $00{:}25{:}29{.}824 \dashrightarrow 00{:}25{:}32{.}641$ and and on his raid on his shelves and

NOTE Confidence: 0.9700307916666667

 $00{:}25{:}32{.}641 \dashrightarrow 00{:}25{:}35{.}738$ he was no longer having access to that.

NOTE Confidence: 0.9700307916666667

 $00:25:35.740 \longrightarrow 00:25:36.096$ So,

NOTE Confidence: 0.970030791666667

00:25:36.096 --> 00:25:36.808 you know,

NOTE Confidence: 0.970030791666667

 $00:25:36.808 \rightarrow 00:25:38.588$ philosophers have long played around

- NOTE Confidence: 0.9700307916666667
- $00:25:38.588 \rightarrow 00:25:40.904$ with this sort of thought experiment of
- NOTE Confidence: 0.9700307916666667
- $00{:}25{:}40{.}904 \dashrightarrow 00{:}25{:}43{.}700$ like what if we're all just brains in vats,
- NOTE Confidence: 0.9700307916666667
- $00{:}25{:}43.700 \dashrightarrow 00{:}25{:}44.826$ you know,
- NOTE Confidence: 0.9700307916666667
- $00:25:44.826 \rightarrow 00:25:46.870$ like the movie The matrix?
- NOTE Confidence: 0.9700307916666667
- $00{:}25{:}46.870 \dashrightarrow 00{:}25{:}47.786$ Kind of, you know,
- NOTE Confidence: 0.970030791666667
- $00:25:47.786 \longrightarrow 00:25:49.160$ plays with this idea as well.
- NOTE Confidence: 0.9700307916666667
- $00{:}25{:}49{.}160 \dashrightarrow 00{:}25{:}50{.}735$ And I actually have the
- NOTE Confidence: 0.970030791666667
- $00:25:50.735 \longrightarrow 00:25:52.310$ I have the feeling that
- NOTE Confidence: 0.905017070714286
- $00{:}25{:}52{.}382 \dashrightarrow 00{:}25{:}54{.}058$ come during the pandemic.
- NOTE Confidence: 0.905017070714286
- $00{:}25{:}54.060 \dashrightarrow 00{:}25{:}55.860$ We all kind of were brains in vats.
- NOTE Confidence: 0.905017070714286
- $00{:}25{:}55{.}860 \dashrightarrow 00{:}25{:}57{.}468$ You know? We were brains in front of.
- NOTE Confidence: 0.905017070714286
- $00{:}25{:}57{.}470 \dashrightarrow 00{:}26{:}00{.}726$ Greens, lots of us were not moving around
- NOTE Confidence: 0.905017070714286
- $00:26:00.726 \rightarrow 00:26:04.289$ as much as we used as we would normally.
- NOTE Confidence: 0.905017070714286
- $00{:}26{:}04{.}290 \dashrightarrow 00{:}26{:}05{.}220$ We weren't commuting.
- NOTE Confidence: 0.905017070714286
- $00:26:05.220 \longrightarrow 00:26:06.150$ We weren't traveling.
- NOTE Confidence: 0.905017070714286

 $00:26:06.150 \rightarrow 00:26:08.676$ We weren't visiting, stimulating new places,

NOTE Confidence: 0.905017070714286

 $00:26:08.680 \rightarrow 00:26:11.440$ we weren't seeing people in person.

NOTE Confidence: 0.905017070714286

 $00:26:11.440 \longrightarrow 00:26:12.724$ Some of us may have been

NOTE Confidence: 0.905017070714286

 $00:26:12.724 \rightarrow 00:26:13.850$ getting out into nature more.

NOTE Confidence: 0.905017070714286

 $00:26:13.850 \longrightarrow 00:26:15.929$ I think that was one upside of the pandemic,

NOTE Confidence: 0.905017070714286

 $00:26:15.930 \longrightarrow 00:26:21.150$ but uhm. You know one of the, UM?

NOTE Confidence: 0.905017070714286

 $00{:}26{:}21{.}150 \dashrightarrow 00{:}26{:}24{.}060$ One of the points that I return to again and NOTE Confidence: 0.905017070714286

 $00{:}26{:}24.135 \dashrightarrow 00{:}26{:}26.754$ again in the book is the metaphors we use

NOTE Confidence: 0.905017070714286

 $00{:}26{:}26{.}754 \dashrightarrow 00{:}26{:}29{.}640$ to understand the brain and and thinking,

NOTE Confidence: 0.905017070714286

 $00{:}26{:}29{.}640 \dashrightarrow 00{:}26{:}32{.}226$ and how, how profoundly those metaphors NOTE Confidence: 0.905017070714286

 $00{:}26{:}32{.}226 \dashrightarrow 00{:}26{:}35{.}837$ affect the way we we think about thinking.

NOTE Confidence: 0.905017070714286

 $00{:}26{:}35{.}840 \dashrightarrow 00{:}26{:}39{.}081$ And one of those metaphors very common

NOTE Confidence: 0.905017070714286

 $00{:}26{:}39.081 \dashrightarrow 00{:}26{:}41.539$ and pervasive metaphor is the brain.

NOTE Confidence: 0.905017070714286

 $00:26:41.540 \longrightarrow 00:26:42.664$ As computer, you know.

NOTE Confidence: 0.905017070714286

 $00:26:42.664 \rightarrow 00:26:44.717$ And it always strikes me as interesting

NOTE Confidence: 0.905017070714286

 $00:26:44.717 \longrightarrow 00:26:46.880$ that human beings in the middle of

 $00:26:46.880 \rightarrow 00:26:49.019$ the last century created computers.

NOTE Confidence: 0.905017070714286

 $00:26:49.020 \longrightarrow 00:26:50.670$ And then we kind of analogize

NOTE Confidence: 0.905017070714286

 $00{:}26{:}50.670 \dashrightarrow 00{:}26{:}51.495$ ourselves to them.

NOTE Confidence: 0.905017070714286

 $00:26:51.500 \rightarrow 00:26:53.700$ And compared ourselves to them in some ways,

NOTE Confidence: 0.905017070714286

 $00:26:53.700 \rightarrow 00:26:57.648$ we created computers to be a kind of

NOTE Confidence: 0.905017070714286

 $00{:}26{:}57{.}648 \dashrightarrow 00{:}26{:}59{.}424$ idealized version of the human brain.

NOTE Confidence: 0.905017070714286

00:26:59.430 --> 00:26:59.998 You know,

NOTE Confidence: 0.905017070714286

 $00{:}26{:}59{.}998 \dashrightarrow 00{:}27{:}02{.}270$ a brain that we could give commands to

NOTE Confidence: 0.905017070714286

 $00{:}27{:}02{.}333 \dashrightarrow 00{:}27{:}04{.}565$ that would execute those commands that

NOTE Confidence: 0.905017070714286

 $00:27:04.565 \rightarrow 00:27:08.083$ would not be embroiled in all this messy

NOTE Confidence: 0.905017070714286

 $00:27:08.083 \rightarrow 00:27:11.339$ stuff of emotions and and the body.

NOTE Confidence: 0.905017070714286

 $00{:}27{:}11{.}340 \dashrightarrow 00{:}27{:}16{.}506$ And that's interestingly, I think the.

NOTE Confidence: 0.905017070714286

00:27:16.510 --> 00:27:18.510 B.

NOTE Confidence: 0.905017070714286

 $00{:}27{:}18.510 \dashrightarrow 00{:}27{:}23.886$ Miss the the misconceptions are Aurum.

NOTE Confidence: 0.905017070714286

 $00{:}27{:}23.890 \dashrightarrow 00{:}27{:}26.428$ You know faulty beliefs behind that

 $00:27:26.428 \rightarrow 00:27:28.865$ idea are becoming more and more

NOTE Confidence: 0.905017070714286

00:27:28.865 --> 00:27:31.545 evident in the failures or the the

NOTE Confidence: 0.905017070714286

 $00:27:31.624 \rightarrow 00:27:34.248$ deficits of artificial intelligence.

NOTE Confidence: 0.905017070714286

 $00{:}27{:}34.250 \dashrightarrow 00{:}27{:}36.819$ It turns out that we can create

NOTE Confidence: 0.905017070714286

 $00:27:36.819 \longrightarrow 00:27:38.430$ computers that play chess.

NOTE Confidence: 0.905017070714286

 $00{:}27{:}38{.}430 \dashrightarrow 00{:}27{:}39{.}940$ You know better than than

NOTE Confidence: 0.905017070714286

 $00:27:39.940 \longrightarrow 00:27:40.846$ the world's grandmasters.

NOTE Confidence: 0.905017070714286

 $00:27:40.850 \rightarrow 00:27:43.946$ But it turns out to be really hard to

NOTE Confidence: 0.905017070714286

 $00:27:43.946 \rightarrow 00:27:46.967$ program a robot to navigate through space,

NOTE Confidence: 0.905017070714286

 $00{:}27{:}46{.}970 \dashrightarrow 00{:}27{:}49{.}790$ as well as a child can or or interact with

NOTE Confidence: 0.905017070714286

 $00{:}27{:}49.862 \dashrightarrow 00{:}27{:}52.614$ another person as fluidly as a child can.

NOTE Confidence: 0.905017070714286

 $00:27:52.620 \longrightarrow 00:27:53.976$ So when we.

NOTE Confidence: 0.905017070714286

 $00{:}27{:}53{.}976 \dashrightarrow 00{:}27{:}57{.}140$ Think of the brain as a computer.

NOTE Confidence: 0.905017070714286

 $00{:}27{:}57{.}140 \dashrightarrow 00{:}27{:}59{.}534$ We're actually cutting off or ignoring

NOTE Confidence: 0.905017070714286

 $00:27:59.534 \rightarrow 00:28:01.953$ many of the wellsprings of human

NOTE Confidence: 0.905017070714286

 $00:28:01.953 \longrightarrow 00:28:03.838$ intelligence which are the body.

 $00{:}28{:}03{.}840 \dashrightarrow 00{:}28{:}06{.}492$ Which are the fact that which do

NOTE Confidence: 0.905017070714286

 $00:28:06.492 \longrightarrow 00:28:08.380$ in here in the sense that we are

NOTE Confidence: 0.905017070714286

 $00:28:08.443 \rightarrow 00:28:10.113$ embedded in a physical environment

NOTE Confidence: 0.905017070714286

 $00:28:10.113 \longrightarrow 00:28:12.272$ and we're embedded in a social

NOTE Confidence: 0.905017070714286

 $00{:}28{:}12{.}272 \dashrightarrow 00{:}28{:}13{.}976$ network of social connections.

NOTE Confidence: 0.905017070714286

 $00{:}28{:}13{.}980 \dashrightarrow 00{:}28{:}16{.}194$ So the other prominent metaphor that

NOTE Confidence: 0.905017070714286

 $00:28:16.194 \longrightarrow 00:28:18.820$ you will often hear in regards to the

NOTE Confidence: 0.905017070714286

 $00{:}28{:}18.820 \dashrightarrow 00{:}28{:}21.498$ brain is the brain is a muscle and this

NOTE Confidence: 0.905017070714286

 $00{:}28{:}21{.}498 \dashrightarrow 00{:}28{:}24{.}370$ is I'm circling back around to the to the.

NOTE Confidence: 0.905017070714286

 $00:28:24.370 \longrightarrow 00:28:25.770$ To the pandemic and your

NOTE Confidence: 0.905017070714286

 $00:28:25.770 \longrightarrow 00:28:27.160$ question about the pandemic.

NOTE Confidence: 0.905017070714286

 $00{:}28{:}27.160 \dashrightarrow 00{:}28{:}30.570$ Kyle because although the idea of the

NOTE Confidence: 0.905017070714286

 $00{:}28{:}30{.}570 \dashrightarrow 00{:}28{:}32{.}954$ brain is a muscle which is prominent

NOTE Confidence: 0.905017070714286

 $00{:}28{:}32{.}954 \dashrightarrow 00{:}28{:}35{.}192$ in theories like the growth mindset

NOTE Confidence: 0.905017070714286

 $00:28:35.192 \rightarrow 00:28:37.966$ which is put put forth by psychologist,

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

 $00:28:44.830 \longrightarrow 00:28:47.094$ Although I think that idea that the brain

NOTE Confidence: 0.905017070714286

 $00:28:47.094 \rightarrow 00:28:50.127$ is a muscle and the more we work our brains,

NOTE Confidence: 0.905017070714286

 $00:28:50.130 \longrightarrow 00:28:51.650$ the the stronger they get,

NOTE Confidence: 0.905017070714286

 $00:28:51.650 \longrightarrow 00:28:53.528$ the smarter we get that can

NOTE Confidence: 0.905017070714286

 $00:28:53.528 \dashrightarrow 00:28:55.370$ 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

 $00{:}28{:}56{.}606 \dashrightarrow 00{:}28{:}58{.}876$ I think it's limited in the sense

NOTE Confidence: 0.905017070714286

 $00:28:58.876 \longrightarrow 00:29:00.626$ that it's still brain bound.

NOTE Confidence: 0.94091315

 $00{:}29{:}00{.}630 \dashrightarrow 00{:}29{:}02{.}388$ It's still focused on on the

NOTE Confidence: 0.94091315

 $00{:}29{:}02{.}388 \dashrightarrow 00{:}29{:}03{.}990$ brain and the brain alone.

NOTE Confidence: 0.94091315

 $00:29:03.990 \rightarrow 00:29:05.766$ And what happened during the pandemic?

NOTE Confidence: 0.94091315

 $00{:}29{:}05{.}770 \dashrightarrow 00{:}29{:}08{.}110$ You know, as many of us found that we

NOTE Confidence: 0.94091315

 $00:29:08.110 \rightarrow 00:29:10.265$ were working longer hours than ever

- NOTE Confidence: 0.94091315
- $00{:}29{:}10.265 \dashrightarrow 00{:}29{:}12.790$ because we didn't have a commute.

 $00:29:12.790 \rightarrow 00:29:15.387$ We didn't have a water cooler chats,

NOTE Confidence: 0.94091315

 $00:29:15.390 \longrightarrow 00:29:17.462$ 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

 $00{:}29{:}21{.}590 \dashrightarrow 00{:}29{:}22{.}910$ But we weren't a lot,

NOTE Confidence: 0.94091315

 $00:29:22.910 \longrightarrow 00:29:24.275$ so I don't think many of us

NOTE Confidence: 0.94091315

 $00:29:24.275 \longrightarrow 00:29:25.564$ felt that we were, you know.

NOTE Confidence: 0.94091315

 $00:29:25.564 \rightarrow 00:29:27.650$ 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

 $00:29:31.963 \rightarrow 00:29:35.064$ 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

 $00:29:37.430 \rightarrow 00:29:39.908$ 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

 $00{:}29{:}40{.}544 \dashrightarrow 00{:}29{:}43{.}080$ I feel like there was almost a natural

 $00{:}29{:}43.149 \dashrightarrow 00{:}29{:}46.000$ experiment that could help make visible

NOTE Confidence: 0.94091315

 $00:29:46.000 \rightarrow 00:29:48.325$ how important mental extensions are,

NOTE Confidence: 0.94091315

 $00:29:48.330 \rightarrow 00:29:49.644$ and I'll just say one more thing about that,

NOTE Confidence: 0.94091315

 $00{:}29{:}49{.}650 \dashrightarrow 00{:}29{:}51{.}848$ which is that the thing I love

NOTE Confidence: 0.94091315

 $00{:}29{:}51{.}848 \dashrightarrow 00{:}29{:}53{.}718$ about the theory of the extended

NOTE Confidence: 0.94091315

 $00:29:53.718 \rightarrow 00:29:56.130$ mind is that it gives us so many.

NOTE Confidence: 0.94091315

 $00:29:56.130 \longrightarrow 00:29:58.020$ 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

 $00:30:02.316 \longrightarrow 00:30:05.220$ of the growth mindset.

NOTE Confidence: 0.94091315

 $00{:}30{:}05{.}220 \dashrightarrow 00{:}30{:}07{.}722$ What's what's your option when you're

NOTE Confidence: 0.94091315

 $00:30:07.722 \longrightarrow 00:30:10.040$ 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

 $00:30:13.050 \rightarrow 00:30:15.498$ It's just to keep at it and keep trying,

NOTE Confidence: 0.94091315

 $00:30:15.500 \dashrightarrow 00:30:18.356$ and keep exercising them that muscle.

