

**SK≡PTIKO**  
science & spirituality

**QUANTUM  
CONSCIOUSNESS  
EXPERIMENTS**

**#545-DEAN-RADIN**



1  
00:00:07,349 --> 00:00:03,110  
on this episode of skeptico a show about

2  
00:00:10,690 --> 00:00:09,830  
and how when you get it it isn't always

3  
00:00:12,549 --> 00:00:10,700  
what you think

4  
00:00:14,310 --> 00:00:12,559  
[Music]

5  
00:00:17,029 --> 00:00:14,320  
i have an interview coming up with the

6  
00:00:19,990 --> 00:00:17,039  
fantastic dean rayden who i can assure

7  
00:00:23,189 --> 00:00:20,000  
you 100 years from now students will be

8  
00:00:26,550 --> 00:00:23,199  
studying his work and in particular his

9  
00:00:28,230 --> 00:00:26,560  
experiments because dr dean rayden

10  
00:00:31,029 --> 00:00:28,240  
experimentally

11  
00:00:33,910 --> 00:00:31,039  
has destroyed crushed falsified to put

12  
00:00:36,709 --> 00:00:33,920  
it in scientific terms the long-standing

13  
00:00:39,030 --> 00:00:36,719

dominant soulless paradigm that we are

14

00:00:41,430 --> 00:00:39,040

biological robots in a meaningless

15

00:00:43,670 --> 00:00:41,440

universe and if you think i'm laying it

16

00:00:45,990 --> 00:00:43,680

on a little too hard there give a listen

17

00:00:48,790 --> 00:00:46,000

to none other than joe rogan who we can

18

00:00:51,350 --> 00:00:48,800

all agree love him or hate him is one of

19

00:00:53,350 --> 00:00:51,360

the most influential media sources in

20

00:00:56,790 --> 00:00:53,360

the world today higher than anyone

21

00:00:59,110 --> 00:00:56,800

you'll see on cnn fox and msnbc i mean

22

00:01:01,830 --> 00:00:59,120

from a numbers standpoint many many more

23

00:01:05,109 --> 00:01:01,840

viewers here's joe yacking it up with

24

00:01:06,950 --> 00:01:05,119

our old friend of me michael shermer

25

00:01:08,149 --> 00:01:06,960

but if you think about it from a simple

26

00:01:10,070 --> 00:01:08,159

perspective

27

00:01:11,590 --> 00:01:10,080

the entire universe is in your brain and

28

00:01:13,830 --> 00:01:11,600

when you cease to exist the universe

29

00:01:15,830 --> 00:01:13,840

ceases to exist it's just sort of true

30

00:01:17,109 --> 00:01:15,840

by definition now he goes a little bit

31

00:01:19,350 --> 00:01:17,119

further and says you know that

32

00:01:22,149 --> 00:01:19,360

consciousness is everything and that we

33

00:01:23,510 --> 00:01:22,159

bring into existence material stuff by

34

00:01:24,950 --> 00:01:23,520

thinking about or observing it or

35

00:01:26,950 --> 00:01:24,960

whatever and here's some quantum physics

36

00:01:28,950 --> 00:01:26,960

experiments that are really spooky

37

00:01:30,310 --> 00:01:28,960

it's like okay time out you know quantum

38

00:01:31,830 --> 00:01:30,320

physics is weird and spooky

39

00:01:33,749 --> 00:01:31,840

consciousness is weird and spooky that

40

00:01:35,670 --> 00:01:33,759

doesn't mean they're connected

41

00:01:38,069 --> 00:01:35,680

so you see it now right

42

00:01:40,230 --> 00:01:38,079

you see that shermer is just wrong or

43

00:01:42,950 --> 00:01:40,240

put it in another way his claims have

44

00:01:44,710 --> 00:01:42,960

been falsified experimentally

45

00:01:47,510 --> 00:01:44,720

by none other than the work of today's

46

00:01:49,590 --> 00:01:47,520

guest dr dean rayden the spooky weird

47

00:01:52,710 --> 00:01:49,600

things with quantum physics

48

00:01:55,030 --> 00:01:52,720

are related to consciousness and we can

49

00:01:56,870 --> 00:01:55,040

show it experimentally here's a clip

50

00:01:59,030 --> 00:01:56,880

from the interview coming up with dean

51  
00:02:00,870 --> 00:01:59,040  
well so we're trying to connect it to

52  
00:02:02,630 --> 00:02:00,880  
quantum mechanics and so we've done that

53  
00:02:04,310 --> 00:02:02,640  
in two ways

54  
00:02:06,789 --> 00:02:04,320  
the first way is using a double slit

55  
00:02:08,630 --> 00:02:06,799  
optical system to see if you can gain

56  
00:02:09,990 --> 00:02:08,640  
which path information

57  
00:02:11,830 --> 00:02:10,000  
which is uh

58  
00:02:12,710 --> 00:02:11,840  
which of the two slits a photon goes

59  
00:02:15,270 --> 00:02:12,720  
through

60  
00:02:17,670 --> 00:02:15,280  
and so we've we've now done about two

61  
00:02:19,270 --> 00:02:17,680  
dozen such experiments and

62  
00:02:21,350 --> 00:02:19,280  
uh some of them worked and some of them

63  
00:02:23,190 --> 00:02:21,360

don't work but if you do a meta-analysis

64

00:02:24,630 --> 00:02:23,200

across the board it looks like there's

65

00:02:26,790 --> 00:02:24,640

pretty good evidence

66

00:02:29,190 --> 00:02:26,800

that something is going on that the the

67

00:02:31,270 --> 00:02:29,200

consciousness is involved in some way in

68

00:02:33,030 --> 00:02:31,280

the quantum process

69

00:02:35,509 --> 00:02:33,040

i also want to add in the one other

70

00:02:37,589 --> 00:02:35,519

quantum oriented experiment that we more

71

00:02:39,589 --> 00:02:37,599

recently published which involved the

72

00:02:41,350 --> 00:02:39,599

use of entangled photons

73

00:02:43,589 --> 00:02:41,360

as the target of a mind matter

74

00:02:45,670 --> 00:02:43,599

interaction because he wanted to look at

75

00:02:47,430 --> 00:02:45,680

non-local mind interacting with

76

00:02:49,110 --> 00:02:47,440

non-local matter

77

00:02:50,869 --> 00:02:49,120

and did it do anything part of the

78

00:02:52,869 --> 00:02:50,879

experiment was looking at could you

79

00:02:55,030 --> 00:02:52,879

increase the strength of entanglement

80

00:02:56,470 --> 00:02:55,040

and then intentionally decrease the

81

00:02:59,350 --> 00:02:56,480

strength of entanglement the short

82

00:03:01,430 --> 00:02:59,360

answer is yeah we're able to modulate it

83

00:03:04,309 --> 00:03:01,440

but like i said at the top of the show

84

00:03:05,750 --> 00:03:04,319

paradigm change never goes exactly the

85

00:03:08,309 --> 00:03:05,760

way you think

86

00:03:10,309 --> 00:03:08,319

take dean's latest plan his biotech

87

00:03:13,030 --> 00:03:10,319

venture that seeks to jab people in the

88

00:03:15,030 --> 00:03:13,040

arm in order to change their dna of

89

00:03:16,390 --> 00:03:15,040  
course to fix their brain which i

90

00:03:18,470 --> 00:03:16,400  
thought were past the brain

91