NOTE Confidence: 0.94091315

 $00:30:18.360 \longrightarrow 00:30:20.270$ Whereas with the with the

- NOTE Confidence: 0.94091315
- $00:30:20.270 \longrightarrow 00:30:22.180$ theory of the extended mind,
- NOTE Confidence: 0.94091315
- $00:30:22.180 \rightarrow 00:30:24.460$ suddenly there's literally a whole
- NOTE Confidence: 0.94091315
- $00{:}30{:}24.460 \dashrightarrow 00{:}30{:}26.740$ world of extra neural resources
- NOTE Confidence: 0.94091315
- $00:30:26.818 \rightarrow 00:30:29.280$ that you can bring in to help your
- NOTE Confidence: 0.94091315
- $00:30:29.280 \rightarrow 00:30:31.280$ 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
- $00:30:33.920 \longrightarrow 00:30:34.920$ You might act it out.
- NOTE Confidence: 0.94091315
- $00{:}30{:}34{.}920 \dashrightarrow 00{:}30{:}36{.}138$ You might go for a run.
- NOTE Confidence: 0.94091315
- $00:30:36.140 \longrightarrow 00:30:37.000$ 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
- $00:30:38.740 \longrightarrow 00:30:40.420$ I just come to me.
- NOTE Confidence: 0.94091315
- $00{:}30{:}40{.}420 \dashrightarrow 00{:}30{:}43{.}052$ It opens up the IT opens up
- NOTE Confidence: 0.94091315
- $00:30:43.052 \rightarrow 00:30:45.845$ the universe of options that we
- NOTE Confidence: 0.94091315
- $00:30:45.845 \rightarrow 00:30:48.470$ have for enhancing our thinking.
- NOTE Confidence: 0.94091315
- $00:30:48.470 \longrightarrow 00:30:51.158$ And that's partly why I feel like
- NOTE Confidence: 0.94091315

 $00:30:51.158 \rightarrow 00:30:53.418$ such an evangelist for this idea.

NOTE Confidence: 0.94091315

 $00{:}30{:}53{.}420 \dashrightarrow 00{:}30{:}55{.}324$ And it did turn out to be the

NOTE Confidence: 0.94091315

 $00:30:55.324 \rightarrow 00:30:57.307$ 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

 $00:31:01.816 \longrightarrow 00:31:06.580$ 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

 $00:31:09.640 \longrightarrow 00:31:11.902$ of the extended mind is really

NOTE Confidence: 0.94200490625

 $00{:}31{:}11{.}902 \dashrightarrow 00{:}31{:}14{.}499$ resonates with a kind of fundamental

NOTE Confidence: 0.94200490625

 $00{:}31{:}14.499 \dashrightarrow 00{:}31{:}16.527$ and transformational process that's

NOTE Confidence: 0.94200490625

 $00{:}31{:}16.527 \dashrightarrow 00{:}31{:}19.580$ happening in in our universities,

NOTE Confidence: 0.94200490625

 $00{:}31{:}19{.}580 \dashrightarrow 00{:}31{:}21{.}200$ particularly in medical schools

NOTE Confidence: 0.94200490625

 $00:31:21.200 \longrightarrow 00:31:22.415$ and research enterprises,

NOTE Confidence: 0.94200490625

 $00{:}31{:}22{.}420 \dashrightarrow 00{:}31{:}25{.}493$ 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

 $00{:}31{:}27{.}940 \dashrightarrow 00{:}31{:}29{.}830$ Scientists with the idea that

NOTE Confidence: 0.94200490625

 $00:31:29.830 \longrightarrow 00:31:32.173$ there would be a certain rigid

 $00:31:32.173 \rightarrow 00:31:34.819$ narrow set of metrics by which we

NOTE Confidence: 0.94200490625

 $00:31:34.819 \longrightarrow 00:31:36.552$ could evaluate all individuals.

NOTE Confidence: 0.94200490625

 $00{:}31{:}36{.}552 \dashrightarrow 00{:}31{:}39{.}468$ 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

 $00{:}31{:}41{.}428 \dashrightarrow 00{:}31{:}44{.}158$ a shift to thinking about team

NOTE Confidence: 0.94200490625

 $00{:}31{:}44.158 \dashrightarrow 00{:}31{:}46.650$ science and and that shift to Team

NOTE Confidence: 0.94200490625

 $00{:}31{:}46.650 \dashrightarrow 00{:}31{:}50.058$ 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

 $00{:}31{:}57{.}150 \dashrightarrow 00{:}32{:}00{.}162$ from a certain prototype of what

NOTE Confidence: 0.94200490625

 $00{:}32{:}00{.}162 \dashrightarrow 00{:}32{:}02{.}702$ 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

 $00{:}32{:}05{.}214 \dashrightarrow 00{:}32{:}07{.}718$ how diversity of abilities.

NOTE Confidence: 0.94200490625

 $00:32:07.720 \longrightarrow 00:32:09.464$ Backgrounds perspectives can work

 $00:32:09.464 \longrightarrow 00:32:12.080$ 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

 $00:32:13.975 \longrightarrow 00:32:15.420$ be and and and,

NOTE Confidence: 0.94200490625

 $00:32:15.420 \longrightarrow 00:32:18.488$ and that in turn has changed our the

NOTE Confidence: 0.94200490625

 $00:32:18.488 \rightarrow 00:32:21.296$ way we evaluate people for promotion.

NOTE Confidence: 0.94200490625

 $00{:}32{:}21{.}300 \dashrightarrow 00{:}32{:}24{.}270$ We have different kinds of tracks

NOTE Confidence: 0.94200490625

 $00:32:24.270 \longrightarrow 00:32:27.013$ 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

 $00{:}32{:}27{.}922 \dashrightarrow 00{:}32{:}30{.}102$ but what do they bring to the

NOTE Confidence: 0.94200490625

 $00{:}32{:}30{.}102 \dashrightarrow 00{:}32{:}32{.}181$ team and how is the team advanced

NOTE Confidence: 0.94200490625

 $00:32:32.181 \longrightarrow 00:32:33.600$ 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

 $00:32:37.737 \longrightarrow 00:32:39.510$ a very fundamental.

NOTE Confidence: 0.94200490625

 $00:32:39.510 \longrightarrow 00:32:41.589$ Miffed in the way we think of

NOTE Confidence: 0.94200490625

 $00:32:41.589 \longrightarrow 00:32:43.871$ 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.

 $00:32:45.840 \longrightarrow 00:32:48.872$ Seems very much linked to this idea of

NOTE Confidence: 0.94200490625

 $00:32:48.872 \rightarrow 00:32:51.059$ the consciousness of the team as they,

NOTE Confidence: 0.94200490625

 $00:32:51.060 \rightarrow 00:32:52.530$ as opposed to the individual

NOTE Confidence: 0.896775922

 $00:32:52.760 \rightarrow 00:32:55.040$ yes and John. I'm curious,

NOTE Confidence: 0.896775922

 $00:32:55.040 \rightarrow 00:32:57.936$ 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

 $00{:}33{:}00{.}716 \dashrightarrow 00{:}33{:}03{.}112$ someone brings to a team or or do

NOTE Confidence: 0.896775922

 $00:33:03.112 \longrightarrow 00:33:05.336$ you evaluate the team as a whole

NOTE Confidence: 0.896775922

 $00:33:05.336 \dashrightarrow 00:33:07.466$ 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

 $00:33:08.936 \rightarrow 00:33:10.740$ on some of the hardest challenges,

NOTE Confidence: 0.925565293333333

 $00:33:10.740 \longrightarrow 00:33:13.002$ which is oftentimes the whole point

NOTE Confidence: 0.925565293333333

 $00{:}33{:}13.002 \dashrightarrow 00{:}33{:}16.364$ of the team is to make invisible

NOTE Confidence: 0.925565293333333

 $00{:}33{:}16{.}364 \dashrightarrow 00{:}33{:}18{.}137$ the individual contributions.

NOTE Confidence: 0.925565293333333

 $00:33:18.140 \longrightarrow 00:33:19.630$ And what what people bring

 $00:33:19.630 \longrightarrow 00:33:21.500$ to the success of the team?

NOTE Confidence: 0.925565293333333

 $00:33:21.500 \rightarrow 00:33:23.480$ Because sometimes what people bring

NOTE Confidence: 0.925565293333333

 $00:33:23.480 \longrightarrow 00:33:26.821$ to the team is the ability to hold

NOTE Confidence: 0.925565293333333

 $00:33:26.821 \rightarrow 00:33:29.377$ 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

 $00:33:31.570 \rightarrow 00:33:35.480$ socially or emotionally difficult process.

NOTE Confidence: 0.925565293333333

 $00:33:35.480 \longrightarrow 00:33:37.965$ And so that can be a challenge.

NOTE Confidence: 0.968910432

 $00:33:39.420 \longrightarrow 00:33:40.370$ I would say that it's

NOTE Confidence: 0.916039046

 $00:33:40.380 \longrightarrow 00:33:43.140$ kind of an evolving process,

NOTE Confidence: 0.916039046

 $00:33:43.140 \longrightarrow 00:33:46.752$ but what people look for is

NOTE Confidence: 0.916039046

 $00:33:46.752 \longrightarrow 00:33:48.412$ precisely that what do

NOTE Confidence: 0.916039046

 $00:33:48.412 \longrightarrow 00:33:50.695$ 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

 $00:33:53.470 \longrightarrow 00:33:54.805$ Ability to contribute to the

NOTE Confidence: 0.916039046

 $00:33:54.805 \rightarrow 00:33:56.570$ success of a group of people,

NOTE Confidence: 0.916039046

 $00:33:56.570 \longrightarrow 00:33:59.937$ and it's not often easy to to

- NOTE Confidence: 0.916039046
- $00:33:59.940 \longrightarrow 00:34:00.774$ as precisely estimate,
- NOTE Confidence: 0.916039046
- $00{:}34{:}00{.}774 \dashrightarrow 00{:}34{:}02{.}900$ but it's something that we're trying to do.
- NOTE Confidence: 0.956820014
- $00:34:04.540 \longrightarrow 00:34:05.356$ So interesting, yeah,
- NOTE Confidence: 0.956820014
- $00:34:05.356 \dashrightarrow 00:34:07.260$ 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
- $00:34:10.248 \longrightarrow 00:34:13.310$ Mellon who's looked at what, what?
- NOTE Confidence: 0.956820014
- $00{:}34{:}13{.}310 \dashrightarrow 00{:}34{:}16{.}950$ 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
- $00:34:22.792 \dashrightarrow 00:34:25.498$ that she has found is psychological
- NOTE Confidence: 0.956820014
- $00:34:25.498 \rightarrow 00:34:27.728$ perceptiveness you know the the
- NOTE Confidence: 0.956820014
- $00:34:27.728 \dashrightarrow 00:34:30.254$ individuals ability to understand other
- NOTE Confidence: 0.956820014
- $00{:}34{:}30{.}254 \dashrightarrow 00{:}34{:}33{.}539$ people empathize with other people.
- NOTE Confidence: 0.956820014
- $00{:}34{:}33{.}540 \dashrightarrow 00{:}34{:}35{.}508$ Take the perspective of other people
- NOTE Confidence: 0.956820014
- $00:34:35.508 \rightarrow 00:34:38.241$ and and she's also found that collective
- NOTE Confidence: 0.956820014

 $00:34:38.241 \rightarrow 00:34:40.506$ intelligence of a really important

NOTE Confidence: 0.956820014

 $00:34:40.506 \rightarrow 00:34:42.134$ contributing factor to collective

NOTE Confidence: 0.956820014

 $00:34:42.134 \rightarrow 00:34:44.102$ intelligence is how many women are

NOTE Confidence: 0.956820014

 $00:34:44.102 \rightarrow 00:34:46.300$ 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: 0.85750675555556

 $00{:}34{:}51{.}940 \dashrightarrow 00{:}34{:}54{.}685$ Annie, we've got a few questions in the chat,

NOTE Confidence: 0.85750675555556

 $00{:}34{:}54{.}690 \dashrightarrow 00{:}34{:}56{.}786$ and I think Kendall has her hand raised.

NOTE Confidence: 0.85750675555556

00:34:56.790 - 00:34:58.568 I'm gonna take some from the chat

NOTE Confidence: 0.85750675555556

 $00{:}34{:}58{.}568 \dashrightarrow 00{:}35{:}00{.}470$ first and I'll read them aloud.

NOTE Confidence: 0.85750675555556

 $00:35:00.470 \rightarrow 00:35:02.630$ I think this is a wonderful example

NOTE Confidence: 0.85750675555556

 $00{:}35{:}02.630 \dashrightarrow 00{:}35{:}04.590$ of the extended mind in practice,

NOTE Confidence: 0.85750675555556

00:35:04.590 - 00:35:05.926 and I think what you were hoping for,

NOTE Confidence: 0.85750675555556

 $00{:}35{:}05{.}930 \dashrightarrow 00{:}35{:}07{.}920$ not just conversation but a

NOTE Confidence: 0.85750675555556

 $00:35:07.920 \dashrightarrow 00:35:09.910$ kind of a collective effort.

NOTE Confidence: 0.85750675555556

 $00:35:09.910 \longrightarrow 00:35:12.088$ So the first question is this.

NOTE Confidence: 0.85750675555556

00:35:12.090 - 00:35:14.750 How does empathy come into

- NOTE Confidence: 0.85750675555556
- $00:35:14.750 \rightarrow 00:35:16.878$ cognition and purposeful action?
- NOTE Confidence: 0.85750675555556
- $00:35:16.880 \longrightarrow 00:35:18.520$ Any emotion for that matter?
- NOTE Confidence: 0.872658955
- $00:35:20.340 \rightarrow 00:35:22.926$ 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
- $00{:}35{:}26{.}380 \dashrightarrow 00{:}35{:}28{.}504$ and particularly the ability to take
- NOTE Confidence: 0.872658955
- $00:35:28.504 \dashrightarrow 00:35:30.760$ 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
- $00:35:35.083 \rightarrow 00:35:37.687$ important factor creating what?
- NOTE Confidence: 0.872658955
- $00:35:37.690 \rightarrow 00:35:40.510$ What scientists, what psychologists call?
- NOTE Confidence: 0.872658955
- 00:35:40.510 00:35:41.244 Collective intelligence,
- NOTE Confidence: 0.872658955
- $00:35:41.244 \longrightarrow 00:35:43.446$ when the intelligence of a
- NOTE Confidence: 0.872658955
- $00:35:43.446 \longrightarrow 00:35:45.241$ group can actually be sort of
- NOTE Confidence: 0.872658955
- $00:35:45.241 \longrightarrow 00:35:47.193$ more than the sum of its parts
- NOTE Confidence: 0.872658955
- $00{:}35{:}47.193 \dashrightarrow 00{:}35{:}49.198$ greater than the intelligence of
- NOTE Confidence: 0.872658955
- $00{:}35{:}49{.}198 \dashrightarrow 00{:}35{:}50{.}802$ the most intelligent individual.
- NOTE Confidence: 0.923267570909091

 $00:35:55.670 \rightarrow 00:35:56.875$ I'm thinking too about this

NOTE Confidence: 0.923267570909091

 $00:35:56.875 \rightarrow 00:35:58.730$ is a bit of a diversion,

NOTE Confidence: 0.923267570909091

 $00:35:58.730 \longrightarrow 00:36:01.298$ 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

 $00:36:03.010 \dashrightarrow 00:36:05.086$ which is the perception of these

NOTE Confidence: 0.923267570909091

 $00:36:05.086 \rightarrow 00:36:07.130$ internal signals and what one of

NOTE Confidence: 0.923267570909091

 $00{:}36{:}07{.}130 \dashrightarrow 00{:}36{:}08{.}918$ the most interesting things to me

NOTE Confidence: 0.923267570909091

 $00:36:08.918 \rightarrow 00:36:10.576$ about the study of interoception

NOTE Confidence: 0.923267570909091

 $00{:}36{:}10{.}576 \dashrightarrow 00{:}36{:}13{.}578$ 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

 $00:36:16.145 \rightarrow 00:36:18.085$ 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

 $00:36:20.141 \rightarrow 00:36:21.906$ often encouraged to sort of suppress

NOTE Confidence: 0.923267570909091

 $00:36:21.906 \rightarrow 00:36:24.255$ or push aside in the interests of just

NOTE Confidence: 0.923267570909091

 $00{:}36{:}24.255 \dashrightarrow 00{:}36{:}26.385$ powering through and getting it.

NOTE Confidence: 0.923267570909091

 $00:36:26.390 \longrightarrow 00:36:27.730$ Done with our big brains.

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

NOTE Confidence: 0.923267570909091

 $00:36:29.470 \longrightarrow 00:36:30.862$ flow of internal sensations,

NOTE Confidence: 0.923267570909091

 $00:36:30.870 \longrightarrow 00:36:33.398$ which is always there.

NOTE Confidence: 0.923267570909091

 $00{:}36{:}33{.}400 \dashrightarrow 00{:}36{:}35{.}554$ Has carried so much non conscious

NOTE Confidence: 0.923267570909091

 $00{:}36{:}35{.}554 \dashrightarrow 00{:}36{:}38{.}025$ information that we we have that otherwise

NOTE Confidence: 0.923267570909091

 $00{:}36{:}38.025 \dashrightarrow 00{:}36{:}40.980$ we have no access to or little access to.

NOTE Confidence: 0.923267570909091

 $00:36:40.980 \dashrightarrow 00:36:43.386$ 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

 $00:36:47.548 \longrightarrow 00:36:49.584$ feel and and what our past,

NOTE Confidence: 0.923267570909091

 $00:36:49.584 \rightarrow 00:36:52.154$ how our past experiences can

NOTE Confidence: 0.923267570909091

 $00{:}36{:}52{.}154 \dashrightarrow 00{:}36{:}54{.}210$ inform our current behavior,

NOTE Confidence: 0.923267570909091

 $00{:}36{:}54{.}210 \dashrightarrow 00{:}36{:}56{.}534$ but also there's such a thing as

NOTE Confidence: 0.923267570909091

 $00{:}36{:}56{.}534 \dashrightarrow 00{:}36{:}58{.}172$ social interoception that this is

NOTE Confidence: 0.923267570909091

 $00:36:58.172 \rightarrow 00:37:00.216$ going back to that question of empathy

 $00:37:00.216 \rightarrow 00:37:02.080$ that you know when we're talking

NOTE Confidence: 0.923267570909091

 $00{:}37{:}02.080 \dashrightarrow 00{:}37{:}04.066$ to another person face to face.

NOTE Confidence: 0.923267570909091

 $00:37:04.066 \rightarrow 00:37:06.396$ We are automatically and unconsciously

NOTE Confidence: 0.923267570909091

 $00:37:06.396 \rightarrow 00:37:09.140$ mimicking in a very subtle way,

NOTE Confidence: 0.923267570909091

 $00:37:09.140 \longrightarrow 00:37:10.748$ their facial expressions,

NOTE Confidence: 0.923267570909091

 $00{:}37{:}10.748 \dashrightarrow 00{:}37{:}12.524$ their gestures, their postures.

NOTE Confidence: 0.923267570909091

 $00{:}37{:}12.524 \dashrightarrow 00{:}37{:}15.340$ And then we read off our own bodies,

NOTE Confidence: 0.923267570909091

 $00:37:15.340 \rightarrow 00:37:18.576$ 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

 $00{:}37{:}19.580 \dashrightarrow 00{:}37{:}21.402$ we have no direct access to what

NOTE Confidence: 0.923267570909091

 $00:37:21.402 \rightarrow 00:37:23.046$ another person is thinking or feeling.

NOTE Confidence: 0.923267570909091

 $00:37:23.050 \longrightarrow 00:37:24.989$ They're their brain is a kind of

NOTE Confidence: 0.923267570909091

 $00:37:24.989 \longrightarrow 00:37:27.065$ black box and it's it's the body

NOTE Confidence: 0.923267570909091

 $00{:}37{:}27.065 \dashrightarrow 00{:}37{:}29.082$ that creates a kind of channel

NOTE Confidence: 0.923267570909091

 $00:37:29.082 \rightarrow 00:37:31.217$ or conduit between two people.

- NOTE Confidence: 0.923267570909091
- 00:37:31.220 --> 00:37:31.926 And interestingly,
- NOTE Confidence: 0.923267570909091
- $00:37:31.926 \rightarrow 00:37:34.750$ therapists are kind of the are the ultimate.
- NOTE Confidence: 0.923267570909091
- $00:37:34.750 \longrightarrow 00:37:35.860$ Experts at this,
- NOTE Confidence: 0.923267570909091
- $00{:}37{:}35{.}860 \dashrightarrow 00{:}37{:}37{.}710$ you know the rapists use their
- NOTE Confidence: 0.923267570909091
- $00:37:37.710 \longrightarrow 00:37:39.909$ bodies to sense what the other,
- NOTE Confidence: 0.923267570909091
- $00:37:39.910 \longrightarrow 00:37:41.596$ what the patient is is feeling
- NOTE Confidence: 0.923267570909091
- $00:37:41.596 \longrightarrow 00:37:43.619$ even when the patient may hurt him
- NOTE Confidence: 0.923267570909091
- $00:37:43.619 \rightarrow 00:37:45.305$ 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
- $00:37:46.940 \longrightarrow 00:37:47.540$ 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
- $00:37:49.510 \longrightarrow 00:37:50.858$ And in psychiatry this,
- NOTE Confidence: 0.923267570909091
- $00:37:50.858 \dashrightarrow 00:37:53.310$ but I think it's so interesting again,
- NOTE Confidence: 0.923267570909091
- $00{:}37{:}53{.}310 \dashrightarrow 00{:}37{:}56{.}026$ in the context of our Western culture,
- NOTE Confidence: 0.923267570909091
- $00{:}37{:}56{.}030 \dashrightarrow 00{:}37{:}58{.}970$ which says mind and body are separate,
- NOTE Confidence: 0.923267570909091

- $00:37:58.970 \longrightarrow 00:38:00.194$ mind is superior.
- NOTE Confidence: 0.923267570909091
- $00{:}38{:}00{.}194 \dashrightarrow 00{:}38{:}02{.}912$ Mind is this sort of spotless
- NOTE Confidence: 0.923267570909091
- $00:38:02.912 \longrightarrow 00:38:05.600$ celestial sphere of rational.
- NOTE Confidence: 0.923267570909091
- $00:38:05.600 \rightarrow 00:38:08.694$ Thought and the body is this irrational,
- NOTE Confidence: 0.923267570909091
- $00{:}38{:}08{.}700 \dashrightarrow 00{:}38{:}09{.}118$ ungovernable,
- NOTE Confidence: 0.923267570909091
- $00:38:09.118 \rightarrow 00:38:12.044$ 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
- $00:38:15.280 \rightarrow 00:38:16.978$ When really as I've been saying,
- NOTE Confidence: 0.923267570909091
- $00:38:16.980 \longrightarrow 00:38:19.518$ the body is a wellspring of
- NOTE Confidence: 0.923267570909091
- $00:38:19.518 \longrightarrow 00:38:20.364$ human intelligence.
- NOTE Confidence: 0.923267570909091
- $00:38:20.370 \dashrightarrow 00:38:22.818$ And to cut it off or to disregard
- NOTE Confidence: 0.923267570909091
- $00:38:22.818 \longrightarrow 00:38:24.379$ it is to make,
- NOTE Confidence: 0.923267570909091
- $00:38:24.380 \longrightarrow 00:38:25.012$ uh, it's.
- NOTE Confidence: 0.923267570909091
- $00:38:25.012 \longrightarrow 00:38:27.224$ It's to leave a lot of potential
- NOTE Confidence: 0.923267570909091
- $00:38:27.224 \rightarrow 00:38:28.349$ intelligence on the table.
- NOTE Confidence: 0.900023788571429
- 00:38:31.240 --> 00:38:32.675 Thanks Annie, I'm gonna take

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

 $00:38:36.070 \dashrightarrow 00:38:39.130$ 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

 $00{:}38{:}40{.}538 \dashrightarrow 00{:}38{:}43{.}460$ It inspires a memory of a superb and

NOTE Confidence: 0.900023788571429

 $00:38:43.460 \rightarrow 00:38:45.686$ inventive mentor saying if you do

NOTE Confidence: 0.900023788571429

 $00:38:45.686 \rightarrow 00:38:47.879$ not understand what you are thinking,

NOTE Confidence: 0.900023788571429

 $00:38:47.880 \rightarrow 00:38:49.384$ take a walk along,

NOTE Confidence: 0.900023788571429

 $00:38:49.384 \rightarrow 00:38:52.769$ walk and see what more comes to your mind.

NOTE Confidence: 0.900023788571429

 $00:38:52.770 \rightarrow 00:38:55.696$ This is enormously helpful over many years,

NOTE Confidence: 0.900023788571429

 $00{:}38{:}55{.}700 \dashrightarrow 00{:}38{:}58{.}140$ and I wonder what you have seen about

NOTE Confidence: 0.900023788571429

 $00{:}38{:}58{.}140 \dashrightarrow 00{:}39{:}00{.}517$ 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

 $00{:}39{:}04.050 \dashrightarrow 00{:}39{:}06.140$ 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

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

 $00:39:15.900 \rightarrow 00:39:18.660$ 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

 $00{:}39{:}20{.}920 \dashrightarrow 00{:}39{:}21{.}991$ You know, it makes the mind go

NOTE Confidence: 0.781459355

 $00:39:21.991 \dashrightarrow 00:39:23.160$ faster and I've always thought like,

NOTE Confidence: 0.781459355

 $00:39:23.160 \longrightarrow 00:39:25.065$ well, the bicycles are really

NOTE Confidence: 0.781459355

 $00{:}39{:}25.065 \dashrightarrow 00{:}39{:}26.970$ good bicycle for the mind.

NOTE Confidence: 0.781459355

 $00:39:26.970 \rightarrow 00:39:28.725$ But what's interesting about that

NOTE Confidence: 0.781459355

 $00:39:28.725 \rightarrow 00:39:31.248$ 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

 $00:39:33.910 \longrightarrow 00:39:37.426$ especially physical activity in the outdoors,

NOTE Confidence: 0.781459355

 $00:39:37.430 \rightarrow 00:39:40.153$ can. And enhance our thinking or change

NOTE Confidence: 0.781459355

 $00{:}39{:}40{.}153 \dashrightarrow 00{:}39{:}42{.}599$ our thinking in a beneficial way.

NOTE Confidence: 0.781459355

 $00:39:42.600 \rightarrow 00:39:43.455$ There's you know,

- NOTE Confidence: 0.781459355
- $00:39:43.455 \dashrightarrow 00:39:44.880$ there's there's reasons behind that.
- NOTE Confidence: 0.781459355
- $00{:}39{:}44.880 \dashrightarrow 00{:}39{:}48.058$ 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
- $00:39:49.620 \longrightarrow 00:39:51.180$ those of the relevant findings.
- NOTE Confidence: 0.781459355
- $00:39:51.180 \longrightarrow 00:39:54.386$ 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
- $00:39:56.160 \longrightarrow 00:39:58.260$ We understand abstract ideas
- NOTE Confidence: 0.781459355
- $00:39:58.260 \rightarrow 00:40:00.885$ through reference to our physical
- NOTE Confidence: 0.781459355
- $00:40:00.885 \longrightarrow 00:40:02.408$ experiences in the world.
- NOTE Confidence: 0.781459355
- $00:40:02.410 \longrightarrow 00:40:05.210$ And so a lot of our thinking
- NOTE Confidence: 0.781459355
- $00:40:05.210 \longrightarrow 00:40:07.100$ 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
- $00:40:08.930 \longrightarrow 00:40:12.188$ In ways that stimulate the metaphor,
- NOTE Confidence: 0.781459355
- $00{:}40{:}12.190 \dashrightarrow 00{:}40{:}14.446$ the the associated metaphor,
- NOTE Confidence: 0.781459355
- $00:40:14.446 \longrightarrow 00:40:17.266$ then we can prime the.
- NOTE Confidence: 0.781459355

 $00:40:17.270 \longrightarrow 00:40:19.034$ You know we can Prime R think

NOTE Confidence: 0.781459355

 $00{:}40{:}19.034 \dashrightarrow 00{:}40{:}20.951$ we can prime thoughts in the

NOTE Confidence: 0.781459355

 $00:40:20.951 \longrightarrow 00:40:22.786$ direction that we're looking for.

NOTE Confidence: 0.781459355

 $00:40:22.790 \rightarrow 00:40:23.810$ This is sounding very vague,

NOTE Confidence: 0.781459355

 $00:40:23.810 \longrightarrow 00:40:25.430$ but I'll be more specific.

NOTE Confidence: 0.781459355

 $00{:}40{:}25{.}430 \dashrightarrow 00{:}40{:}28.055$ 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

 $00:40:30.820 \longrightarrow 00:40:32.759$ you notice that the metaphors we use

NOTE Confidence: 0.781459355

 $00{:}40{:}32.759 \dashrightarrow 00{:}40{:}35.130$ have to do with motion and movement.

NOTE Confidence: 0.781459355

 $00:40:35.130 \longrightarrow 00:40:37.746$ Like if if you're not being creative.

NOTE Confidence: 0.781459355

 $00:40:37.750 \longrightarrow 00:40:40.290$ 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

 $00:40:44.740 \longrightarrow 00:40:46.498$ but when things are going well,

NOTE Confidence: 0.781459355

 $00:40:46.500 \rightarrow 00:40:48.642$ you might say I'm on a roll or my

NOTE Confidence: 0.781459355

 $00:40:48.642 \rightarrow 00:40:50.522$ thoughts are flowing, you know,

- NOTE Confidence: 0.781459355
- $00{:}40{:}50.522 \dashrightarrow 00{:}40{:}52.777$ and the physical experience of
- NOTE Confidence: 0.781459355
- $00{:}40{:}52{.}777 \dashrightarrow 00{:}40{:}54{.}759$ walking or biking is one.
- NOTE Confidence: 0.781459355
- $00:40:54.760 \longrightarrow 00:40:57.608$ It's kind of a loose metaphor for creativity.
- NOTE Confidence: 0.781459355
- $00{:}40{:}57.610 \dashrightarrow 00{:}40{:}59.650$ You know, there's an idea.
- NOTE Confidence: 0.781459355
- $00{:}40{:}59.650 \dashrightarrow 00{:}41{:}01.520$ There's the sights and sounds
- NOTE Confidence: 0.781459355
- $00:41:01.520 \dashrightarrow 00:41:04.090$ that are sort of flowing past you.
- NOTE Confidence: 0.781459355
- $00:41:04.090 \longrightarrow 00:41:05.281$ You're moving forward.
- NOTE Confidence: 0.781459355
- $00{:}41{:}05{.}281 \dashrightarrow 00{:}41{:}07{.}266$ 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
- $00:41:09.302 \longrightarrow 00:41:11.334$ 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
- $00{:}41{:}14{.}382 \dashrightarrow 00{:}41{:}18{.}036$ And then the part about being outdoors
- NOTE Confidence: 0.781459355
- $00{:}41{:}18.036 \dashrightarrow 00{:}41{:}21.184$ and you know again we this is all really
- NOTE Confidence: 0.781459355
- $00:41:21.184 \rightarrow 00:41:23.458$ about thinking about what the brain is.
- NOTE Confidence: 0.781459355

 $00:41:23.460 \rightarrow 00:41:25.602$ It's a biological organ that evolved

NOTE Confidence: 0.781459355

 $00{:}41{:}25.602 \dashrightarrow 00{:}41{:}27.721$ 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

 $00:41:29.617 \rightarrow 00:41:31.640$ we give it to solve these days.

NOTE Confidence: 0.781459355

 $00:41:31.640 \longrightarrow 00:41:33.808$ So we have to kind of keep the

NOTE Confidence: 0.781459355

 $00:41:33.808 \longrightarrow 00:41:35.911$ 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

 $00:41:38.220 \longrightarrow 00:41:39.046$ for example,

NOTE Confidence: 0.781459355

 $00{:}41{:}39.046 \dashrightarrow 00{:}41{:}40.698$ because the the brain,

NOTE Confidence: 0.781459355

 $00:41:40.700 \longrightarrow 00:41:42.275$ unlike a computer.

NOTE Confidence: 0.781459355

 $00{:}41{:}42.275 \dashrightarrow 00{:}41{:}44.375$ Is exquisitely sensitive to

NOTE Confidence: 0.781459355

 $00:41:44.375 \longrightarrow 00:41:46.529$ its context where it is,

NOTE Confidence: 0.781459355

 $00:41:46.530 \longrightarrow 00:41:48.329$ and you know to go back to

NOTE Confidence: 0.781459355

 $00:41:48.329 \longrightarrow 00:41:49.100$ that evolution piece.

NOTE Confidence: 0.781459355

 $00:41:49.100 \longrightarrow 00:41:50.928$ We evolved human beings

NOTE Confidence: 0.781459355

 $00:41:50.928 \longrightarrow 00:41:52.756$ evolved outdoors this life.

 $00:41:52.760 \rightarrow 00:41:54.867$ 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

 $00:41:57.749 \rightarrow 00:42:00.104$ recent development in our human history,

NOTE Confidence: 0.781459355

 $00:42:00.104 \longrightarrow 00:42:03.469$ and so the kind of information or

NOTE Confidence: 0.781459355

 $00{:}42{:}03{.}469 \dashrightarrow 00{:}42{:}05{.}757$ stimuli available out outside.

NOTE Confidence: 0.781459355

 $00{:}42{:}05.760 \dashrightarrow 00{:}42{:}07.840$ It's very easy for our brain to process.

NOTE Confidence: 0.93376645

 $00:42:07.840 \rightarrow 00:42:10.656$ It's very effortless to process and in fact,

NOTE Confidence: 0.93376645

 $00:42:10.660 \rightarrow 00:42:12.396$ the things that the brain finds easy and.

NOTE Confidence: 0.93376645

 $00:42:12.400 \longrightarrow 00:42:13.402$ Effortless to process,

NOTE Confidence: 0.93376645

00:42:13.402 --> 00:42:14.738 it also finds pleasant,

NOTE Confidence: 0.93376645

 $00:42:14.740 \longrightarrow 00:42:16.988$ so that's part of why we get such

NOTE Confidence: 0.93376645

 $00{:}42{:}16.988 \dashrightarrow 00{:}42{:}19.378$ a mood boost from being outside.

NOTE Confidence: 0.93376645

 $00{:}42{:}19{.}380 \dashrightarrow 00{:}42{:}21{.}747$ 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

 $00{:}42{:}24.473 \dashrightarrow 00{:}42{:}26.574$ diverted when we're outside, we do.

00:42:26.574 --> 00:42:28.056 It's not that kind of focused,

NOTE Confidence: 0.93376645

 $00{:}42{:}28.060 \dashrightarrow 00{:}42{:}30.510$ hard edged attention that we have to

NOTE Confidence: 0.93376645

 $00:42:30.510 \longrightarrow 00:42:33.356$ pay to our work that refills the tank,

NOTE Confidence: 0.93376645

 $00:42:33.356 \rightarrow 00:42:35.347$ so to speak, of our attention.

NOTE Confidence: 0.93376645

 $00{:}42{:}35{.}347 \dashrightarrow 00{:}42{:}37{.}201$ It's it's this is known as

NOTE Confidence: 0.93376645

 $00{:}42{:}37{.}201 \dashrightarrow 00{:}42{:}38{.}659$ attention restoration theory.