00:03:19,990 --> 00:03:18,480  
consciousness thing but anyways to fix

92

00:03:22,309 --> 00:03:20,000  
their brain so they're not depressed so

93

00:03:24,149 --> 00:03:22,319  
they don't have alzheimer's and maybe

94

00:03:26,229 --> 00:03:24,159  
they're a little bit more psychic than

95

00:03:28,869 --> 00:03:26,239  
they were before and maybe they're even

96

00:03:32,630 --> 00:03:28,879  
a little bit more connected consciously

97

00:03:34,630 --> 00:03:32,640  
more like a hive mind kind of thing so i

98

00:03:35,830 --> 00:03:34,640  
wrote a story which is designed to be an

99

00:03:36,869 --> 00:03:35,840  
antidote

100

00:03:39,270 --> 00:03:36,879  
to

101  
00:03:42,630 --> 00:03:39,280  
the way that psychic phenomena are

102  
00:03:44,149 --> 00:03:42,640  
usually portrayed in entertainment so

103  
00:03:46,949 --> 00:03:44,159  
think about the invasion of the body

104  
00:03:49,190 --> 00:03:46,959  
snatchers and the borg and star trek and

105  
00:03:51,830 --> 00:03:49,200  
virtually every other example where you

106  
00:03:52,949 --> 00:03:51,840  
have a hive mind which is presented as

107  
00:03:54,309 --> 00:03:52,959  
the most horrific thing that you can

108  
00:03:56,470 --> 00:03:54,319  
possibly do

109  
00:03:58,789 --> 00:03:56,480  
and we're saying in the story no it is

110  
00:04:01,190 --> 00:03:58,799  
not only not horrific it is the best

111  
00:04:03,270 --> 00:04:01,200  
possible thing that we can do to because

112  
00:04:06,470 --> 00:04:03,280  
it it pulls together something which is

113  
00:04:08,949 --> 00:04:06,480

already interconnected but we be we sort

114

00:04:10,390 --> 00:04:08,959

of behave in an illusory way that we're

115

00:04:13,110 --> 00:04:10,400

separate and we're not really not

116

00:04:14,710 --> 00:04:13,120

connected it is that disconnection that

117

00:04:16,870 --> 00:04:14,720

leads to the kind of madness that we're

118

00:04:19,270 --> 00:04:16,880

currently seeing in ukraine

119

00:04:20,789 --> 00:04:19,280

right you know people and literally

120

00:04:22,069 --> 00:04:20,799

shooting at each other

121

00:04:24,070 --> 00:04:22,079

and not

122

00:04:25,749 --> 00:04:24,080

appreciating the fact that at a deeper

123

00:04:28,710 --> 00:04:25,759

level everything it really is

124

00:04:30,629 --> 00:04:28,720

interconnected including us so this is

125

00:04:33,270 --> 00:04:30,639

part of the plot line and the story

126

00:04:35,189 --> 00:04:33,280

where there's a tension then between

127

00:04:37,270 --> 00:04:35,199

people who

128

00:04:40,550 --> 00:04:37,280

who in this case take a genetic

129

00:04:42,710 --> 00:04:40,560

enhancement and become a

130

00:04:44,550 --> 00:04:42,720

a group mind essentially

131

00:04:47,030 --> 00:04:44,560

everyone outside the group mind thinks

132

00:04:50,390 --> 00:04:47,040

that this is scary we need to stop that

133

00:04:52,310 --> 00:04:50,400

it's bad from inside this is the best

134

00:04:54,310 --> 00:04:52,320

thing that ever happened this is like

135

00:04:56,870 --> 00:04:54,320

the difference between

136

00:04:58,710 --> 00:04:56,880

homo sapiens and homo superior

137

00:05:01,270 --> 00:04:58,720

if we if we're going to survive we need

138

00:05:03,189 --> 00:05:01,280

to advance as a species

139

00:05:06,469 --> 00:05:03,199

and so the story is basically making the

140

00:05:08,950 --> 00:05:06,479

case that homo sapiens is dying

141

00:05:11,590 --> 00:05:08,960

and we have to we either die or we

142

00:05:14,469 --> 00:05:11,600

evolve well the evolution is going

143

00:05:16,710 --> 00:05:14,479

towards a new kind of human and if it

144

00:05:18,390 --> 00:05:16,720

needs a little genetic push to get there

145

00:05:19,670 --> 00:05:18,400

so be it

146

00:05:22,390 --> 00:05:19,680

so the question about whether or not

147

00:05:24,870 --> 00:05:22,400

this biotech is going to happen is

148

00:05:27,110 --> 00:05:24,880

really not a question at all of course

149

00:05:29,270 --> 00:05:27,120

it's going to happen maybe the best we

150

00:05:31,670 --> 00:05:29,280

can do is hope that we have the right

151

00:05:33,909 --> 00:05:31,680

scientist with his hand at the switch

152

00:05:36,790 --> 00:05:33,919

and in that way maybe we should be glad

153

00:05:38,629 --> 00:05:36,800

that dean rayden is doing this work but

154

00:05:41,189 --> 00:05:38,639

i can't help but feel we might want to

155

00:05:43,430 --> 00:05:41,199

study this one a little bit deeper and

156

00:05:44,870 --> 00:05:43,440

fortunately i can tell you i've done the

157

00:05:46,390 --> 00:05:44,880

research

158

00:05:49,909 --> 00:05:46,400

here it is

159

00:05:51,350 --> 00:05:49,919

1 12 it works on just the one primate

160

00:05:53,670 --> 00:05:51,360

one is all we need

161

00:05:55,590 --> 00:05:53,680

full cognitive recovery

162

00:05:56,710 --> 00:05:55,600

we're ready look are you sure you're not

163

00:05:58,469 --> 00:05:56,720

rushing this

164

00:05:59,990 --> 00:05:58,479

the date is clear

165

00:06:01,590 --> 00:06:00,000

we're ready stephen

166

00:06:03,830 --> 00:06:01,600

all i need is your approval for human

167

00:06:06,390 --> 00:06:03,840

trial yep that's rise of the planet of

168

00:06:08,710 --> 00:06:06,400

the apes and in this case the scientist

169

00:06:10,230 --> 00:06:08,720

with the hand on a switch is james

170

00:06:13,029 --> 00:06:10,240

franco

171

00:06:14,710 --> 00:06:13,039

think about that one for a minute

172

00:06:15,670 --> 00:06:14,720

by the way here's how that thing turns

173

00:06:17,990 --> 00:06:15,680

out

174

00:06:23,909 --> 00:06:18,000

donnie get it ready she's got stage

175

00:06:29,430 --> 00:06:26,390

we're ready to move on to the next phase

176  
00:06:33,430 --> 00:06:31,590  
no no no

177  
00:06:35,350 --> 00:06:33,440  
been absolutely no side effects

178  
00:06:38,070 --> 00:06:35,360  
associated with 112

179  
00:06:40,309 --> 00:06:38,080  
with one exception

180  
00:06:42,309 --> 00:06:40,319  
dean rayden is an awesome scientist we

181  
00:06:44,469 --> 00:06:42,319  
stand on the shoulders of giants like

182  
00:06:46,070 --> 00:06:44,479  
this i'm very grateful that he came on

183  
00:06:48,550 --> 00:06:46,080  
i'm very grateful that he was so open