NOTE Confidence: 0.93376645

 $00:42:38.660 \longrightarrow 00:42:40.292$ You know we come.

NOTE Confidence: 0.93376645

 $00:42:40.292 \rightarrow 00:42:42.740$ 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

 $00:42:44.275 \longrightarrow 00:42:45.810$ attention and being upset that

NOTE Confidence: 0.93376645

 $00{:}42{:}45.866 \dashrightarrow 00{:}42{:}47.576$ our attention is being distracted,

NOTE Confidence: 0.93376645

 $00{:}42{:}47{.}580 \dashrightarrow 00{:}42{:}50{.}692$ but we don't often think about like the

NOTE Confidence: 0.93376645

 $00{:}42{:}50.692 \dashrightarrow 00{:}42{:}53.609$ 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

 $00:42:56.220 \rightarrow 00:42:57.420$ not just spending it down,

NOTE Confidence: 0.93376645

 $00:42:57.420 \longrightarrow 00:42:58.638$ but restoring it.

- NOTE Confidence: 0.93376645
- $00:42:58.638 \rightarrow 00:43:01.480$ And it turns out that spending time
- NOTE Confidence: 0.93376645
- $00{:}43{:}01{.}563 \dashrightarrow 00{:}43{:}03{.}888$ outside is the fastest and easiest and
- NOTE Confidence: 0.93376645
- $00{:}43{:}03.888 \dashrightarrow 00{:}43{:}06.399$ most effective way to restore our attention.
- NOTE Confidence: 0.93376645
- $00:43:06.400 \longrightarrow 00:43:08.080$ So I think that helps to explain.
- NOTE Confidence: 0.93376645
- $00{:}43{:}08.080 \dashrightarrow 00{:}43{:}10.000$ At least I find it useful.
- NOTE Confidence: 0.93376645
- $00:43:10.000 \rightarrow 00:43:11.137$ Those two things,
- NOTE Confidence: 0.93376645
- $00{:}43{:}11{.}137 \dashrightarrow 00{:}43{:}12.653$ the metaphorical movements that
- NOTE Confidence: 0.93376645
- $00:43:12.653 \rightarrow 00:43:14.450$ are associated with creativity.
- NOTE Confidence: 0.93376645
- $00:43:14.450 \longrightarrow 00:43:16.170$ And the attention restoring
- NOTE Confidence: 0.93376645
- $00:43:16.170 \longrightarrow 00:43:17.890$ aspects of being outside.
- NOTE Confidence: 0.93376645
- $00{:}43{:}17.890 \dashrightarrow 00{:}43{:}19.682$ I think that's why taking a walk
- NOTE Confidence: 0.93376645
- $00{:}43{:}19.682 \dashrightarrow 00{:}43{:}21.629$ or taking a bike route outside can
- NOTE Confidence: 0.93376645
- $00:43:21.629 \rightarrow 00:43:23.900$ so often be the place and the
- NOTE Confidence: 0.93376645
- $00{:}43{:}23.900 \dashrightarrow 00{:}43{:}25.755$ 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

 $00:43:39.970 \longrightarrow 00:43:42.760$ I never come to grand rounds.

NOTE Confidence: 0.80445443

 $00:43:42.760 \longrightarrow 00:43:46.435$ Ever, but I'm a postdoc at Yale

NOTE Confidence: 0.80445443

 $00{:}43{:}46{.}435 \dashrightarrow 00{:}43{:}48{.}600$ and a person with lived experience.

NOTE Confidence: 0.80445443

 $00{:}43{:}48.600 \dashrightarrow 00{:}43{:}51.748$ 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

 $00{:}43{:}54{.}030 \dashrightarrow 00{:}43{:}55{.}421$ teaching Clark and Chalmers essay

NOTE Confidence: 0.80445443

 $00{:}43{:}55{.}421 \dashrightarrow 00{:}43{:}57{.}323$ to a bunch of graduate students.

NOTE Confidence: 0.80445443

 $00{:}43{:}57{.}330 \dashrightarrow 00{:}44{:}01{.}430$ 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

 $00{:}44{:}03.550 \dashrightarrow 00{:}44{:}05.000$ but it's gotten really complicated

NOTE Confidence: 0.80445443

 $00{:}44{:}05{.}000 \dashrightarrow 00{:}44{:}07{.}836$ since then. But the so maybe it's more.

NOTE Confidence: 0.80445443

 $00:44:07.836 \longrightarrow 00:44:10.006$ 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
- $00:44:11.320 \longrightarrow 00:44:14.950$ then ones I expect answers to.

 $00{:}44{:}14{.}950 \dashrightarrow 00{:}44{:}15{.}630$ And I do.

NOTE Confidence: 0.80445443

 $00:44:15.630 \rightarrow 00:44:17.639$ I was the first thing I thought of was

NOTE Confidence: 0.80445443

 $00:44:17.639 \rightarrow 00:44:19.796$ the neuroscience that just came out of it.

NOTE Confidence: 0.80445443

 $00{:}44{:}19.796 \dashrightarrow 00{:}44{:}21.378$ 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

 $00{:}44{:}23.174 \dashrightarrow 00{:}44{:}24.969$ 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

 $00:44:27.916 \longrightarrow 00:44:30.350$ was referencing it the the.

NOTE Confidence: 0.80445443

 $00:44:30.350 \longrightarrow 00:44:33.680$ 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

 $00:44:35.318 \longrightarrow 00:44:36.410$ the neuroimaging that came.

NOTE Confidence: 0.80445443

 $00{:}44{:}36{.}410 \dashrightarrow 00{:}44{:}39{.}276$ I think it was when teams

NOTE Confidence: 0.80445443

 $00:44:39.276 \longrightarrow 00:44:41.303$ worked together well and.

NOTE Confidence: 0.80445443

 $00:44:41.303 \longrightarrow 00:44:44.455$ But it sort of seemed like that

- $00:44:44.455 \longrightarrow 00:44:46.240$ was one possible extension of
- NOTE Confidence: 0.80445443
- $00{:}44{:}46{.}306 \dashrightarrow 00{:}44{:}48{.}208$ 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
- $00{:}44{:}51{.}330 \dashrightarrow 00{:}44{:}53{.}222$ and also the idea of sort
- NOTE Confidence: 0.80445443
- $00:44:53.222 \longrightarrow 00:44:54.946$ of non representation list.
- NOTE Confidence: 0.80445443
- 00:44:54.950 --> 00:44:55.632 You know,
- NOTE Confidence: 0.80445443
- $00:44:55.632 \rightarrow 00:44:57.678$ 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
- $00:44:59.067 \longrightarrow 00:45:01.342$ and then act out in the world.
- NOTE Confidence: 0.80445443
- $00{:}45{:}01{.}350 \dashrightarrow 00{:}45{:}04{.}148$ And I think I don't know what to do with
- NOTE Confidence: 0.80445443
- $00{:}45{:}04{.}148 \dashrightarrow 00{:}45{:}06{.}110$ all of this because it's a heuristic.
- NOTE Confidence: 0.80445443
- $00:45:06.110 \longrightarrow 00:45:07.428$ It's a really nice idea.
- NOTE Confidence: 0.80445443
- $00:45:07.430 \longrightarrow 00:45:08.480$ 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
- $00:45:10.580 \longrightarrow 00:45:12.466$ cap capturing like it's.
- NOTE Confidence: 0.80445443
- $00:45:12.466 \longrightarrow 00:45:14.022$ So things like nothing

 $00:45:14.022 \rightarrow 00:45:15.108$ can explain everything.

NOTE Confidence: 0.908455421666667

 $00:45:17.360 \longrightarrow 00:45:19.792$ 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

 $00:45:22.240 \longrightarrow 00:45:23.840$ so the way I think of it with

NOTE Confidence: 0.9084554216666667

 $00{:}45{:}23.840 \dashrightarrow 00{:}45{:}25.503$ 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

 $00{:}45{:}27.140 \dashrightarrow 00{:}45{:}29.338$ how we all interact and how

NOTE Confidence: 0.925612249230769

 $00:45:30.020 \rightarrow 00:45:31.847$ we use our environments to help us

NOTE Confidence: 0.925612249230769

 $00:45:31.847 \rightarrow 00:45:33.798$ think and to change our thinking.

NOTE Confidence: 0.925612249230769

 $00{:}45{:}33{.}800 \dashrightarrow 00{:}45{:}36{.}772$ And I think within this is speaking

NOTE Confidence: 0.925612249230769

 $00:45:36.772 \dashrightarrow 00:45:38.776$ as a person with lived experience.

NOTE Confidence: 0.925612249230769

 $00{:}45{:}38{.}780 \dashrightarrow 00{:}45{:}40{.}852$ I think with within the psychiatric

NOTE Confidence: 0.925612249230769

 $00{:}45{:}40{.}852 \dashrightarrow 00{:}45{:}43{.}918$ sort of services realm there's actually

NOTE Confidence: 0.925612249230769

 $00{:}45{:}43.918 \dashrightarrow 00{:}45{:}47.127$ a place to think about that as we.

NOTE Confidence: 0.925612249230769

 $00{:}45{:}47{.}130 \dashrightarrow 00{:}45{:}49{.}470$ Often seem to try to change people to

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

 $00:45:54.380 \longrightarrow 00:45:58.020$ like it's it's a way of.

NOTE Confidence: 0.925612249230769

 $00:45:58.020 \rightarrow 00:46:00.620$ A sort of. We say what you know,

NOTE Confidence: 0.925612249230769

 $00:46:00.620 \rightarrow 00:46:02.088$ thought thoughts start wrong,

NOTE Confidence: 0.925612249230769

 $00{:}46{:}02.088 \dashrightarrow 00{:}46{:}03.189$ feelings aren't wrong.

NOTE Confidence: 0.97031416

 $00:46:04.370 \longrightarrow 00:46:05.518$ But then we immediately

NOTE Confidence: 0.866982989333333

 $00:46:05.530 \longrightarrow 00:46:08.044$ try to manipulate help a person

NOTE Confidence: 0.866982989333333

 $00:46:08.044 \longrightarrow 00:46:10.247$ aren't to reach shift those

NOTE Confidence: 0.866982989333333

 $00:46:10.247 \rightarrow 00:46:13.147$ 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

 $00:46:15.336 \rightarrow 00:46:17.008$ how the world they're experiencing

NOTE Confidence: 0.929561575

 $00:46:17.020 \longrightarrow 00:46:20.375$ might be influencing how those

NOTE Confidence: 0.929561575

 $00:46:20.375 \rightarrow 00:46:22.370$ representations are being like it's it's.

NOTE Confidence: 0.93588055555556

00:46:22.680 --> 00:46:23.820 It's almost like we're

NOTE Confidence: 0.93588055555556

 $00:46:23.820 \rightarrow 00:46:25.245$ starting in the wrong place.

- NOTE Confidence: 0.93588055555556
- 00:46:25.250 --> 00:46:28.080 Starting one step two up,
- NOTE Confidence: 0.93588055555556
- $00:46:28.080 \longrightarrow 00:46:29.348$ the causal chain potentially,
- NOTE Confidence: 0.93588055555556
- $00:46:29.350 \longrightarrow 00:46:31.618$ even though it may not be causal,
- NOTE Confidence: 0.93588055555556
- $00:46:31.620 \rightarrow 00:46:32.564$ I'm not really sure,
- NOTE Confidence: 0.93588055555556
- $00:46:32.564 \rightarrow 00:46:33.980$ but that's as you were talking.
- NOTE Confidence: 0.93588055555556
- $00:46:33.980 \longrightarrow 00:46:37.050$ I just kept thinking this is both.
- NOTE Confidence: 0.93588055555556
- $00:46:37.050 \longrightarrow 00:46:39.374$ Really interesting from a
- NOTE Confidence: 0.93588055555556
- 00:46:39.374 --> 00:46:40.536 philosophical perspective,
- NOTE Confidence: 0.93588055555556
- $00:46:40.540 \rightarrow 00:46:43.580$ potentially from a therapeutic perspective,
- NOTE Confidence: 0.93588055555556
- 00:46:43.580 --> 00:46:44.880 although I think that had
- NOTE Confidence: 0.93588055555556
- $00:46:44.880 \longrightarrow 00:46:46.440$ would have to get worked out.
- NOTE Confidence: 0.93588055555556
- $00{:}46{:}46{.}440 \dashrightarrow 00{:}46{:}49{.}010$ Pretty was hed 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
- $00{:}46{:}53.870 \dashrightarrow 00{:}46{:}56.286$ 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

 $00{:}46{:}58{.}548 \dashrightarrow 00{:}47{:}00{.}540$ illness has itself been brain bound.

NOTE Confidence: 0.86093735

 $00{:}47{:}00{.}540 \dashrightarrow 00{:}47{:}02{.}340$ I mean all the people on this call

NOTE Confidence: 0.86093735

 $00{:}47{:}02{.}340 \dashrightarrow 00{:}47{:}04{.}167$ will know more about this than I do,

NOTE Confidence: 0.86093735

 $00:47:04.170 \longrightarrow 00:47:07.094$ 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

 $00{:}47{:}10.790 \dashrightarrow 00{:}47{:}13.168$ illness have been assumed to originate

NOTE Confidence: 0.86093735

 $00:47:13.168 \longrightarrow 00:47:15.672$ in in the in the inside the skull,

NOTE Confidence: 0.86093735

 $00:47:15.680 \longrightarrow 00:47:18.628$ when really, you know.

NOTE Confidence: 0.86093735

 $00{:}47{:}18.630 \dashrightarrow 00{:}47{:}21.898$ 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
, these extra neural, UM?

NOTE Confidence: 0.86093735

 $00:47:25.550 \longrightarrow 00:47:27.750$ Factors are an enormously important

NOTE Confidence: 0.86093735

 $00{:}47{:}27.750 \dashrightarrow 00{:}47{:}30.259$ part of what contributes to mental

NOTE Confidence: 0.86093735

 $00:47:30.259 \rightarrow 00:47:32.670$ 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

 $00:47:34.290 \longrightarrow 00:47:35.605$ I'll just mention two examples

- NOTE Confidence: 0.86093735
- 00:47:35.605 00:47:36.920 that I've come across recently.

 $00{:}47{:}36{.}920 \dashrightarrow 00{:}47{:}40{.}112$ One is that an interception and faulty

NOTE Confidence: 0.86093735

 $00:47:40.112 \rightarrow 00:47:42.538$ Intraception has is increasingly being

NOTE Confidence: 0.86093735

 $00{:}47{:}42.538 \dashrightarrow 00{:}47{:}45.947$ recognized as a contributor to all kinds

NOTE Confidence: 0.86093735

 $00:47:45.947 \rightarrow 00:47:49.667$ of mental conditions like eating disorders,

NOTE Confidence: 0.86093735

 $00:47:49.670 \longrightarrow 00:47:51.342$ depression, anxiety,

NOTE Confidence: 0.86093735

00:47:51.342 --> 00:47:53.850 panic attacks, addiction,

NOTE Confidence: 0.86093735

 $00{:}47{:}53.850 \dashrightarrow 00{:}47{:}55.574$ and that's a recognition

NOTE Confidence: 0.86093735

 $00:47:55.574 \longrightarrow 00:47:58.160$ of the role of the body.

NOTE Confidence: 0.86093735

 $00{:}47{:}58{.}160 \dashrightarrow 00{:}48{:}00{.}344$ In in these conditions that may be was

NOTE Confidence: 0.86093735

 $00:48:00.344 \longrightarrow 00:48:02.561$ not fully present before and then the

NOTE Confidence: 0.86093735

 $00{:}48{:}02{.}561 \dashrightarrow 00{:}48{:}04{.}397$ other thing I'm thinking about is,

NOTE Confidence: 0.86093735

 $00{:}48{:}04{.}400 \dashrightarrow 00{:}48{:}07{.}796$ is Alzheimer's and other kinds of

NOTE Confidence: 0.86093735

 $00{:}48{:}07.796 \dashrightarrow 00{:}48{:}10.060$ dementia and cognitive decline?

NOTE Confidence: 0.86093735

 $00{:}48{:}10.060 \dashrightarrow 00{:}48{:}12.616$ And how much caregivers become and

 $00:48:12.616 \rightarrow 00:48:14.799$ even the physical environment for

NOTE Confidence: 0.86093735

 $00:48:14.799 \rightarrow 00:48:16.423$ people suffering from Alzheimer's

NOTE Confidence: 0.86093735

 $00{:}48{:}16{.}423 \dashrightarrow 00{:}48{:}19{.}459$ becomes a part of their extended mind,

NOTE Confidence: 0.86093735

 $00:48:19.460 \longrightarrow 00:48:22.136$ and that that's that's kind of

NOTE Confidence: 0.86093735

 $00{:}48{:}22{.}136 \dashrightarrow 00{:}48{:}23{.}474$ potentially revolutionary and

NOTE Confidence: 0.86093735

 $00{:}48{:}23{.}474 \dashrightarrow 00{:}48{:}25{.}739$ thinking about the ethics and the

NOTE Confidence: 0.86093735

 $00:48:25.739 \longrightarrow 00:48:27.972$ treatment of people with with these

NOTE Confidence: 0.86093735

 $00:48:27.972 \rightarrow 00:48:30.468$ 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

 $00:48:32.414 \longrightarrow 00:48:33.386$ in their skulls,

NOTE Confidence: 0.86093735

 $00{:}48{:}33{.}390 \dashrightarrow 00{:}48{:}35{.}934$ but are extend outside of them to their

NOTE Confidence: 0.86093735

 $00:48:35.934 \rightarrow 00:48:37.918$ relationships and their physical setting.