184  
00:06:50,070 --> 00:06:48,560  
about answering all these questions

185  
00:06:51,110 --> 00:06:50,080  
who knows where any of this stuff is

186  
00:06:53,909 --> 00:06:51,120  
going to go

187  
00:06:55,990 --> 00:06:53,919  
and who knows what our role is in

188  
00:06:57,990 --> 00:06:56,000

directing it

189

00:07:00,710 --> 00:06:58,000

stick around i have a monumental

190

00:07:03,350 --> 00:07:00,720

interview with dr dean raden coming up

191

00:07:05,110 --> 00:07:03,360

next on skeptico

192

00:07:07,510 --> 00:07:05,120

welcome to skeptica where we explore

193

00:07:09,830 --> 00:07:07,520

controversial science and spirituality

194

00:07:11,909 --> 00:07:09,840

with leading researchers thinkers and

195

00:07:13,270 --> 00:07:11,919

their critics i'm your host alex scarce

196

00:07:15,029 --> 00:07:13,280

and today

197

00:07:16,870 --> 00:07:15,039

boy oh boy

198

00:07:19,110 --> 00:07:16,880

what a treat what a treat for me and

199

00:07:21,670 --> 00:07:19,120

hopefully i can do a good job and make

200

00:07:24,469 --> 00:07:21,680

it a treat for you as well we have dr

201  
00:07:27,110 --> 00:07:24,479  
dean raiden back on skeptico i think

202  
00:07:29,990 --> 00:07:27,120  
almost everyone who's listening to this

203  
00:07:31,909 --> 00:07:30,000  
show who regularly listens to it knows

204  
00:07:34,390 --> 00:07:31,919  
who dean braden is

205  
00:07:35,909 --> 00:07:34,400  
but in case you don't

206  
00:07:38,870 --> 00:07:35,919  
we are talking about one of the world's

207  
00:07:40,550 --> 00:07:38,880  
most respected and most famous

208  
00:07:41,589 --> 00:07:40,560  
parapsychologists

209  
00:07:44,710 --> 00:07:41,599  
as in

210  
00:07:46,070 --> 00:07:44,720  
all time most famous all-time most

211  
00:07:48,230 --> 00:07:46,080  
respected

212  
00:07:51,510 --> 00:07:48,240  
truly groundbreaking career

213  
00:07:53,589 --> 00:07:51,520

paradigm shattering science so

214

00:07:56,950 --> 00:07:53,599

it really has to be put in perspective

215

00:07:59,990 --> 00:07:56,960

his day job is as chief scientist at

216

00:08:03,189 --> 00:08:00,000

ions institute of noetic sciences

217

00:08:05,589 --> 00:08:03,199

he has a very interesting biotech thing

218

00:08:08,070 --> 00:08:05,599

going on cognogenix we're going to

219

00:08:09,510 --> 00:08:08,080

certainly want to talk about that

220

00:08:12,550 --> 00:08:09,520

and we're going to want to talk about

221

00:08:14,950 --> 00:08:12,560

what i thought we would talk about i was

222

00:08:16,309 --> 00:08:14,960

listening to an interview you recently

223

00:08:17,430 --> 00:08:16,319

did dean

224

00:08:19,909 --> 00:08:17,440

and

225

00:08:21,749 --> 00:08:19,919

at the end the guy goes hey he kind of

226

00:08:23,189 --> 00:08:21,759

is apologizing goes i'm sorry you know

227

00:08:25,270 --> 00:08:23,199

for asking you

228

00:08:26,390 --> 00:08:25,280

kind of the same questions that everyone

229

00:08:29,029 --> 00:08:26,400

asks you

230

00:08:30,950 --> 00:08:29,039

and you're like you know that's okay

231

00:08:33,829 --> 00:08:30,960

i take it as kind of a challenge kind of

232

00:08:34,790 --> 00:08:33,839

as a performance challenge to see how i

233

00:08:36,870 --> 00:08:34,800

can

234

00:08:38,630 --> 00:08:36,880

bring this information all this science

235

00:08:40,070 --> 00:08:38,640

that i've accumulated and bring it out

236

00:08:41,990 --> 00:08:40,080

in a new way or bring it out in a

237

00:08:44,070 --> 00:08:42,000

different way or shape it towards the

238

00:08:46,870 --> 00:08:44,080

audience i think i'm talking to and i

239

00:08:48,870 --> 00:08:46,880

thought you know it's such a good

240

00:08:50,790 --> 00:08:48,880

it was such an interesting response

241

00:08:52,550 --> 00:08:50,800

because

242

00:08:54,710 --> 00:08:52,560

certainly part of your career early part

243

00:08:57,030 --> 00:08:54,720

of your life was about performance and

244

00:08:59,430 --> 00:08:57,040

was about you know how do i take what

245

00:09:01,110 --> 00:08:59,440

i'm doing and bring it forth did i get

246

00:09:04,949 --> 00:09:01,120

that right in terms of what you told

247

00:09:06,949 --> 00:09:04,959

that guy well it it is true that

248

00:09:10,710 --> 00:09:06,959

i i've done now

249

00:09:11,910 --> 00:09:10,720

650 years some number like that of

250

00:09:13,990 --> 00:09:11,920

interviews

251

00:09:16,710 --> 00:09:14,000

and it takes a fair amount of time

252

00:09:19,750 --> 00:09:16,720

uh so i do it for two reasons one is to

253

00:09:21,430 --> 00:09:19,760

be able to speak in a way that virtually

254

00:09:23,590 --> 00:09:21,440

anybody can understand what i'm talking

255

00:09:26,550 --> 00:09:23,600

about so that it takes some effort to do

256

00:09:29,430 --> 00:09:26,560

that because most of the time my mind is

257

00:09:31,829 --> 00:09:29,440

inside some analysis somewhere and it's

258

00:09:32,870 --> 00:09:31,839

very technical stuff

259

00:09:34,710 --> 00:09:32,880

so

260

00:09:36,470 --> 00:09:34,720

it's very important when you're speaking

261

00:09:38,070 --> 00:09:36,480

not only to the general public but to

262

00:09:39,269 --> 00:09:38,080

other scientists

263

00:09:40,870 --> 00:09:39,279

that they can understand what you're

264

00:09:43,350 --> 00:09:40,880

talking about and that means you can't

265

00:09:45,509 --> 00:09:43,360

use jargon you can't go into heavy

266

00:09:47,110 --> 00:09:45,519

technical stuff because you know we

267

00:09:49,509 --> 00:09:47,120

can't know everything

268

00:09:50,870 --> 00:09:49,519

so i i enjoy that challenge that's the

269

00:09:51,829 --> 00:09:50,880

same challenge that i have in writing

270

00:09:53,829 --> 00:09:51,839

books

271

00:09:55,190 --> 00:09:53,839

i want the general public and everybody

272

00:09:57,910 --> 00:09:55,200

else to be able to read it and get

273

00:10:00,070 --> 00:09:57,920

something out of it

274

00:10:02,829 --> 00:10:00,080

and the other thing is it keeps me sharp

275

00:10:07,350 --> 00:10:02,839

in terms of being able to talk about

276

00:10:09,190 --> 00:10:07,360

this so sometimes even on national radio

277

00:10:12,870 --> 00:10:09,200

you hear somebody who's every other word

278