NOTE Confidence: 0.960915165714286

 $00{:}48{:}39{.}120 \dashrightarrow 00{:}48{:}41{.}388$ Yeah, I I. I think that's true.

NOTE Confidence: 0.960915165714286

 $00:48:41.390 \rightarrow 00:48:43.176$ 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

 $00:48:45.235 \longrightarrow 00:48:47.185$ go too far sometimes with with.

 $00{:}48{:}49{.}590 \dashrightarrow 00{:}48{:}51{.}284$ I want to be careful I'm in

NOTE Confidence: 0.913551041818182

 $00:48:51.284 \longrightarrow 00:48:52.890$ a room with psychiatrist.

NOTE Confidence: 0.913551041818182

 $00:48:52.890 \rightarrow 00:48:55.041$ I think that I think I think we actually

NOTE Confidence: 0.913551041818182

 $00:48:55.041 \rightarrow 00:48:56.689$ give more credit than we realize.

NOTE Confidence: 0.913551041818182

 $00:48:56.690 \rightarrow 00:48:59.050$ Sometimes two external factors now,

NOTE Confidence: 0.913551041818182

 $00:48:59.050 \rightarrow 00:49:01.340$ like I think the I think psychiatry

NOTE Confidence: 0.913551041818182

 $00{:}49{:}01{.}340 \dashrightarrow 00{:}49{:}03{.}138$ has a sophistication that doesn't

NOTE Confidence: 0.913551041818182

 $00:49:03.138 \rightarrow 00:49:05.554$ always get translated out to the world.

NOTE Confidence: 0.913551041818182

 $00{:}49{:}05{.}554 \dashrightarrow 00{:}49{:}07{.}602$ 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

 $00{:}49{:}14.190 \dashrightarrow 00{:}49{:}16.065$ don't doubt any of that.

NOTE Confidence: 0.92705548

 $00{:}49{:}16.070 \dashrightarrow 00{:}49{:}17.550$ I think it's and I think what I

NOTE Confidence: 0.92705548

 $00:49:17.550 \longrightarrow 00:49:18.898$ what I really heard from you is

NOTE Confidence: 0.92705548

 $00:49:18.898 \rightarrow 00:49:20.998$ it's the ethics of it. Actually,

 $00:49:21.260 \rightarrow 00:49:24.000$ like what the ethics are huge yeah, that

NOTE Confidence: 0.936765971428571

 $00:49:24.010 \longrightarrow 00:49:25.564$ 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

 $00{:}49{:}27.719 \dashrightarrow 00{:}49{:}29.708$ 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

 $00{:}49{:}31{.}362 \dashrightarrow 00{:}49{:}33{.}257$ day where we think we've become

NOTE Confidence: 0.936765971428571

 $00{:}49{:}33{.}257 \dashrightarrow 00{:}49{:}34{.}946$ transparent to ourselves like I

NOTE Confidence: 0.936765971428571

 $00:49:34.946 \longrightarrow 00:49:37.170$ think that is a not a goal worth

NOTE Confidence: 0.936765971428571

 $00{:}49{:}37{.}247 \dashrightarrow 00{:}49{:}39{.}380$ chasing when when human beings try

NOTE Confidence: 0.936765971428571

 $00:49:39.380 \rightarrow 00:49:40.644$ to understand themselves completely.

NOTE Confidence: 0.936765971428571

 $00{:}49{:}40{.}644 \dashrightarrow 00{:}49{:}42{.}579$ 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

 $00{:}49{:}44.800 \dashrightarrow 00{:}49{:}46.115$ 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

 $00:49:47.410 \longrightarrow 00:49:48.990$ willing to listen to and hear.

NOTE Confidence: 0.926756102857143

 $00:49:48.990 \longrightarrow 00:49:50.196$ And that's where I think this

 $00:49:50.200 \rightarrow 00:49:53.363$ may have a really big impact on

NOTE Confidence: 0.926756102857143

 $00:49:53.363 \rightarrow 00:49:56.150$ sort of deepening conversations

NOTE Confidence: 0.90368944

 $00{:}49{:}56{.}160 \dashrightarrow 00{:}49{:}58{.}665$ 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

 $00:50:00.430 \longrightarrow 00:50:02.866$ me, but I don't have the ethics.

NOTE Confidence: 0.73159015

 $00:50:02.870 \longrightarrow 00:50:05.873$ You know, this has become a really

NOTE Confidence: 0.73159015

 $00:50:05.873 \dashrightarrow 00:50:08.798$ active piece of the extended mind.

NOTE Confidence: 0.73159015

 $00{:}50{:}08.800 \dashrightarrow 00{:}50{:}11.418$ Literature and research is on the what.

NOTE Confidence: 0.73159015

 $00{:}50{:}11{.}420 \dashrightarrow 00{:}50{:}15{.}422$ What are the implications for the

NOTE Confidence: 0.73159015

 $00{:}50{:}15{.}422 \dashrightarrow 00{:}50{:}18{.}130$ ethics of dealing with people when we

NOTE Confidence: 0.73159015

 $00:50:18.130 \longrightarrow 00:50:20.218$ once we start thinking of their their

NOTE Confidence: 0.73159015

 $00:50:20.218 \rightarrow 00:50:22.198$ 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

 $00:50:26.010 \rightarrow 00:50:29.458$ is that simply a kind of property crime,

NOTE Confidence: 0.73159015

 $00:50:29.460 \longrightarrow 00:50:32.524$ or is it now almost like a kind

 $00:50:32.524 \rightarrow 00:50:34.090$ 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

 $00{:}50{:}36{.}253 \dashrightarrow 00{:}50{:}38{.}528$ and your your mind is to some

NOTE Confidence: 0.73159015

 $00:50:38.528 \dashrightarrow 00:50:40.130$ extent contained in that device.

NOTE Confidence: 0.73159015

 $00{:}50{:}40{.}130 \dashrightarrow 00{:}50{:}41{.}588$ That's a whole different way of

NOTE Confidence: 0.73159015

 $00:50:41.588 \longrightarrow 00:50:43.030$ looking at what happened.

NOTE Confidence: 0.73159015

 $00{:}50{:}43.030 \dashrightarrow 00{:}50{:}44.846$ What has happened to you and how we

NOTE Confidence: 0.73159015

 $00:50:44.846 \rightarrow 00:50:46.459$ should deal with that as a society.

NOTE Confidence: 0.6285727

 $00{:}50{:}48{.}470 \dashrightarrow 00{:}50{.}50{.}724$ Kyle, did you? Did you see somebody

NOTE Confidence: 0.6285727

 $00{:}50{:}50{.}724 \dashrightarrow 00{:}50{:}53{.}280$ some body else with the question there we

NOTE Confidence: 0.862259455333333

 $00{:}50{:}53{.}290 \dashrightarrow 00{:}50{:}56{.}170$ have some more questions in the

NOTE Confidence: 0.862259455333333

 $00{:}50{:}56{.}170 \dashrightarrow 00{:}50{:}58{.}090$ chat was wonderful conversation

NOTE Confidence: 0.862259455333333

 $00:50:58.170 \longrightarrow 00:51:00.000$ on on the extended mind.

NOTE Confidence: 0.862259455333333

 $00:51:00.000 \longrightarrow 00:51:02.220$ You can contribute to the conversation

NOTE Confidence: 0.862259455333333

 $00:51:02.220 \longrightarrow 00:51:04.554$ 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
- $00:51:06.463 \rightarrow 00:51:07.802$ by putting your question in the
- NOTE Confidence: 0.862259455333333
- $00{:}51{:}07{.}802 \dashrightarrow 00{:}51{:}09{.}110$ chat and I'll read it out loud.
- NOTE Confidence: 0.862259455333333
- $00:51:09.110 \longrightarrow 00:51:11.070$ So I've got a couple more from
- NOTE Confidence: 0.862259455333333
- $00:51:11.070 \longrightarrow 00:51:13.310$ the chat to read to any first one.
- NOTE Confidence: 0.862259455333333
- $00:51:13.310 \rightarrow 00:51:15.980$ Is this sorry I haven't read your book yet,
- NOTE Confidence: 0.862259455333333
- $00:51:15.980 \longrightarrow 00:51:18.140$ so I think that it's in the 60s.
- NOTE Confidence: 0.862259455333333
- $00:51:18.140 \longrightarrow 00:51:20.720$ 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
- $00{:}51{:}22.952 \dashrightarrow 00{:}51{:}25.742$ laboratory in technical Report number
- NOTE Confidence: 0.862259455333333
- $00:51:25.742 \longrightarrow 00:51:29.018$ 9 the neurophysiology of cognition
- NOTE Confidence: 0.862259455333333
- $00:51:29.020 \rightarrow 00:51:31.195$ plays an interesting idea about
- NOTE Confidence: 0.862259455333333
- $00{:}51{:}31{.}195 \dashrightarrow 00{:}51{:}33{.}370$ cognition being modulated by the
- NOTE Confidence: 0.862259455333333
- $00:51:33.444 \rightarrow 00:51:35.688$ interaction with the environment.
- NOTE Confidence: 0.862259455333333
- $00{:}51{:}35{.}690 \dashrightarrow 00{:}51{:}38{.}312$ How do you think that education is
- NOTE Confidence: 0.862259455333333
- $00{:}51{:}38{.}312 \dashrightarrow 00{:}51{:}40{.}444$ modulated for the interaction between
- NOTE Confidence: 0.862259455333333

 $00:51:40.444 \rightarrow 00:51:43.060$ teacher and student brain flash body?

NOTE Confidence: 0.956934438

 $00{:}51{:}44{.}700 \dashrightarrow 00{:}51{:}45{.}420$ 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

 $00:51:47.364 \rightarrow 00:51:49.194$ we're just beginning to explore,

NOTE Confidence: 0.956934438

 $00:51:49.200 \rightarrow 00:51:50.820$ at least on a neuroscientific level.

NOTE Confidence: 0.956934438

 $00{:}51{:}50{.}820 \dashrightarrow 00{:}51{:}53{.}291$ 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

 $00:51:55.439 \longrightarrow 00:51:57.812$ that we were starting to get evidence

NOTE Confidence: 0.956934438

 $00{:}51{:}57{.}888 \dashrightarrow 00{:}52{:}00{.}050$ that when two people are In Sync,

NOTE Confidence: 0.956934438

 $00{:}52{:}00{.}050 \dashrightarrow 00{:}52{:}01{.}765$ including and some of these

NOTE Confidence: 0.956934438

 $00{:}52{:}01.765 \dashrightarrow 00{:}52{:}03.137$ experiments have been carried

NOTE Confidence: 0.956934438

 $00:52:03.137 \longrightarrow 00:52:04.840$ out in a classroom setting.

NOTE Confidence: 0.956934438

 $00:52:04.840 \longrightarrow 00:52:06.370$ When people are In Sync,

NOTE Confidence: 0.956934438

 $00:52:06.370 \longrightarrow 00:52:07.750$ are on the same page,

NOTE Confidence: 0.956934438

 $00:52:07.750 \rightarrow 00:52:10.270$ there is a kind of neural synchrony

NOTE Confidence: 0.956934438

 $00:52:10.270 \rightarrow 00:52:13.054$ that's that's happening that their

- NOTE Confidence: 0.956934438
- $00:52:13.054 \rightarrow 00:52:15.118$ their people's brain waves are kind of.

 $00{:}52{:}15{.}120 \dashrightarrow 00{:}52{:}17{.}682$ Syncing up in a way that is

NOTE Confidence: 0.956934438

 $00:52:17.682 \longrightarrow 00:52:20.120$ is is visible or measurable,

NOTE Confidence: 0.956934438

 $00:52:20.120 \longrightarrow 00:52:24.176$ which is such a sort of lovely UM

NOTE Confidence: 0.956934438

 $00:52:24.180 \longrightarrow 00:52:26.250$ confirmation in a way of the feeling of

NOTE Confidence: 0.956934438

 $00{:}52{:}26.250 \dashrightarrow 00{:}52{:}28.440$ the sense that we have when we're kind of.

NOTE Confidence: 0.956934438

 $00:52:28.440 \longrightarrow 00:52:29.476$ When were, you know,

NOTE Confidence: 0.956934438

 $00:52:29.476 \longrightarrow 00:52:31.548$ we feel like we're on the same page

NOTE Confidence: 0.956934438

 $00:52:31.548 \longrightarrow 00:52:33.340$ or our brains are firing in the

NOTE Confidence: 0.956934438

 $00{:}52{:}33{.}340 \dashrightarrow 00{:}52{:}35{.}100$ 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

 $00{:}52{:}38{.}418 \dashrightarrow 00{:}52{:}40{.}866$ What's interesting to me or what

NOTE Confidence: 0.956934438

 $00{:}52{:}40{.}866 \dashrightarrow 00{:}52{:}42{.}667$ 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

 $00:52:44.772 \rightarrow 00:52:46.746$ to get people on the same page?

 $00:52:46.750 \rightarrow 00:52:49.606$ 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

 $00:52:52.736 \longrightarrow 00:52:55.296$ thinking with groups about how

NOTE Confidence: 0.956934438

 $00:52:55.296 \rightarrow 00:52:58.036$ 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

 $00:52:59.434 \rightarrow 00:53:01.298$ 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

 $00:53:03.610 \rightarrow 00:53:06.227$ to feel like an entity like a group,

NOTE Confidence: 0.956934438

 $00{:}53{:}06{.}230 \dashrightarrow 00{:}53{:}08{.}564$ like something like a more than

NOTE Confidence: 0.956934438

 $00{:}53{:}08{.}564 \dashrightarrow 00{:}53{:}10{.}525$ a collection of individuals but

NOTE Confidence: 0.956934438

 $00{:}53{:}10.525 \dashrightarrow 00{:}53{:}12.541$ 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

 $00{:}53{:}23{.}261 \dashrightarrow 00{:}53{:}25{.}785$ and familiar or sort of hacks that

NOTE Confidence: 0.956934438

 $00{:}53{:}25{.}785 \dashrightarrow 00{:}53{:}28{.}011$ people over the centuries have used

NOTE Confidence: 0.956934438

 $00:53:28.084 \rightarrow 00:53:30.500$ to get to get a group of people

NOTE Confidence: 0.956934438

 $00:53:30.500 \longrightarrow 00:53:32.890$ feeling like a collective one of

NOTE Confidence: 0.956934438

 $00:53:32.890 \rightarrow 00:53:34.670$ those is synchronous movement.

NOTE Confidence: 0.956934438

00:53:34.670 --> 00:53:35.632 You know,

NOTE Confidence: 0.956934438

 $00:53:35.632 \rightarrow 00:53:38.518$ if you think about armies marching

NOTE Confidence: 0.956934438

 $00:53:38.518 \rightarrow 00:53:41.030$ 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

 $00{:}53{:}43.616 \dashrightarrow 00{:}53{:}47.198$ sort of moving as one or even like like a.

NOTE Confidence: 0.956934438

 $00{:}53{:}47{.}200 \dashrightarrow 00{:}53{:}49{.}482$ Rave like when people dance and get

NOTE Confidence: 0.956934438

 $00{:}53{:}49{.}482 \dashrightarrow 00{:}53{:}51{.}581$ 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

 $00{:}53{:}54{.}040 \dashrightarrow 00{:}53{:}55{.}980$ but part of a group.