00:10:15,509 --> 00:10:12,880

is um and ah and you know and all that

279

00:10:16,790 --> 00:10:15,519

and i try not to do that and try to make

280

00:10:19,430 --> 00:10:16,800

it sound like i actually know what i'm

281

00:10:22,310 --> 00:10:19,440

talking about and the moment i do start

282

00:10:23,590 --> 00:10:22,320

to use the ums and the oz it's a signal

283

00:10:25,990 --> 00:10:23,600

to me that i actually don't know what

284

00:10:26,949 --> 00:10:26,000

i'm talking about great i wish i could

285

00:10:29,350 --> 00:10:26,959

uh

286

00:10:32,069 --> 00:10:29,360

hold to that standard but i i don't

287

00:10:33,750 --> 00:10:32,079

always do it so i thought here's what i

288

00:10:36,470 --> 00:10:33,760

thought we might do is a little bit of a

289

00:10:38,069 --> 00:10:36,480  
performance challenge for you

290

00:10:39,509 --> 00:10:38,079  
most folks

291

00:10:40,550 --> 00:10:39,519  
know you through

292

00:10:42,790 --> 00:10:40,560  
these

293

00:10:45,590 --> 00:10:42,800  
enormously successful books that you've

294

00:10:48,870 --> 00:10:45,600  
had uh the conscious universe 1997

295

00:10:52,870 --> 00:10:48,880  
harper collins entangled mine 2006 simon

296

00:10:56,230 --> 00:10:52,880  
schuster super normal 2013 random house

297

00:10:57,430 --> 00:10:56,240  
real magic 2018 random house amazing

298

00:10:59,030 --> 00:10:57,440  
because

299

00:11:01,110 --> 00:10:59,040  
they're science books by major

300

00:11:03,110 --> 00:11:01,120  
publishers that's amazing enough they're

301  
00:11:04,870 --> 00:11:03,120  
in a field that more or less didn't

302  
00:11:07,910 --> 00:11:04,880  
exist before you started writing these

303  
00:11:09,910 --> 00:11:07,920  
books double amazing and

304  
00:11:11,829 --> 00:11:09,920  
at the same time even though these books

305  
00:11:12,790 --> 00:11:11,839  
are how a lot of people come across your

306  
00:11:15,190 --> 00:11:12,800  
work

307  
00:11:17,910 --> 00:11:15,200  
you are essentially

308  
00:11:21,110 --> 00:11:17,920  
what do you call it an experimentalist

309  
00:11:23,990 --> 00:11:21,120  
you are a scientist who observes the

310  
00:11:25,829 --> 00:11:24,000  
world and then can't resist the urge to

311  
00:11:28,790 --> 00:11:25,839  
say well how can i take that and bring

312  
00:11:31,670 --> 00:11:28,800  
it into my lab and see if i can make it

313  
00:11:33,670 --> 00:11:31,680

work in here so i thought

314

00:11:36,630 --> 00:11:33,680

your challenge would be

315

00:11:39,030 --> 00:11:36,640

to give us kind of a highlight reel

316

00:11:39,910 --> 00:11:39,040

of those four books

317

00:11:43,190 --> 00:11:39,920

and

318

00:11:45,430 --> 00:11:43,200

some of the most significant experiments

319

00:11:47,990 --> 00:11:45,440

that are somehow connected to those

320

00:11:50,389 --> 00:11:48,000

books how's that for uh

321

00:11:52,470 --> 00:11:50,399

highlight real performance challenge

322

00:11:55,030 --> 00:11:52,480

yeah i could do that but i first want to

323

00:11:57,990 --> 00:11:55,040

correct you that the the field that i

324

00:12:00,550 --> 00:11:58,000

work in has been around since 1882 in a

325

00:12:02,790 --> 00:12:00,560

systematic way and they're i'm standing

326

00:12:04,629 --> 00:12:02,800

on the shoulders of giants like anybody

327

00:12:06,870 --> 00:12:04,639

working in science the

328

00:12:08,470 --> 00:12:06,880

you're always standing on history and

329

00:12:10,310 --> 00:12:08,480

and i am too and there are plenty of

330

00:12:11,430 --> 00:12:10,320

books for my colleagues who are just as

331

00:12:13,269 --> 00:12:11,440

good as mine

332

00:12:15,269 --> 00:12:13,279

i have taken a slightly different tact

333

00:12:17,829 --> 00:12:15,279

usually in writing it

334

00:12:20,310 --> 00:12:17,839

at a level which i hope most people can

335

00:12:24,550 --> 00:12:20,320

understand and sometimes other books

336

00:12:25,590 --> 00:12:24,560

tend to be more technical or denser

337

00:12:30,710 --> 00:12:25,600

so

338

00:12:33,030 --> 00:12:30,720

be talking about this stuff

339

00:12:34,470 --> 00:12:33,040

so the the four books

340

00:12:36,550 --> 00:12:34,480

uh

341

00:12:38,710 --> 00:12:36,560

the first one the the conscious universe

342

00:12:41,110 --> 00:12:38,720

i actually wrote when i was at princeton

343

00:12:43,829 --> 00:12:41,120

university many years ago and i wrote

344

00:12:46,790 --> 00:12:43,839

like 80 of it and no book publishers

345

00:12:48,629 --> 00:12:46,800

were interested in it

346

00:12:50,790 --> 00:12:48,639

probably because i wasn't an author at

347

00:12:52,550 --> 00:12:50,800

that point and nobody knew who i was and

348

00:12:54,550 --> 00:12:52,560

they didn't they didn't know what i was

349

00:12:56,629 --> 00:12:54,560

writing about

350

00:12:59,030 --> 00:12:56,639

so some years go by and then i'm at the

351

00:13:01,509 --> 00:12:59,040

university of nevada and

352

00:13:03,509 --> 00:13:01,519

a piece of luck falls out of the sky and

353

00:13:05,269 --> 00:13:03,519

it was featured in an article in the new

354

00:13:07,350 --> 00:13:05,279

york times magazine

355

00:13:08,230 --> 00:13:07,360

and the next day i got multiple calls

356

00:13:09,750 --> 00:13:08,240

from

357

00:13:11,350 --> 00:13:09,760

a book publisher saying oh would you

358

00:13:13,750 --> 00:13:11,360

ever consider writing a book and i said

359

00:13:15,350 --> 00:13:13,760

oh well i had something actually so that

360

00:13:16,790 --> 00:13:15,360

was that's how i got the conscious

361

00:13:19,269 --> 00:13:16,800

universe published

362

00:13:20,710 --> 00:13:19,279

and the point of that book was

363

00:13:31,829 --> 00:13:20,720

that

364

00:13:33,509 --> 00:13:31,839

are done they're flawed or they're fraud

365

00:13:34,870 --> 00:13:33,519

or more importantly they're not

366

00:13:36,870 --> 00:13:34,880

replicated

367

00:13:37,910 --> 00:13:36,880

which is the currency of truth in

368

00:13:39,750 --> 00:13:37,920

science

369

00:13:42,150 --> 00:13:39,760

well i knew that wasn't true

370

00:13:44,470 --> 00:13:42,160

so i felt i i needed to write a book

371

00:13:46,150 --> 00:13:44,480

which i could not find in the shelves

372

00:13:47,509 --> 00:13:46,160

that's how all of my books are actually

373

00:13:48,870 --> 00:13:47,519

i don't want to write something that's

374

00:13:50,150 --> 00:13:48,880

just going to repeat what somebody else

375

00:13:52,550 --> 00:13:50,160

says

376

00:13:54,470 --> 00:13:52,560

so that first book the conscious

377

00:13:55,670 --> 00:13:54,480

universe was written as a way of

378

00:13:57,750 --> 00:13:55,680

introducing

379

00:13:59,110 --> 00:13:57,760

people and scientists

380

00:14:00,710 --> 00:13:59,120

that

381

00:14:02,629 --> 00:14:00,720

what is the history

382

00:14:04,710 --> 00:14:02,639

what are the replications how do we know

383

00:14:07,910 --> 00:14:04,720

that it's replicated so it was

384

00:14:09,990 --> 00:14:07,920

introducing meta-analysis and you know

385

00:14:12,310 --> 00:14:10,000

not a very technical way but

386

00:14:13,990 --> 00:14:12,320

appropriately for the time that i wrote

387

00:14:16,470 --> 00:14:14,000

it the methods

388

00:14:19,110 --> 00:14:16,480

and presented one example after another

389

00:14:20,470 --> 00:14:19,120

of cases where we know that effects were

390

00:14:22,710 --> 00:14:20,480

repeated

391

00:14:25,189 --> 00:14:22,720

uh that they are replicated and overall

392

00:14:26,870 --> 00:14:25,199

of highly statistically significant even

393

00:14:29,269 --> 00:14:26,880

though the magnitude of the results in

394

00:14:30,870 --> 00:14:29,279

each case is usually pretty small

395

00:14:32,470 --> 00:14:30,880

so that that was basically the point of

396

00:14:35,189 --> 00:14:32,480

that whole book

397

00:14:38,710 --> 00:14:35,199

so dean let me ask you this at that time

398

00:14:41,750 --> 00:14:38,720

what would you say experimentally

399

00:14:44,069 --> 00:14:41,760

in your lab was driving you forward was

400

00:14:46,949 --> 00:14:44,079

really catching your interest the most

401  
00:14:49,829 --> 00:14:46,959  
at that time when that book comes out

402  
00:14:51,110 --> 00:14:49,839  
uh back then it would probably the most

403  
00:14:53,590 --> 00:14:51,120  
interesting thing to me would have been

404  
00:14:56,230 --> 00:14:53,600  
the presentment experiments the

405  
00:14:57,509 --> 00:14:56,240  
unconscious physiological response to

406  
00:14:59,670 --> 00:14:57,519  
future events

407  
00:15:01,430 --> 00:14:59,680  
because it was relatively new i was

408  
00:15:02,710 --> 00:15:01,440  
getting really good results and i

409  
00:15:04,949 --> 00:15:02,720  
already had some colleagues who were

410  
00:15:06,150 --> 00:15:04,959  
able to successfully replicate those

411  
00:15:08,230 --> 00:15:06,160  
effects

412  
00:15:10,710 --> 00:15:08,240  
so that was new and i always thought

413  
00:15:13,910 --> 00:15:10,720

what was interesting about that work and

414

00:15:16,389 --> 00:15:13,920

you just related you just referenced

415

00:15:19,269 --> 00:15:16,399

it and that is

416

00:15:21,829 --> 00:15:19,279

it pulled you deeper deeper into

417

00:15:23,670 --> 00:15:21,839

kind of being on the forefront of

418

00:15:25,030 --> 00:15:23,680

advancing i don't want to say advancing

419

00:15:28,069 --> 00:15:25,040

the scientific method because that's not

420

00:15:30,629 --> 00:15:28,079

true but but you were held to such a

421

00:15:32,310 --> 00:15:30,639

standard in terms of the procedures

422

00:15:33,269 --> 00:15:32,320

you're doing controls you're doing and

423

00:15:35,990 --> 00:15:33,279

in particular when you get to the

424

00:15:39,030 --> 00:15:36,000

pre-sentiment stuff it was like

425

00:15:41,110 --> 00:15:39,040

how do you do a good baseline and then

426

00:15:43,030 --> 00:15:41,120

how do you measure these small changes

427

00:15:45,590 --> 00:15:43,040

against that good baseline and then how

428

00:15:47,590 --> 00:15:45,600

do you do meta analysis and then how do

429

00:15:50,310 --> 00:15:47,600

you work on it even like the file drawer

430

00:15:52,310 --> 00:15:50,320

problem all this kind of stuff that you

431

00:15:55,110 --> 00:15:52,320

know it was around and people were

432

00:15:58,790 --> 00:15:55,120

talking about in terms of science but it

433

00:16:02,069 --> 00:15:58,800

you just it was forced into i think more

434

00:16:04,310 --> 00:16:02,079

of public attention in a way that

435

00:16:06,069 --> 00:16:04,320

should have really uh

436

00:16:07,590 --> 00:16:06,079

been a good lesson for science at the

437

00:16:09,030 --> 00:16:07,600

time maybe it was a good lesson i don't

438

00:16:10,230 --> 00:16:09,040

know but to speak to some of that

439

00:16:13,110 --> 00:16:10,240

because i think that's what you're

440

00:16:14,550 --> 00:16:13,120

alluding to before

441

00:16:15,910 --> 00:16:14,560

yeah one thing you learn after a while

442

00:16:16,870 --> 00:16:15,920

is that people believe what they want to

443

00:16:19,189 --> 00:16:16,880

believe

444

00:16:21,509 --> 00:16:19,199

and there's no evidence that you can get

445

00:16:22,949 --> 00:16:21,519

no data no amount of charts and graphs

446

00:16:24,389 --> 00:16:22,959

no amount of explanation that is going

447

00:16:26,230 --> 00:16:24,399

to change your mind

448

00:16:28,470 --> 00:16:26,240

what does change people's mind is a

449

00:16:30,310 --> 00:16:28,480

single personal experience

450

00:16:31,590 --> 00:16:30,320

so that so a book is never going to do

451  
00:16:33,910 --> 00:16:31,600  
that

452  
00:16:36,710 --> 00:16:33,920  
so i'm appealing then to

453  
00:16:37,590 --> 00:16:36,720  
those of us who can apply rational

454  
00:16:39,990 --> 00:16:37,600  
thought

455  
00:16:41,829 --> 00:16:40,000  
to methods which is of course what

456  
00:16:44,790 --> 00:16:41,839  
science is really good at it's methods

457  
00:16:46,710 --> 00:16:44,800  
to get biases out of the way and so some

458  
00:16:48,949 --> 00:16:46,720  
of the biases are we want to believe

459  
00:16:50,470 --> 00:16:48,959  
what we want to believe and so

460  
00:16:53,110 --> 00:16:50,480  
how do you fix that well

461  
00:16:55,430 --> 00:16:53,120  
there are pretty good ways of doing that

462  
00:16:57,350 --> 00:16:55,440  
so that's partly what the story was in

463  
00:16:59,990 --> 00:16:57,360

the conscious universe as well

464

00:17:01,590 --> 00:17:00,000

to be able to describe how these