NOTE Confidence: 0.956934438

 $00{:}53{:}55{.}980 \dashrightarrow 00{:}54{:}00{.}000$ That's like a very old visceral

- $00:54:00.000 \rightarrow 00:54:02.010$ kind of primitive.
- NOTE Confidence: 0.956934438
- 00:54:02.010 --> 00:54:02.479 Human,
- NOTE Confidence: 0.956934438
- $00:54:02.479 \longrightarrow 00:54:05.293$ it's almost like a technology of
- NOTE Confidence: 0.956934438
- $00:54:05.293 \rightarrow 00:54:07.470$ group group biotechnology of group
- NOTE Confidence: 0.956934438
- $00{:}54{:}07{.}470 \dashrightarrow 00{:}54{:}09{.}892$ formation that when we move in the
- NOTE Confidence: 0.956934438
- $00:54:09.892 \rightarrow 00:54:12.989$ same way at the same time as other people,
- NOTE Confidence: 0.956934438
- $00{:}54{:}12.990 \dashrightarrow 00{:}54{:}15.252$ there's a a cognitive change that
- NOTE Confidence: 0.956934438
- $00:54:15.252 \rightarrow 00:54:17.638$ we kind of we come to understand
- NOTE Confidence: 0.956934438
- $00:54:17.638 \longrightarrow 00:54:19.849$ ourselves as as being in a way
- NOTE Confidence: 0.956934438
- $00:54:19.849 \longrightarrow 00:54:21.725$ like them or or part of them,
- NOTE Confidence: 0.956934438
- $00:54:21.730 \longrightarrow 00:54:23.994$ or part of a whole and that makes
- NOTE Confidence: 0.956934438
- $00:54:23.994 \rightarrow 00:54:26.211$ it easier for us to cooperate and
- NOTE Confidence: 0.956934438
- $00{:}54{:}26{.}211 \dashrightarrow 00{:}54{:}28{.}390$ to think together so you know it.
- NOTE Confidence: 0.956934438
- $00:54:28.390 \rightarrow 00:54:31.414$ It often strikes me that human beings are.
- NOTE Confidence: 0.956934438
- $00:54:31.420 \longrightarrow 00:54:32.720$ We've evolved to think.
- NOTE Confidence: 0.956934438
- $00:54:32.720 \rightarrow 00:54:34.020$ Together and work together,

- NOTE Confidence: 0.956934438
- 00:54:34.020 --> 00:54:34.782 you know,
- NOTE Confidence: 0.956934438
- $00{:}54{:}34{.}782 \dashrightarrow 00{:}54{:}38{.}213$ to work in isolation or alone is not at
- NOTE Confidence: 0.956934438
- $00:54:38.213 \rightarrow 00:54:40.946$ all was not at all the the way we evolved.
- NOTE Confidence: 0.956934438
- $00:54:40.946 \longrightarrow 00:54:42.776$ And yet we find it so difficult
- NOTE Confidence: 0.956934438
- $00:54:42.776 \dashrightarrow 00:54:45.079$ often to work in groups and people.
- NOTE Confidence: 0.947282109166667
- $00{:}54{:}45{.}080 \dashrightarrow 00{:}54{:}47{.}216$ 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
- $00{:}54{:}49{.}360 \dashrightarrow 00{:}54{:}52{.}664$ 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
- $00:54:57.288 \longrightarrow 00:55:00.610$ is that we have all these very
- NOTE Confidence: 0.947282109166667
- $00:55:00.610 \longrightarrow 00:55:02.910$ individualistic practices and protocols.
- NOTE Confidence: 0.947282109166667
- $00:55:02.910 \rightarrow 00:55:04.998$ Ways of working that are arranged
- NOTE Confidence: 0.947282109166667
- $00{:}55{:}04{.}998 \dashrightarrow 00{:}55{:}06{.}390$ around being an individual,
- NOTE Confidence: 0.947282109166667
- $00{:}55{:}06{.}390 \dashrightarrow 00{:}55{:}08{.}854$ thinking alone and we need to invent
- NOTE Confidence: 0.947282109166667

 $00:55:08.854 \rightarrow 00:55:11.197$ and implement a whole new array

NOTE Confidence: 0.947282109166667

 $00{:}55{:}11.197 \dashrightarrow 00{:}55{:}13.227$ of practices and protocols that

NOTE Confidence: 0.947282109166667

 $00:55:13.227 \rightarrow 00:55:15.822$ are oriented towards getting us to

NOTE Confidence: 0.947282109166667

 $00:55:15.822 \rightarrow 00:55:17.962$ 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

 $00{:}55{:}19{.}406 \dashrightarrow 00{:}55{:}21{.}201$ there are industries that are

NOTE Confidence: 0.947282109166667

 $00:55:21.201 \rightarrow 00:55:22.709$ kind of leading the way,

NOTE Confidence: 0.947282109166667

 $00:55:22.710 \longrightarrow 00:55:27.130$ UM, things like often wear.

NOTE Confidence: 0.947282109166667

 $00{:}55{:}27.130 \dashrightarrow 00{:}55{:}28.624$ In industries and fields where it's

NOTE Confidence: 0.947282109166667

 $00:55:28.624 \rightarrow 00:55:30.388$ like a matter of life and death,

NOTE Confidence: 0.947282109166667

 $00{:}55{:}30{.}390 \dashrightarrow 00{:}55{:}32{.}420$ 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

 $00:55:36.122 \rightarrow 00:55:38.212$ surgical teams are often very

NOTE Confidence: 0.947282109166667

 $00:55:38.212 \rightarrow 00:55:40.169$ 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,

 $00:55:42.230 \rightarrow 00:55:45.174$ it's just that we haven't put as much

NOTE Confidence: 0.947282109166667

 $00:55:45.174 \rightarrow 00:55:47.209$ energy and thought and intention

NOTE Confidence: 0.947282109166667

 $00{:}55{:}47{.}209 \dashrightarrow 00{:}55{:}50{.}689$ into it as we should because we are

NOTE Confidence: 0.947282109166667

 $00:55:50.689 \rightarrow 00:55:52.897$ such an individualistic culture.

NOTE Confidence: 0.947282109166667

 $00:55:52.900 \rightarrow 00:55:54.890$ That was a long answer, sorry,

NOTE Confidence: 0.947282109166667

 $00:55:54.930 \rightarrow 00:55:56.850$ 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

 $00:55:58.490 \longrightarrow 00:56:00.037$ so I'll take the next one here.

NOTE Confidence: 0.854478443333333

 $00{:}56{:}00{.}040 \dashrightarrow 00{:}56{:}02{.}816$ How does the mind extended for people who

NOTE Confidence: 0.854478443333333

 $00:56:02.816 \rightarrow 00:56:05.392$ are creative and are working in art or

NOTE Confidence: 0.854478443333333

 $00{:}56{:}05{.}392 \dashrightarrow 00{:}56{:}07{.}700$ using colors in their day-to-day life?

NOTE Confidence: 0.67961695

 $00{:}56{:}09{.}510 \dashrightarrow 00{:}56{:}13{.}122$ Oh gosh. That's a beautiful question,

NOTE Confidence: 0.67961695

 $00{:}56{:}13.122 \dashrightarrow 00{:}56{:}15.249$ but I'm not sure I can answer that.

NOTE Confidence: 0.67961695

 $00{:}56{:}15{.}250 \dashrightarrow 00{:}56{:}17{.}302$ Uhm, I'd love to think of

NOTE Confidence: 0.67961695

 $00:56:17.302 \longrightarrow 00:56:19.849$ color as a kind of extension.

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

 $00{:}56{:}25{.}985 \dashrightarrow 00{:}56{:}28{.}488$ impoverished and so sterile in a way.

NOTE Confidence: 0.67961695

 $00{:}56{:}28{.}490 \dashrightarrow 00{:}56{:}30{.}317$ I mean again, I have this image of us NOTE Confidence: 0.67961695

 $00{:}56{:}30{.}317 \dashrightarrow 00{:}56{:}32{.}301$ all just sitting in front of our screens

NOTE Confidence: 0.67961695

 $00{:}56{:}32{.}301 \dashrightarrow 00{:}56{:}34{.}389$ for hours and hours during the pandemic.

NOTE Confidence: 0.67961695

 $00{:}56{:}34{.}390 \dashrightarrow 00{:}56{:}36{.}819$ You know, so much of the richness

NOTE Confidence: 0.67961695

 $00{:}56{:}36{.}819 \dashrightarrow 00{:}56{:}39{.}344$ of our thoughts and our imagination

NOTE Confidence: 0.67961695

 $00{:}56{:}39{.}344 \dashrightarrow 00{:}56{:}41{.}684$ and our creativity comes from

NOTE Confidence: 0.67961695

 $00:56:41.684 \rightarrow 00:56:43.550$ experiencing and sensing and.

NOTE Confidence: 0.67961695

 $00{:}56{:}43{.}550 \dashrightarrow 00{:}56{:}45{.}730$ Interacting with the world,

NOTE Confidence: 0.67961695

 $00:56:45.730 \longrightarrow 00:56:48.748$ and so you know when I hear Mark

NOTE Confidence: 0.67961695

 $00{:}56{:}48.748 \dashrightarrow 00{:}56{:}50.138$ Zuckerberg talked about the metaverse

NOTE Confidence: 0.67961695

 $00:56:50.138 \dashrightarrow 00:56:52.354$ and how we're all going to be living

NOTE Confidence: 0.67961695

 $00{:}56{:}52{.}354 \dashrightarrow 00{:}56{:}53{.}669$ like these virtual lives online.

NOTE Confidence: 0.67961695

 $00:56:53.670 \rightarrow 00:56:55.308$ I'm like, please now we need

- NOTE Confidence: 0.67961695
- $00:56:55.308 \longrightarrow 00:56:57.040$ to go the opposite direction.
- NOTE Confidence: 0.67961695
- $00{:}56{:}57{.}040 \dashrightarrow 00{:}56{:}59{.}512$ 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
- $00:57:01.830 \longrightarrow 00:57:02.748$ 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
- $00{:}57{:}04.890 \dashrightarrow 00{:}57{:}07.018$ Please, let's like, let's retreat to that.
- NOTE Confidence: 0.87550919444444
- $00:57:10.670 \longrightarrow 00:57:11.921$ Here's another question.
- NOTE Confidence: 0.87550919444444
- $00:57:11.921 \rightarrow 00:57:14.423$ Are there implications for re framing?
- NOTE Confidence: 0.87550919444444
- $00{:}57{:}14{.}430 \dashrightarrow 00{:}57{:}16{.}910$ Are diagnostics of some systems,
- NOTE Confidence: 0.87550919444444
- $00:57:16.910 \longrightarrow 00:57:19.925$ for example schizophrenia and hallucinations
- NOTE Confidence: 0.87550919444444
- $00:57:19.925 \rightarrow 00:57:23.296$ are a dissonance between body flash
- NOTE Confidence: 0.87550919444444
- $00{:}57{:}23.296 \dashrightarrow 00{:}57{:}25.788$ perception and mind or autism is a
- NOTE Confidence: 0.87550919444444
- $00{:}57{:}25.788 \dashrightarrow 00{:}57{:}28.292$ breakdown in the body's capacity to
- NOTE Confidence: 0.87550919444444
- $00{:}57{:}28.292 \dashrightarrow 00{:}57{:}33.100$ 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

 $00:57:35.435 \longrightarrow 00:57:37.658$ expert in this kind of thing than I am.

NOTE Confidence: 0.8702292505

 $00{:}57{:}37{.}660 \dashrightarrow 00{:}57{:}40{.}985$ I would just suggest or or.

NOTE Confidence: 0.8702292505

 $00{:}57{:}40{.}985 \dashrightarrow 00{:}57{:}44{.}030$ Note that I have seen more and

NOTE Confidence: 0.8702292505

 $00:57:44.132 \rightarrow 00:57:48.150$ more emphasis in what I have read.

NOTE Confidence: 0.8702292505

 $00{:}57{:}48{.}150 \dashrightarrow 00{:}57{:}51{.}633$ Ah, in the literatures that I have read on.

NOTE Confidence: 0.8702292505

 $00{:}57{:}51{.}640 \dashrightarrow 00{:}57{:}53{.}986$ The body, the role of the

NOTE Confidence: 0.8702292505

 $00:57:53.986 \longrightarrow 00:57:56.101$ body in in mental conditions,

NOTE Confidence: 0.8702292505

 $00:57:56.101 \longrightarrow 00:57:58.856$ the role of physical space,

NOTE Confidence: 0.8702292505

 $00{:}57{:}58{.}860 \dashrightarrow 00{:}58{:}02{.}273$ the role of of relationships that

NOTE Confidence: 0.8702292505

 $00{:}58{:}02{.}273 \dashrightarrow 00{:}58{:}03{.}688$ all these things are constituent,

NOTE Confidence: 0.8702292505

 $00{:}58{:}03.690 \dashrightarrow 00{:}58{:}06.042$ if not only of our thinking but of

NOTE Confidence: 0.8702292505

 $00{:}58{:}06.042 \dashrightarrow 00{:}58{:}08.524$ our our mental health and the ways

NOTE Confidence: 0.8702292505

 $00:58:08.524 \rightarrow 00:58:11.049$ our mental health can can go wrong.

NOTE Confidence: 0.8702292505

 $00{:}58{:}11.050 \dashrightarrow 00{:}58{:}13.648$ And that this again this this

NOTE Confidence: 0.8702292505

 $00{:}58{:}13.648 \dashrightarrow 00{:}58{:}14.947$ it's so per vasive.

NOTE Confidence: 0.8702292505

00:58:14.950 --> 00:58:17.554 It's so baked into our culture again,

- NOTE Confidence: 0.8702292505
- $00:58:17.560 \longrightarrow 00:58:19.395$ the separation between mind and

 $00:58:19.395 \rightarrow 00:58:22.290$ 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

 $00:58:22.944 \longrightarrow 00:58:25.233$ and it's it has dictated so much

NOTE Confidence: 0.8702292505

 $00:58:25.233 \rightarrow 00:58:27.666$ of what we do and how we do it,

NOTE Confidence: 0.8702292505

 $00:58:27.670 \longrightarrow 00:58:29.248$ 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

 $00{:}58{:}30{.}204 \dashrightarrow 00{:}58{:}31{.}476$ the more that come.

NOTE Confidence: 0.938716235652174

 $00{:}58{:}33{.}930 \dashrightarrow 00{:}58{:}35{.}665$ An integrative kind of holistic

NOTE Confidence: 0.938716235652174

 $00:58:35.665 \rightarrow 00:58:37.786$ approach is is one that's going

NOTE Confidence: 0.938716235652174

 $00{:}58{:}37{.}786 \dashrightarrow 00{:}58{:}40{.}005$ 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

 $00:58:41.680 \longrightarrow 00:58:43.144$ and any problems that a human

NOTE Confidence: 0.938716235652174

 $00:58:43.144 \longrightarrow 00:58:44.120$ being is struggling with.

NOTE Confidence: 0.850322621818182

 $00{:}58{:}48.650 \dashrightarrow 00{:}58{:}50.115$ There's a comment here from

 $00{:}58{:}50{.}115 \dashrightarrow 00{:}58{:}51{.}580$ Doctor Crystal two that Doctor

NOTE Confidence: 0.850322621818182

 $00:58:51.631 \rightarrow 00:58:53.599$ Morris Bell in our department has

NOTE Confidence: 0.850322621818182

 $00:58:53.599 \rightarrow 00:58:54.911$ been developing assessments and

NOTE Confidence: 0.850322621818182

 $00:58:54.965 \longrightarrow 00:58:56.747$ rehabilitative interventions based

NOTE Confidence: 0.850322621818182

 $00{:}58{:}56{.}747 \dashrightarrow 00{:}58{:}58{.}949$ on the notion of embodied cognition

NOTE Confidence: 0.7951513675

 $00:58:59.440 \rightarrow 00:59:02.008$ 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

 $00:59:06.898 \dashrightarrow 00:59:09.800$ assessments and how and what kinds of

NOTE Confidence: 0.924877761176471

 $00{:}59{:}09{.}800 \dashrightarrow 00{:}59{:}12{.}180$ 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

 $00:59:14.520 \longrightarrow 00:59:15.990$ about their physical environment?

NOTE Confidence: 0.924877761176471

 $00:59:15.990 \longrightarrow 00:59:17.790$ Are they being asked about?

NOTE Confidence: 0.924877761176471

 $00:59:17.790 \longrightarrow 00:59:18.855$ 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

 $00:59:20.050 \rightarrow 00:59:23.194$ but I just I wonder how much more

NOTE Confidence: 0.924877761176471

 $00:59:23.194 \rightarrow 00:59:25.932$ we could broaden those questions

- NOTE Confidence: 0.924877761176471
- $00{:}59{:}25{.}932 \dashrightarrow 00{:}59{:}28{.}055$ and those those inquiries to
- NOTE Confidence: 0.924877761176471
- $00{:}59{:}28.055 \dashrightarrow 00{:}59{:}29.825$ 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
- $00:59:31.850 \longrightarrow 00:59:35.398$ not just their biochemistry.
- NOTE Confidence: 0.924877761176471
- $00{:}59{:}35{.}400 \dashrightarrow 00{:}59{:}36{.}450$ I'd love to hear more about them
- NOTE Confidence: 0.917020345
- $00:59:36.460 \longrightarrow 00:59:38.773$ here. Here's another
- NOTE Confidence: 0.917020345
- $00:59:38.773 \rightarrow 00:59:41.086$ really wonderful question.
- NOTE Confidence: 0.917020345
- $00:59:41.090 \rightarrow 00:59:43.410$ Thank you very much for the informative talk.
- NOTE Confidence: 0.917020345
- $00:59:43.410 \longrightarrow 00:59:46.567$ Do you think that people need some
- NOTE Confidence: 0.917020345
- $00:59:46.567 \rightarrow 00:59:48.989$ training flash education to use slash?
- NOTE Confidence: 0.917020345
- $00:59:48.990 \longrightarrow 00:59:51.645$ Activate the extended brain in
- NOTE Confidence: 0.917020345
- $00{:}59{:}51{.}645 \dashrightarrow 00{:}59{:}53{.}769$ Eastern traditions and philosophy.
- NOTE Confidence: 0.917020345
- $00{:}59{:}53.770 \dashrightarrow 00{:}59{:}57.010$ 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
- $00:59:58.886 \rightarrow 01:00:00.549$ research and practice of architecture,
- NOTE Confidence: 0.917020345