465

00:17:03,749 --> 00:17:01,600

experiments are done

466

00:17:05,429 --> 00:17:03,759

and to among other things show that it's

467

00:17:07,110 --> 00:17:05,439

not like every so often somebody will

468

00:17:09,350 --> 00:17:07,120

write say well did you think of this you

469

00:17:10,710 --> 00:17:09,360

know are you redoing this and well of

470

00:17:12,470 --> 00:17:10,720

course we thought of all of that it's

471

00:17:14,549 --> 00:17:12,480

like the most elementary part of running

472

00:17:16,309 --> 00:17:14,559

an experiment is to make sure the

473

00:17:17,829 --> 00:17:16,319

controls are what you think they are and

474

00:17:19,350 --> 00:17:17,839

that the statistics are right and all of

475

00:17:20,789 --> 00:17:19,360

the rest of it

476

00:17:22,870 --> 00:17:20,799

that doesn't mean that mistakes aren't

477

00:17:24,630 --> 00:17:22,880

made i mean like we we learn from

478

00:17:26,949 --> 00:17:24,640

mistakes and then we don't do it again

479

00:17:28,630 --> 00:17:26,959

but you look at the history many many

480

00:17:31,029 --> 00:17:28,640

decades of doing various kinds of

481

00:17:34,390 --> 00:17:31,039

experiments

482

00:17:36,549 --> 00:17:34,400

are very few loopholes left in fact in

483

00:17:38,470 --> 00:17:36,559

some cases we don't have any loopholes

484

00:17:40,710 --> 00:17:38,480

that we're aware of of course there are

485

00:17:43,190 --> 00:17:40,720

always the unknown unknowns

486

00:17:45,510 --> 00:17:43,200

uh that can bite you at some point

487

00:17:46,630 --> 00:17:45,520

but in some cases here we're not talking

488

00:17:47,909 --> 00:17:46,640

about

489

00:17:49,990 --> 00:17:47,919

weird

490

00:17:51,669 --> 00:17:50,000

laboratory anomalies that only show up

491

00:17:53,510 --> 00:17:51,679

when we do experiments

492

00:17:55,830 --> 00:17:53,520

these these experiments are devised in

493

00:17:58,230 --> 00:17:55,840

the first place to take what people

494

00:18:00,549 --> 00:17:58,240

report in their real life

495

00:18:01,990 --> 00:18:00,559

and find a way of operationalizing it in

496

00:18:04,230 --> 00:18:02,000

a controlled manner and then doing in

497

00:18:06,549 --> 00:18:04,240

the laboratory so you already have a lot

498

00:18:08,390 --> 00:18:06,559

of anecdotal evidence which is

499

00:18:10,470 --> 00:18:08,400

not really the currency in science but

500

00:18:12,630 --> 00:18:10,480

it does provide a way of saying

501  
00:18:14,950 --> 00:18:12,640  
if those experiences as people describe

502  
00:18:17,350 --> 00:18:14,960  
are real and we can put them into the

503  
00:18:19,750 --> 00:18:17,360  
lab and we get similar effects

504  
00:18:21,830 --> 00:18:19,760  
well then it probably is real so some of

505  
00:18:23,590 --> 00:18:21,840  
those anecdotes are exactly the way that

506  
00:18:26,710 --> 00:18:23,600  
people describe them

507  
00:18:29,830 --> 00:18:26,720  
okay so the conscious universe causes

508  
00:18:30,950 --> 00:18:29,840  
quite a stir again because you put it in

509  
00:18:34,150 --> 00:18:30,960  
very

510  
00:18:36,870 --> 00:18:34,160  
stark scientific terms and you got the

511  
00:18:40,830 --> 00:18:36,880  
goods and you deliver it you wait a few

512  
00:18:44,070 --> 00:18:40,840  
years and then entangled minds

513  
00:18:46,310 --> 00:18:44,080

2006 how does that how does the story

514

00:18:48,390 --> 00:18:46,320

arc go from conscious universe to

515

00:18:49,830 --> 00:18:48,400

entangled minds

516

00:18:51,669 --> 00:18:49,840

because the

517

00:18:54,390 --> 00:18:51,679

question i did not answer in the

518

00:18:56,310 --> 00:18:54,400

conscious universe is how does this work

519

00:18:58,070 --> 00:18:56,320

like how do we take these kinds of

520

00:18:58,870 --> 00:18:58,080

effects

521

00:19:00,549 --> 00:18:58,880

and

522

00:19:01,990 --> 00:19:00,559

show that they're compatible with our

523

00:19:03,029 --> 00:19:02,000

current understanding of the physical

524

00:19:05,190 --> 00:19:03,039

world

525

00:19:07,510 --> 00:19:05,200

because prior to the development

526

00:19:09,190 --> 00:19:07,520

especially of quantum mechanics but also

527

00:19:11,430 --> 00:19:09,200

relativity

528

00:19:12,630 --> 00:19:11,440

it was easy to dismiss these effects

529

00:19:15,110 --> 00:19:12,640

because

530

00:19:17,270 --> 00:19:15,120

we thought that that space time matter

531

00:19:18,230 --> 00:19:17,280

and energy were all absolutes in which

532

00:19:19,830 --> 00:19:18,240

case

533

00:19:21,990 --> 00:19:19,840

how could you perceive something that

534

00:19:23,830 --> 00:19:22,000

was far away from you it was it was

535

00:19:25,110 --> 00:19:23,840

considered impossible and there's still

536

00:19:26,950 --> 00:19:25,120

people today

537

00:19:28,950 --> 00:19:26,960

including academics who say it's

538

00:19:30,630 --> 00:19:28,960

impossible because that's not the way

539

00:19:32,789 --> 00:19:30,640

the physical world works

540

00:19:35,990 --> 00:19:32,799

well they're wrong and so

541

00:19:37,909 --> 00:19:36,000

the the entangled minds i wrote in

542

00:19:40,230 --> 00:19:37,919

response to questions i had gotten about

543

00:19:43,510 --> 00:19:40,240

how how could this possibly fit with our

544

00:19:45,110 --> 00:19:43,520

current understanding of physics

545

00:19:46,150 --> 00:19:45,120

that's what that book is about so it

546

00:19:48,549 --> 00:19:46,160

goes

547

00:19:50,789 --> 00:19:48,559

moderately deeply into quantum mechanics

548

00:19:52,470 --> 00:19:50,799

and interpretations thereof

549

00:19:54,630 --> 00:19:52,480

and it addresses the

550

00:19:57,190 --> 00:19:54,640

interesting parallel between

551  
00:19:59,430 --> 00:19:57,200  
the same thing in quantum mechanics and

552  
00:20:00,549 --> 00:19:59,440  
in cybersearch that are both considered

553  
00:20:02,149 --> 00:20:00,559  
weird

554  
00:20:04,230 --> 00:20:02,159  
so they both can they both involve

555  
00:20:05,430 --> 00:20:04,240  
non-local connections through space and

556  
00:20:07,590 --> 00:20:05,440  
time

557  
00:20:10,230 --> 00:20:07,600  
and they both involve something about

558  
00:20:11,909 --> 00:20:10,240  
the act of intention or observation in

559  
00:20:14,070 --> 00:20:11,919  
observing a system and having that a

560  
00:20:15,669 --> 00:20:14,080  
system change its behavior

561  
00:20:17,430 --> 00:20:15,679  
and so some would say well this is a

562  
00:20:20,390 --> 00:20:17,440  
coincidence it's a meaningless

563  
00:20:22,470 --> 00:20:20,400

correlation and i would say no i think

564

00:20:24,950 --> 00:20:22,480

actually what people report when they

565

00:20:27,110 --> 00:20:24,960

have these experiences is a reflection

566

00:20:28,950 --> 00:20:27,120

of what we know about the physical world

567

00:20:30,549 --> 00:20:28,960

because it does support those kinds of

568

00:20:31,990 --> 00:20:30,559

phenomena

569

00:20:33,510 --> 00:20:32,000

nevertheless there are still papers

570

00:20:35,350 --> 00:20:33,520

being published regularly mostly by

571

00:20:37,510 --> 00:20:35,360

psychologists who say that these

572

00:20:40,390 --> 00:20:37,520

phenomena cannot be real

573

00:20:43,669 --> 00:20:40,400

because they violate basic scientific

574

00:20:46,230 --> 00:20:43,679

ideas about the way the world works

575

00:20:48,710 --> 00:20:46,240

which is utter nonsense because it

576

00:20:50,230 --> 00:20:48,720

doesn't violate anything it's just that

577

00:20:52,070 --> 00:20:50,240

we don't understand how to put all the

578

00:20:55,350 --> 00:20:52,080

pieces together yet but we're we're no

579

00:20:58,390 --> 00:20:55,360

longer in a classical physical world

580

00:20:59,990 --> 00:20:58,400

so experimentally in your lab

581

00:21:02,710 --> 00:21:00,000

what's going on

582

00:21:07,430 --> 00:21:02,720

what are you doing that

583

00:21:09,830 --> 00:21:07,440

kind of relates to this entangled minds

584

00:21:11,990 --> 00:21:09,840

idea

585

00:21:13,830 --> 00:21:12,000

well so we're trying to connect it to

586

00:21:16,149 --> 00:21:13,840

quantum mechanics and so we've done that

587

00:21:17,830 --> 00:21:16,159

in two ways

588

00:21:20,310 --> 00:21:17,840

the first way is using a double slit

589

00:21:23,510 --> 00:21:20,320

optical system to see if you can gain

590

00:21:25,350 --> 00:21:23,520

which path information which is uh

591

00:21:26,230 --> 00:21:25,360

which of the two slits a photon goes

592

00:21:27,990 --> 00:21:26,240

through

593

00:21:29,190 --> 00:21:28,000

if you can gain that information by any

594

00:21:30,789 --> 00:21:29,200

means

595

00:21:31,590 --> 00:21:30,799

so-called

596

00:21:33,190 --> 00:21:31,600

then

597

00:21:35,909 --> 00:21:33,200

you will not see an interference pattern

598

00:21:37,830 --> 00:21:35,919

you reduce the wave-like nature of light

599

00:21:40,549 --> 00:21:37,840

and you make it particulate look at that

600

00:21:42,230 --> 00:21:40,559

as a particle so you can see the the

601  
00:21:43,830 --> 00:21:42,240  
change very clearly by looking at the

602  
00:21:45,669 --> 00:21:43,840  
interference pattern that is produced by

603  
00:21:47,669 --> 00:21:45,679  
that kind of optical system

604  
00:21:48,950 --> 00:21:47,679  
so we had people many of whom were

605  
00:21:50,149 --> 00:21:48,960  
meditators

606  
00:21:52,230 --> 00:21:50,159  
asked to

607  
00:21:54,230 --> 00:21:52,240  
use their mind's eye

608  
00:21:56,149 --> 00:21:54,240  
to see if they could tell where the

609  
00:21:58,390 --> 00:21:56,159  
photon was going or if they found that

610  
00:21:59,990 --> 00:21:58,400  
too difficult and just push the photon

611  
00:22:01,350 --> 00:22:00,000  
intentionally so it would only go

612  
00:22:04,230 --> 00:22:01,360  
through one

613  
00:22:06,310 --> 00:22:04,240

and so we we've now done about two dozen

614

00:22:07,909 --> 00:22:06,320

such experiments and

615

00:22:09,990 --> 00:22:07,919

uh some of them worked and some of them

616

00:22:11,830 --> 00:22:10,000

don't work but if you do a meta-analysis

617

00:22:13,270 --> 00:22:11,840

across the board it looks like there's

618

00:22:15,430 --> 00:22:13,280

pretty good evidence

619

00:22:17,830 --> 00:22:15,440

that something is going on that the the

620

00:22:20,390 --> 00:22:17,840

consciousness is involved in some way in

621

00:22:21,750 --> 00:22:20,400

the quantum process

622

00:22:23,510 --> 00:22:21,760

so one of the things that kind of

623

00:22:25,430 --> 00:22:23,520

repeats itself here that is really smart

624

00:22:27,430 --> 00:22:25,440

the way you did this science is like you

625

00:22:29,190 --> 00:22:27,440

take the conscious universe and you take

626  
00:22:30,710 --> 00:22:29,200  
the pre-sentiment experiment where

627  
00:22:32,149 --> 00:22:30,720  
there's an image flashing up on the

628  
00:22:33,990 --> 00:22:32,159  
screen and you're

629  
00:22:36,070 --> 00:22:34,000  
measuring the

630  
00:22:37,750 --> 00:22:36,080  
human interaction with that and ways

631  
00:22:39,270 --> 00:22:37,760  
that we can measure it eye dilation all

632  
00:22:41,029 --> 00:22:39,280  
this different stuff

633  
00:22:42,630 --> 00:22:41,039  
but the reason that you set up that

634  
00:22:45,029 --> 00:22:42,640  
experiment that way is because they've

635  
00:22:47,590 --> 00:22:45,039  
been doing that experiment for freshman

636  
00:22:49,669 --> 00:22:47,600  
psychology students for decades and

637  
00:22:52,070 --> 00:22:49,679  
decades so you said hey you guys are

638  
00:22:54,310 --> 00:22:52,080

familiar with this experiment right

639

00:22:56,789 --> 00:22:54,320

well you never put the alligator clips

640

00:22:59,750 --> 00:22:56,799

on this part of it and if you do it kind

641

00:23:02,230 --> 00:22:59,760

of looks different and i think that's

642

00:23:03,510 --> 00:23:02,240

very very clever way to do it and then

643

00:23:06,070 --> 00:23:03,520

with the

644

00:23:08,470 --> 00:23:06,080

double slit experiment you just blow

645

00:23:11,909 --> 00:23:08,480

everything up because

646

00:23:13,990 --> 00:23:11,919

that is the experiment that has everyone

647

00:23:16,549 --> 00:23:14,000

has been danced around for a hundred

648

00:23:18,470 --> 00:23:16,559

years like no it can't really be

649

00:23:20,549 --> 00:23:18,480

consciousness is fundamental like max

650

00:23:22,789 --> 00:23:20,559

planck said i mean i can't really

651  
00:23:25,110 --> 00:23:22,799  
process that and you said okay well

652  