- $01:00:00.550 \longrightarrow 01:00:01.753$ I'm an architect.
- NOTE Confidence: 0.917020345
- $01{:}00{:}01{.}753 \dashrightarrow 01{:}00{:}03{.}758$ I sometimes meet the resistance
- NOTE Confidence: 0.917020345
- $01:00:03.758 \longrightarrow 01:00:05.605$ 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
- $01{:}00{:}07.880 \dashrightarrow 01{:}00{:}10.211$ 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
- $01:00:13.830 \longrightarrow 01:00:15.171$ 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
- $01{:}00{:}17.857 \dashrightarrow 01{:}00{:}20.986$ 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
- $01:00:22.800 \longrightarrow 01:00:25.336$ motif and and one that is not as
- NOTE Confidence: 0.9357484575
- $01{:}00{:}25{.}336 \dashrightarrow 01{:}00{:}27{.}643$ 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
- $01:00:30.340 \longrightarrow 01:00:32.902$ I'm really interested to that the
- NOTE Confidence: 0.9357484575
- $01:00:32.902 \rightarrow 01:00:35.220$ speaker is an architect because

- NOTE Confidence: 0.9357484575
- $01:00:35.220 \longrightarrow 01:00:36.660$ 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
- $01:00:37.940 \rightarrow 01:00:40.719$ That we need essentially a second education.
- NOTE Confidence: 0.9357484575
- $01:00:40.720 \longrightarrow 01:00:43.065$ 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
- $01{:}00{:}45{.}340 \dashrightarrow 01{:}00{:}49{.}203$ We now need a second education to give
- NOTE Confidence: 0.9357484575
- $01:00:49.203 \longrightarrow 01:00:52.024$ 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
- $01:00:54.600 \dashrightarrow 01:00:56.448$ which is not an education that we get.
- NOTE Confidence: 0.9357484575
- $01:00:56.450 \rightarrow 01:00:58.040$ We're not really taught taught
- NOTE Confidence: 0.9357484575
- $01:00:58.040 \longrightarrow 01:01:00.317$ how to use our bodies to think
- NOTE Confidence: 0.9357484575
- $01{:}01{:}00{.}317 \dashrightarrow 01{:}01{:}02{.}189$ how to arrange our our physical
- NOTE Confidence: 0.9357484575
- $01{:}01{:}02{.}189 \dashrightarrow 01{:}01{:}04{.}218$ setting in order to think better.
- NOTE Confidence: 0.9357484575
- $01:01:04.220 \longrightarrow 01:01:06.278$ How, how, to as I was saying,
- NOTE Confidence: 0.9357484575
- $01{:}01{:}06.280 \dashrightarrow 01{:}01{:}08.936$ how to use the minds of other people.
- NOTE Confidence: 0.9357484575

 $01:01:08.940 \longrightarrow 01:01:09.777$ To think better,

NOTE Confidence: 0.9357484575

01:01:09.777 $\operatorname{-->}$ 01:01:12.560 but I do think that there are spots like

NOTE Confidence: 0.9357484575

 $01:01:12.560 \rightarrow 01:01:14.852$ bright spots in various industries in

NOTE Confidence: 0.9357484575

 $01:01:14.852 \rightarrow 01:01:17.070$ various fields or people are already

NOTE Confidence: 0.9357484575

 $01{:}01{:}17{.}070 \dashrightarrow 01{:}01{:}19{.}146$ 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

 $01:01:22.132 \rightarrow 01:01:24.738$ we try to do in our heads and how much

NOTE Confidence: 0.9357484575

 $01:01:24.738 \rightarrow 01:01:26.682$ more effective and efficient it would

NOTE Confidence: 0.9357484575

 $01{:}01{:}26.682 \dashrightarrow 01{:}01{:}29.444$ be to do our thinking out in the world.

NOTE Confidence: 0.9357484575

 $01:01:29.450 \rightarrow 01:01:31.140$ Architects are already doing that.

NOTE Confidence: 0.9357484575

01:01:31.140 --> 01:01:31.860 You know,

NOTE Confidence: 0.9357484575

 $01{:}01{:}31{.}860 \dashrightarrow 01{:}01{:}34{.}380$ they build models of a building that

NOTE Confidence: 0.9357484575

 $01:01:34.380 \longrightarrow 01:01:36.419$ they are thinking about constructing

NOTE Confidence: 0.9357484575

 $01:01:36.419 \longrightarrow 01:01:39.469$ 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 the model,

- NOTE Confidence: 0.9357484575
- $01:01:42.690 \longrightarrow 01:01:44.106$ when they've, once they've built it,
- NOTE Confidence: 0.9357484575
- $01:01:44.110 \longrightarrow 01:01:46.000$ they can Orient their bodies to it.
- NOTE Confidence: 0.9357484575
- $01:01:46.000 \longrightarrow 01:01:47.170$ They can move around it.
- NOTE Confidence: 0.9357484575
- $01:01:47.170 \longrightarrow 01:01:49.760$ They can manipulate different parts of it,
- NOTE Confidence: 0.9357484575
- $01{:}01{:}49.760 \dashrightarrow 01{:}01{:}52.558$ and all of those are really
- NOTE Confidence: 0.9357484575
- $01:01:52.558 \longrightarrow 01:01:54.430$ 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
- $01:01:55.650 \longrightarrow 01:01:56.799$ when they're moving.
- NOTE Confidence: 0.9357484575
- $01{:}01{:}56.799 \dashrightarrow 01{:}01{:}59.097$ When architects are looking at and
- NOTE Confidence: 0.9357484575
- $01:01:59.097 \rightarrow 01:02:01.370$ interacting with the model that is thinking,
- NOTE Confidence: 0.9357484575
- $01:02:01.370 \longrightarrow 01:02:04.765$ and I think that kind of interactivity
- NOTE Confidence: 0.9357484575
- 01:02:04.770 $\operatorname{-->}$ 01:02:06.380 could be incorporated into a
- NOTE Confidence: 0.9357484575
- $01:02:06.380 \longrightarrow 01:02:08.370$ lot of other fields as well.
- NOTE Confidence: 0.9357484575
- $01:02:08.370 \longrightarrow 01:02:09.550$ It always strikes me that.
- NOTE Confidence: 0.9357484575
- $01{:}02{:}09{.}550 \dashrightarrow 01{:}02{:}12{.}280$ Like we think it's OK for kindergart eners
- NOTE Confidence: 0.9357484575

 $01:02:12.280 \rightarrow 01:02:15.169$ and first graders to use the manipulatives.

NOTE Confidence: 0.9357484575

 $01:02:15.170 \longrightarrow 01:02:16.130$ You know when they're learning

NOTE Confidence: 0.9357484575

 $01:02:16.130 \longrightarrow 01:02:16.706$ math or something.

NOTE Confidence: 0.9357484575

01:02:16.710 --> 01:02:17.630 But as you get older,

NOTE Confidence: 0.9357484575

 $01{:}02{:}17.630 \dashrightarrow 01{:}02{:}19.520$ you really should put away those

NOTE Confidence: 0.9357484575

 $01{:}02{:}19.520 \dashrightarrow 01{:}02{:}21.050$ those external tools and start

NOTE Confidence: 0.9357484575

 $01:02:21.050 \longrightarrow 01:02:22.328$ to do it all up here.

NOTE Confidence: 0.9357484575

 $01:02:22.330 \dashrightarrow 01:02:24.502$ And that's actually it's really a

NOTE Confidence: 0.9357484575

 $01{:}02{:}24.502 \dashrightarrow 01{:}02{:}26.333$ mistaken idea that mature thinkers

NOTE Confidence: 0.9357484575

 $01:02:26.333 \longrightarrow 01:02:28.229$ 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

 $01{:}02{:}30{.}510 \dashrightarrow 01{:}02{:}33{.}282$ and I think we can see that in in

NOTE Confidence: 0.9357484575

 $01:02:33.282 \rightarrow 01:02:35.531$ certain professions and certain

NOTE Confidence: 0.9357484575

 $01{:}02{:}35{.}531 \dashrightarrow 01{:}02{:}37{.}388$ industries where externalized

NOTE Confidence: 0.9357484575

 $01:02:37.388 \rightarrow 01:02:39.772$ thinking has become, it's it's.

- NOTE Confidence: 0.9357484575
- $01{:}02{:}39{.}772 \dashrightarrow 01{:}02{:}40{.}816$ Part of the culture.
- NOTE Confidence: 0.82483669625
- $01:02:43.820 \longrightarrow 01:02:46.140$ Any a couple more things from the chat.
- NOTE Confidence: 0.82483669625
- $01{:}02{:}46.140 \dashrightarrow 01{:}02{:}49.143$ One is someone worked who works with
- NOTE Confidence: 0.82483669625
- $01:02:49.143 \dashrightarrow 01:02:52.300$ Maurice Bell says knows that she would be.
- NOTE Confidence: 0.82483669625
- $01:02:52.300 \longrightarrow 01:02:53.455$ He would be delighted to
- NOTE Confidence: 0.82483669625
- $01:02:53.455 \longrightarrow 01:02:54.610$ speak with you about Chris
- NOTE Confidence: 0.602977595
- $01:02:54.620 \longrightarrow 01:02:57.828$ working. Yeah yeah, great.
- NOTE Confidence: 0.87183683
- $01:02:57.940 \longrightarrow 01:02:59.955$ And then another yeah and
- NOTE Confidence: 0.87183683
- $01:02:59.955 \longrightarrow 01:03:01.567$ 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
- $01{:}03{:}03{.}346 \dashrightarrow 01{:}03{:}04{.}977$ understand to be the relationship
- NOTE Confidence: 0.87183683
- $01{:}03{:}04{.}977 \dashrightarrow 01{:}03{:}06{.}927$ between your thinking on this
- NOTE Confidence: 0.87183683
- $01{:}03{:}06{.}927 \dashrightarrow 01{:}03{:}08{.}934$ topic and previous questions
- NOTE Confidence: 0.87183683
- $01{:}03{:}08{.}934 \dashrightarrow 01{:}03{:}11{.}086$ about education slash learning.
- NOTE Confidence: 0.87183683
- $01{:}03{:}11.090 \dashrightarrow 01{:}03{:}13.154$ Is it your view that the
- NOTE Confidence: 0.87183683

 $01:03:13.154 \longrightarrow 01:03:14.186$ 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

 $01{:}03{:}19{.}330 \dashrightarrow 01{:}03{:}22{.}550$ If So what are those implications? Yes,

NOTE Confidence: 0.84537571944444

 $01{:}03{:}22.580 \dashrightarrow 01{:}03{:}25.136$ thank you to hand staff for

NOTE Confidence: 0.84537571944444

01:03:25.136 --> 01:03:28.884 asking that I I that is a very

NOTE Confidence: 0.845375719444444

 $01:03:28.884 \rightarrow 01:03:31.078$ important aspect of this inquiry.

NOTE Confidence: 0.84537571944444

 $01:03:31.078 \rightarrow 01:03:33.142$ To me it's something that I write about

NOTE Confidence: 0.845375719444444

 $01{:}03{:}33{.}142 \dashrightarrow 01{:}03{:}35{.}132$ in the book and something that became

NOTE Confidence: 0.845375719444444

 $01{:}03{:}35{.}132 \dashrightarrow 01{:}03{:}37{.}040$ increasingly apparent to me over the

NOTE Confidence: 0.84537571944444

 $01{:}03{:}37{.}098 \dashrightarrow 01{:}03{:}39{.}000$ course of researching and writing it.

NOTE Confidence: 0.845375719444444

 $01:03:39.000 \rightarrow 01:03:43.984$ That if we are to understand thinking as.

NOTE Confidence: 0.845375719444444

 $01:03:43.990 \rightarrow 01:03:44.530$ Fundamentally,

NOTE Confidence: 0.845375719444444

 $01:03:44.530 \rightarrow 01:03:47.230$ including these extra neural resources,

NOTE Confidence: 0.845375719444444

 $01:03:47.230 \longrightarrow 01:03:49.869$ and in fact depending for its it's

NOTE Confidence: 0.845375719444444

 $01:03:49.869 \rightarrow 01:03:52.490$ quality on these external resources,

- NOTE Confidence: 0.845375719444444
- $01:03:52.490 \rightarrow 01:03:54.751$ then the quality of the resources that
- NOTE Confidence: 0.84537571944444
- $01:03:54.751 \rightarrow 01:03:56.799$ people have access to really matters.
- NOTE Confidence: 0.84537571944444
- $01:03:56.800 \longrightarrow 01:03:57.442$ You know?
- NOTE Confidence: 0.84537571944444
- $01:03:57.442 \longrightarrow 01:03:59.368$ I mean, we have this fiction,
- NOTE Confidence: 0.845375719444444
- $01:03:59.370 \longrightarrow 01:04:01.428$ this myth that all that matters
- NOTE Confidence: 0.845375719444444
- $01:04:01.428 \longrightarrow 01:04:03.190$ is what's inside your head,
- NOTE Confidence: 0.84537571944444
- $01:04:03.190 \longrightarrow 01:04:05.710$ and that a test or an IQ test or some
- NOTE Confidence: 0.845375719444444
- $01:04:05.788 \longrightarrow 01:04:08.044$ other kind of achievement test is
- NOTE Confidence: 0.845375719444444
- $01{:}04{:}08.044 \dashrightarrow 01{:}04{:}10.708$ that it's almost like a readout of of.
- NOTE Confidence: 0.84537571944444
- 01:04:10.710 --> 01:04:12.378 It's almost like weighing, you know,
- NOTE Confidence: 0.845375719444444
- $01:04:12.380 \longrightarrow 01:04:14.150$ the way the eugenicists used to.
- NOTE Confidence: 0.845375719444444
- $01:04:14.150 \longrightarrow 01:04:16.255$ 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: 0.84537571944444
- 01:04:18.849 --> 01:04:20.468 accurate reading of someone's
- NOTE Confidence: 0.845375719444444
- $01:04:20.468 \rightarrow 01:04:22.060$ intelligence in someone's potential.
- NOTE Confidence: 0.845375719444444

 $01:04:22.060 \longrightarrow 01:04:24.970$ When you start thinking of.

NOTE Confidence: 0.845375719444444

 $01:04:24.970 \longrightarrow 01:04:27.406$ Thinking when you when you start

NOTE Confidence: 0.84537571944444

 $01{:}04{:}27{.}406 \dashrightarrow 01{:}04{:}30{.}732$ viewing the process of thinking as a as

NOTE Confidence: 0.84537571944444

01:04:30.732 --> 01:04:33.168 really a dynamic process of assembling

NOTE Confidence: 0.84537571944444

 $01{:}04{:}33{.}246 \dashrightarrow 01{:}04{:}35{.}610$ external and internal resources,

NOTE Confidence: 0.84537571944444

01:04:35.610 --> 01:04:38.370 integrating external and internal resources,

NOTE Confidence: 0.845375719444444

 $01:04:38.370 \longrightarrow 01:04:41.674$ then you then you have to pay

NOTE Confidence: 0.845375719444444

 $01{:}04{:}41{.}674 \dashrightarrow 01{:}04{:}44{.}110$ attention to again the access

NOTE Confidence: 0.845375719444444

 $01:04:44.110 \longrightarrow 01:04:46.886$ and Equitable Ness of the raw

NOTE Confidence: 0.845375719444444

 $01{:}04{:}46.886 \dashrightarrow 01{:}04{:}49.209$ materials that people have access to.

NOTE Confidence: 0.84537571944444

 $01{:}04{:}49{.}210 \dashrightarrow 01{:}04{:}51{.}051$ And we know that those raw materials

NOTE Confidence: 0.84537571944444

 $01:04:51.051 \rightarrow 01:04:53.389$ are in no way equitably distributed.

NOTE Confidence: 0.845375719444444

 $01{:}04{:}53{.}390 \dashrightarrow 01{:}04{:}55{.}610$ People don't have the same.

NOTE Confidence: 0.845375719444444

 $01{:}04{:}55{.}610 \dashrightarrow 01{:}04{:}57{.}578$ Freedom to move their bodies the

NOTE Confidence: 0.845375719444444

 $01:04:57.578 \longrightarrow 01:04:59.370$ same access to natural spaces.

NOTE Confidence: 0.84537571944444

 $01{:}04{:}59{.}370 \dashrightarrow 01{:}05{:}03{.}374$ The same access to safe and well

NOTE Confidence: 0.845375719444444

 $01:05:03.374 \rightarrow 01:05:06.154$ designed interiors or even you know,

NOTE Confidence: 0.84537571944444

 $01:05:06.154 \longrightarrow 01:05:08.290$ access to a quiet place to to work

NOTE Confidence: 0.84537571944444

 $01{:}05{:}08.359 \dashrightarrow 01{:}05{:}10.487$ or a quiet place to sleep at night.

NOTE Confidence: 0.84537571944444

 $01:05:10.490 \rightarrow 01:05:13.325$ All these things are they they influence

NOTE Confidence: 0.845375719444444

 $01{:}05{:}13.325 \dashrightarrow 01{:}05{:}15.149$ our cognition so substantially

NOTE Confidence: 0.84537571944444

 $01:05:15.149 \rightarrow 01:05:16.748$ and yet somehow,

NOTE Confidence: 0.84537571944444

 $01{:}05{:}16.750 \dashrightarrow 01{:}05{:}19.151$ it's like we erased them all when

NOTE Confidence: 0.845375719444444

 $01{:}05{:}19{.}151 \dashrightarrow 01{:}05{:}21{.}620$ we have people take these tests

NOTE Confidence: 0.84537571944444

 $01{:}05{:}21.620 \dashrightarrow 01{:}05{:}24.500$ that that determines so much of

NOTE Confidence: 0.84537571944444

 $01:05:24.500 \rightarrow 01:05:25.856$ of a person's opportunity.

NOTE Confidence: 0.845375719444444

 $01:05:25.856 \longrightarrow 01:05:26.542$ In life,

NOTE Confidence: 0.845375719444444

 $01{:}05{:}26.542 \dashrightarrow 01{:}05{:}29.764$ so in the book I write about how we

NOTE Confidence: 0.84537571944444

01:05:29.764 --> 01:05:32.086 should be talking about extension inequality.

NOTE Confidence: 0.84537571944444

01:05:32.090 --> 01:05:33.595 You know the inequality that

NOTE Confidence: 0.845375719444444

 $01{:}05{:}33{.}595 \dashrightarrow 01{:}05{:}35{.}869$ people face in terms of the mental

NOTE Confidence: 0.845375719444444

 $01:05:35.869 \rightarrow 01:05:37.993$ extensions that are available to them.

NOTE Confidence: 0.845375719444444

 $01{:}05{:}38{.}000 \dashrightarrow 01{:}05{:}41{.}696$ We should be talking about extension

NOTE Confidence: 0.84537571944444

 $01:05:41.696 \rightarrow 01:05:44.160$ inequality alongside wealth inequality

NOTE Confidence: 0.84537571944444

 $01:05:44.246 \rightarrow 01:05:46.070$ or or social capital inequality

NOTE Confidence: 0.84537571944444

 $01:05:46.070 \longrightarrow 01:05:47.730$ or or income inequality.

NOTE Confidence: 0.84537571944444

 $01:05:47.730 \longrightarrow 01:05:49.140$ I think it's just as important.

NOTE Confidence: 0.6250606266666667

 $01:05:54.510 \longrightarrow 01:05:55.770$ Older, you're muted.

NOTE Confidence: 0.37709153

 $01:05:58.410 \longrightarrow 01:05:59.770$ Sorry bout that we have time

NOTE Confidence: 0.37709153

 $01:05:59.770 \longrightarrow 01:06:00.790$ for a few more questions.

NOTE Confidence: 0.906890609130435

 $01:06:00.790 \longrightarrow 01:06:03.618$ If you'd like to either raise your

NOTE Confidence: 0.906890609130435

 $01{:}06{:}03.618 \dashrightarrow 01{:}06{:}06.514$ hand in zoom or add it to the

NOTE Confidence: 0.906890609130435

 $01{:}06{:}06{.}514 \dashrightarrow 01{:}06{:}09{.}229$ 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

 $01:06:14.810 \longrightarrow 01:06:16.812$ How do you see the curriculum of

NOTE Confidence: 0.906890609130435

 $01:06:16.812 \rightarrow 01:06:18.743$ the extended mind changing the way

- NOTE Confidence: 0.906890609130435
- $01:06:18.743 \rightarrow 01:06:20.423$ 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
- $01:06:22.595 \longrightarrow 01:06:24.480$ 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
- $01:06:28.885 \rightarrow 01:06:31.510$ Except through some some intriguing
- NOTE Confidence: 0.883765233
- $01:06:31.510 \rightarrow 01:06:34.359$ things that people have told me.
- NOTE Confidence: 0.883765233
- $01:06:34.360 \longrightarrow 01:06:36.015$ For example, that there's and
- NOTE Confidence: 0.883765233
- $01{:}06{:}36.015 \dashrightarrow 01{:}06{:}38.439$ maybe some of you know about this.
- NOTE Confidence: 0.883765233
- $01{:}06{:}38{.}440 \dashrightarrow 01{:}06{:}40{.}918$ There's a a platform that allows medical
- NOTE Confidence: 0.883765233
- $01:06:40.918 \longrightarrow 01:06:43.593$ students to to learn all the voluminous
- NOTE Confidence: 0.883765233
- $01{:}06{:}43.593 \dashrightarrow 01{:}06{:}45.909$ 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
- $01{:}06{:}48{.}300 \dashrightarrow 01{:}06{:}49{.}528$ and like a kind.
- NOTE Confidence: 0.883765233
- $01:06:49.528 \longrightarrow 01:06:51.063$ That's the kind of drawing
- NOTE Confidence: 0.883765233

- $01:06:51.063 \rightarrow 01:06:53.706$ based approach to to memory,
- NOTE Confidence: 0.883765233
- $01:06:53.706 \longrightarrow 01:06:55.462$ which can be very effective,
- NOTE Confidence: 0.883765233
- $01{:}06{:}55{.}462 \dashrightarrow 01{:}06{:}58{.}132$ and I think is is a super interesting
- NOTE Confidence: 0.883765233
- $01:06:58.132 \rightarrow 01:07:01.174$ way to externalize thought.
- NOTE Confidence: 0.883765233
- $01{:}07{:}01{.}174 \dashrightarrow 01{:}07{:}03{.}986$ And capture capture information
- NOTE Confidence: 0.883765233
- $01{:}07{:}03.986 \dashrightarrow 01{:}07{:}06.107$ 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
- $01{:}07{:}17.380 \dashrightarrow 01{:}07{:}18.700$ let's reinvent education along
- NOTE Confidence: 0.883765233
- $01{:}07{:}18.700 \dashrightarrow 01{:}07{:}20.760$ the lines of the extended mind.
- NOTE Confidence: 0.883765233
- $01:07:20.760 \longrightarrow 01:07:21.420$ I would.
- NOTE Confidence: 0.883765233
- $01:07:21.420 \longrightarrow 01:07:23.730$ I think you could go through those
- NOTE Confidence: 0.883765233
- $01:07:23.730 \longrightarrow 01:07:26.320$ three major categories and say how are

- NOTE Confidence: 0.883765233
- $01:07:26.320 \rightarrow 01:07:28.660$ we involving the body in learning?
- NOTE Confidence: 0.883765233
- 01:07:28.660 $\operatorname{-->}$ 01:07:31.996 How are we giving people embodied
- NOTE Confidence: 0.883765233
- $01:07:31.996 \rightarrow 01:07:34.530$ experience students embodied experiences of?
- NOTE Confidence: 0.883765233
- $01:07:34.530 \rightarrow 01:07:37.128$ Of what they're learning in ways
- NOTE Confidence: 0.883765233
- $01{:}07{:}37{.}128 \dashrightarrow 01{:}07{:}39{.}900$ that ground abstract ideas in their
- NOTE Confidence: 0.883765233
- $01:07:39.900 \longrightarrow 01:07:42.275$ sort of lived bodily experience.
- NOTE Confidence: 0.883765233
- $01{:}07{:}42.280 \dashrightarrow 01{:}07{:}45.010$ 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
- $01:07:46.830 \longrightarrow 01:07:48.864$ 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
- $01{:}07{:}50{.}840 \dashrightarrow 01{:}07{:}52{.}328$ And how are we, you know,
- NOTE Confidence: 0.883765233
- $01{:}07{:}52{.}330 \dashrightarrow 01{:}07{:}54{.}710$ one particular aspect of medical
- NOTE Confidence: 0.883765233
- $01{:}07{:}54.710 \dashrightarrow 01{:}07{:}57.665$ education that I think the extended
- NOTE Confidence: 0.883765233
- $01{:}07{:}57.665 \dashrightarrow 01{:}08{:}01.060$ mind could have a helpful influence on,
- NOTE Confidence: 0.883765233
- $01:08:01.060 \rightarrow 01:08:02.356$ is, you know.
- NOTE Confidence: 0.883765233

 $01:08:02.356 \rightarrow 01:08:06.370$ As in many other fields in medical education,

NOTE Confidence: 0.883765233

 $01{:}08{:}06{.}370 \dashrightarrow 01{:}08{:}10{.}410$ experts teach novices, but experts,

NOTE Confidence: 0.883765233

 $01:08:10.410 \rightarrow 01:08:12.010$ by virtue of being experts,

NOTE Confidence: 0.883765233

 $01:08:12.010 \rightarrow 01:08:14.956$ are often unable literally unable to

NOTE Confidence: 0.883765233

 $01{:}08{:}14.956 \dashrightarrow 01{:}08{:}18.759$ share all that they know because their

NOTE Confidence: 0.883765233

 $01:08:18.759 \dashrightarrow 01:08:21.664$ knowledge has become so automated.

NOTE Confidence: 0.883765233

 $01:08:21.670 \longrightarrow 01:08:24.754$ So well practiced that they actually

NOTE Confidence: 0.883765233

 $01:08:24.754 \longrightarrow 01:08:27.060$ don't have conscious access to

NOTE Confidence: 0.883765233

 $01:08:27.060 \rightarrow 01:08:28.356$ their their knowledge anymore,

NOTE Confidence: 0.883765233

 $01:08:28.356 \rightarrow 01:08:30.300$ and that can be very frustrating

NOTE Confidence: 0.883765233

 $01:08:30.360 \longrightarrow 01:08:32.010$ for the novice for the beginner,

NOTE Confidence: 0.883765233

 $01:08:32.010 \longrightarrow 01:08:33.958$ because they are still.

NOTE Confidence: 0.883765233

 $01:08:33.958 \rightarrow 01:08:36.880$ Learning step by step they have

NOTE Confidence: 0.883765233

 $01:08:36.973 \longrightarrow 01:08:39.332$ not chunked their their their

NOTE Confidence: 0.883765233

 $01:08:39.332 \rightarrow 01:08:42.314$ knowledge the way a an expert has

NOTE Confidence: 0.883765233

 $01:08:42.314 \rightarrow 01:08:45.089$ and so those the those chunks,

- NOTE Confidence: 0.883765233
- $01:08:45.090 \longrightarrow 01:08:46.854$ those consolidated pieces of
- NOTE Confidence: 0.883765233
- $01{:}08{:}46.854 \dashrightarrow 01{:}08{:}49.059$ information used by an expert
- NOTE Confidence: 0.883765233
- $01:08:49.059 \longrightarrow 01:08:51.180$ 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
- $01{:}08{:}54{.}140 \dashrightarrow 01{:}08{:}58{.}604$ 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
- $01:09:01.914 \longrightarrow 01:09:04.478$ 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
- $01:09:08.180 \longrightarrow 01:09:10.216$ these days is in internal.
- NOTE Confidence: 0.883765233
- 01:09:10.216 --> 01:09:11.080 You know,
- NOTE Confidence: 0.883765233
- $01{:}09{:}11.080 \dashrightarrow 01{:}09{:}13.720$ in in the days of apprentices hips,
- NOTE Confidence: 0.883765233
- $01:09:13.720 \dashrightarrow 01:09:17.850$ where a an apprentice could watch a,
- NOTE Confidence: 0.883765233
- $01{:}09{:}17.850 \dashrightarrow 01{:}09{:}22.170$ a Carpenter or a Taylor do what they do,
- NOTE Confidence: 0.883765233
- $01{:}09{:}22.170 \dashrightarrow 01{:}09{:}26.958$ 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

 $01{:}09{:}28{.}900 \dashrightarrow 01{:}09{:}30{.}916$ 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

 $01:09:33.504 \rightarrow 01:09:36.276$ what's the old saying like come see one.

NOTE Confidence: 0.883765233

 $01:09:36.276 \rightarrow 01:09:38.360$ Do one, teach one or whatever you know.

NOTE Confidence: 0.883765233

 $01:09:38.360 \longrightarrow 01:09:39.515$ But then again,

NOTE Confidence: 0.883765233

 $01:09:39.515 \longrightarrow 01:09:41.440$ like so many other fields,

NOTE Confidence: 0.883765233

 $01:09:41.440 \longrightarrow 01:09:43.848$ so much of the work in medicine

NOTE Confidence: 0.883765233

 $01:09:43.848 \longrightarrow 01:09:45.820$ is now cognitive as internal,

NOTE Confidence: 0.883765233

 $01:09:45.820 \longrightarrow 01:09:47.682$ and so we need to design kind

NOTE Confidence: 0.883765233

 $01:09:47.682 \longrightarrow 01:09:50.794$ of a new generation of what are

NOTE Confidence: 0.883765233

 $01{:}09{:}50{.}794 \dashrightarrow 01{:}09{:}52{.}474$ called cognitive apprentices hips,

NOTE Confidence: 0.950891729166667

 $01:09:52.480 \longrightarrow 01:09:55.112$ which is all about making the thought

NOTE Confidence: 0.950891729166667

 $01:09:55.112 \rightarrow 01:09:57.360$ processes of the expert visible.

NOTE Confidence: 0.950891729166667

 $01:09:57.360 \longrightarrow 01:09:59.520$ And legible to the to

NOTE Confidence: 0.950891729166667

 $01:09:59.520 \rightarrow 01:10:01.155$ the learner so you know,

- NOTE Confidence: 0.950891729166667
- $01{:}10{:}01{.}155 \dashrightarrow 01{:}10{:}02.685$ I think there's there's so much
- NOTE Confidence: 0.950891729166667
- $01:10:02.685 \longrightarrow 01:10:04.368$ that could be from the extended
- NOTE Confidence: 0.950891729166667
- $01{:}10{:}04.368 \dashrightarrow 01{:}10{:}06.479$ mind that could be applied to education.
- NOTE Confidence: 0.950891729166667
- $01:10:06.480 \longrightarrow 01:10:07.785$ I really think we're just
- NOTE Confidence: 0.950891729166667
- $01:10:07.785 \longrightarrow 01:10:08.829$ 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
- $01:10:14.050 \longrightarrow 01:10:15.758$ 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
- $01:10:18.300 \longrightarrow 01:10:20.140$ especially for inviting us
- NOTE Confidence: 0.76865189625
- $01:10:20.140 \longrightarrow 01:10:21.520$ 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
- $01:10:23.432 \longrightarrow 01:10:25.289$ 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
- $01{:}10{:}26{.}934 \dashrightarrow 01{:}10{:}28{.}699$ and we part of yours today.
- NOTE Confidence: 0.76865189625
- 01:10:28.700 --> 01:10:29.950 Yeah, it
- NOTE Confidence: 0.854716975

 $01:10:29.960 \rightarrow 01:10:32.066$ was a great proof of concept.

NOTE Confidence: 0.854716975

 $01:10:32.070 \longrightarrow 01:10:33.162$ We've got it. We've got it

NOTE Confidence: 0.854716975

 $01:10:33.162 \rightarrow 01:10:35.200$ going on right here. There you

NOTE Confidence: 0.896113217142857

 $01:10:35.210 \longrightarrow 01:10:37.480$ go, so I'll turn it to Mike. So

NOTE Confidence: 0.80895690875

 $01{:}10{:}37{.}490 \dashrightarrow 01{:}10{:}40{.}394$ I would just add my thanks to Kyle,

NOTE Confidence: 0.80895690875

 $01{:}10{:}40.400 \dashrightarrow 01{:}10{:}43.316$ 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

 $01{:}10{:}45.836 \dashrightarrow 01{:}10{:}48.662$ wonderful format and to kind of

NOTE Confidence: 0.80895690875

 $01{:}10{:}48.662 \dashrightarrow 01{:}10{:}51.440$ have a group pick your brain.

NOTE Confidence: 0.80895690875

 $01:10:51.440 \longrightarrow 01:10:53.155$ In this very wide ranging

NOTE Confidence: 0.80895690875

 $01{:}10{:}53.155 \dashrightarrow 01{:}10{:}54.870$ conversation it was just wonderful.

NOTE Confidence: 0.80895690875

 $01:10:54.870 \longrightarrow 01:10:58.654$ Thank you again and we should again

NOTE Confidence: 0.80895690875

 $01{:}10{:}58.654 \dashrightarrow 01{:}11{:}00.559$ 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

 $01:11:02.380 \longrightarrow 01:11:06.855$ Yes, I'm so great and we hope to check

NOTE Confidence: 0.80895690875

 $01{:}11{:}06.855 \dashrightarrow 01{:}11{:}09.491$ in with you again at some future date to

NOTE Confidence: 0.80895690875

 $01{:}11{:}09{.}491 \dashrightarrow 01{:}11{:}11{.}771$ see how these ideas that have come up.

NOTE Confidence: 0.80895690875

01:11:11.780 $\operatorname{-->}$ 01:11:14.540 And there was a a few times or at least

NOTE Confidence: 0.80895690875

 $01:11:14.615 \rightarrow 01:11:17.045$ once the question came up was will

NOTE Confidence: 0.80895690875

 $01:11:17.045 \rightarrow 01:11:19.670$ the recording be shared and it's yes.

NOTE Confidence: 0.80895690875

01:11:19.670 $\operatorname{-->}$ 01:11:22.478 And so that would be available on our

NOTE Confidence: 0.80895690875

 $01{:}11{:}22.478 \dashrightarrow 01{:}11{:}25.078$ 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

 $01:11:27.420 \longrightarrow 01:11:29.430$ 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

 $01:11:33.450 \longrightarrow 01:11:33.715$ 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 any body wants to continue

NOTE Confidence: 0.9245411575

 $01:11:37.245 \longrightarrow 01:11:38.585$ the conversation on Twitter,

NOTE Confidence: 0.9245411575

 $01{:}11{:}38{.}590 \dashrightarrow 01{:}11{:}40{.}680$ my handle is at Annie Murphy, Paul.

NOTE Confidence: 0.8459914

 $01{:}11{:}42.830 \dashrightarrow 01{:}11{:}48.220$ 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
- $01:11:50.620 \longrightarrow 01:11:53.038$ 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
- $01:11:54.312 \longrightarrow 01:11:55.902$ 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
- $01:12:03.370 \longrightarrow 01:12:04.000$ OK, thank you.