00:23:27,590 --> 00:23:25,120  
let's just freshen that baby up a little

653  
00:23:28,950 --> 00:23:27,600  
bit too if let's look at it this way in

654  
00:23:30,789 --> 00:23:28,960  
this way and

655  
00:23:33,190 --> 00:23:30,799  
is there an interference pattern and can

656  
00:23:34,390 --> 00:23:33,200  
meditators do it and because you did uh

657  
00:23:37,510 --> 00:23:34,400  
you've done

658  
00:23:40,390 --> 00:23:37,520  
a number of kind of variations on the

659  
00:23:42,630 --> 00:23:40,400  
theme when it comes to

660  
00:23:46,070 --> 00:23:42,640  
bringing the double slit experiment and

661  
00:23:47,430 --> 00:23:46,080  
saying yes it really is about

662  
00:23:48,870 --> 00:23:47,440  
consciousness

663  
00:23:50,950 --> 00:23:48,880

what are some of the

664

00:23:52,549 --> 00:23:50,960

variations that on that theme that

665

00:23:55,029 --> 00:23:52,559

you've done

666

00:23:56,470 --> 00:23:55,039

well first of all we've created a series

667

00:23:59,990 --> 00:23:56,480

of different kinds of double slit

668

00:24:03,190 --> 00:24:00,000

systems so we've used the originally

669

00:24:05,350 --> 00:24:03,200

continuous beam helium neon laser

670

00:24:06,870 --> 00:24:05,360

which has certain advantages and certain

671

00:24:09,110 --> 00:24:06,880

disadvantages

672

00:24:11,269 --> 00:24:09,120

we've used diode lasers continuous beam

673

00:24:13,990 --> 00:24:11,279

we've used single photon

674

00:24:16,310 --> 00:24:14,000

double slit systems each time a

675

00:24:18,070 --> 00:24:16,320

conceptual replication of the previous

676  
00:24:19,990 --> 00:24:18,080  
one saying if that worked and this

677  
00:24:21,669 --> 00:24:20,000  
probably ought to work and if this works

678  
00:24:24,630 --> 00:24:21,679  
that should work and so on

679  
00:24:27,510 --> 00:24:24,640  
each time a different kind of analysis

680  
00:24:30,470 --> 00:24:27,520  
is required given the nature of the data

681  
00:24:32,310 --> 00:24:30,480  
which is not completely optimal because

682  
00:24:35,269 --> 00:24:32,320  
before you do an experiment you're never

683  
00:24:37,430 --> 00:24:35,279  
quite sure what the analysis should be

684  
00:24:39,990 --> 00:24:37,440  
especially for this kind of experiment

685  
00:24:41,430 --> 00:24:40,000  
so that's that's a disadvantage for for

686  
00:24:42,789 --> 00:24:41,440  
doing these which is why i'm still

687  
00:24:44,950 --> 00:24:42,799  
waiting for

688  
00:24:46,950 --> 00:24:44,960

more than one other person to do a

689

00:24:48,470 --> 00:24:46,960

replication because so far there's only

690

00:24:50,630 --> 00:24:48,480

one replication

691

00:24:52,390 --> 00:24:50,640

which for his pilot studies were highly

692

00:24:55,190 --> 00:24:52,400

significant and in the same direction

693

00:24:57,430 --> 00:24:55,200

that i saw and for his formal studies

694

00:24:59,269 --> 00:24:57,440

were not significant from a directional

695

00:25:01,029 --> 00:24:59,279

perspective but from a bi-directional

696

00:25:03,029 --> 00:25:01,039

perspective it was

697

00:25:05,430 --> 00:25:03,039

and which is what we have seen in our

698

00:25:07,430 --> 00:25:05,440

own experiments too what what this means

699

00:25:08,789 --> 00:25:07,440

is that if you

700

00:25:10,789 --> 00:25:08,799

if you imagine that you're nobody's

701  
00:25:13,190 --> 00:25:10,799  
looking at the double subsystem you see

702  
00:25:14,549 --> 00:25:13,200  
a wave-like pattern you see interference

703  
00:25:16,710 --> 00:25:14,559  
if somebody's looking at it you can

704  
00:25:18,549 --> 00:25:16,720  
predict that if you can gain which path

705  
00:25:20,149 --> 00:25:18,559  
information you will collapse so call

706  
00:25:21,669 --> 00:25:20,159  
the collapse away function and it will

707  
00:25:23,990 --> 00:25:21,679  
get a part particulate pattern a

708  
00:25:26,549 --> 00:25:24,000  
diffraction matter

709  
00:25:28,070 --> 00:25:26,559  
well a that's a directional hypothesis

710  
00:25:29,350 --> 00:25:28,080  
that's saying it will go from this to

711  
00:25:30,630 --> 00:25:29,360  
this

712  
00:25:33,669 --> 00:25:30,640  
uh what

713  
00:25:35,590 --> 00:25:33,679

my colleague had found was uh that he

714

00:25:37,029 --> 00:25:35,600

saw a significant result but sometimes

715

00:25:38,870 --> 00:25:37,039

it went in one direction and sometimes

716

00:25:40,470 --> 00:25:38,880

it went in a different direction in a

717

00:25:42,789 --> 00:25:40,480

different experiment

718

00:25:45,430 --> 00:25:42,799

so we've analyzed went back and analyzed

719

00:25:46,470 --> 00:25:45,440

our data as well and we find that too

720

00:25:48,710 --> 00:25:46,480

that

721

00:25:50,310 --> 00:25:48,720

between one person and the next person

722

00:25:52,070 --> 00:25:50,320

some people will make it go one way some

723

00:25:53,830 --> 00:25:52,080

will go the other way and if you use a

724

00:25:56,230 --> 00:25:53,840

variance measure

725

00:25:58,230 --> 00:25:56,240

as opposed to a mean shift you actually

726

00:25:59,269 --> 00:25:58,240

get pretty significant results that hold

727

00:26:01,830 --> 00:25:59,279

up

728

00:26:03,590 --> 00:26:01,840

what this tells us is that

729

00:26:05,830 --> 00:26:03,600

as usual things are never quite as

730

00:26:07,430 --> 00:26:05,840

simple as you originally think it's not

731

00:26:09,990 --> 00:26:07,440

simply that consciousness collapses the

732

00:26:12,310 --> 00:26:10,000

wave function but the way i would put it

733

00:26:14,549 --> 00:26:12,320

rather is that it seems to steer

734

00:26:16,549 --> 00:26:14,559

what is going on it steers the wave

735

00:26:18,390 --> 00:26:16,559

function now where else do we see that

736

00:26:20,310 --> 00:26:18,400

well we see it as the quantum zeno

737

00:26:23,430 --> 00:26:20,320

effect

738

00:26:25,669 --> 00:26:23,440

you repeatedly measure a quantum system

739

00:26:27,029 --> 00:26:25,679

it will freeze its evolution

740

00:26:28,549 --> 00:26:27,039

and that sometimes it'll freeze it in

741

00:26:30,230 --> 00:26:28,559

one direction sometimes we'll freeze it

742

00:26:31,909 --> 00:26:30,240

in the other direction depends a lot and

743

00:26:33,430 --> 00:26:31,919

how fast you are

744

00:26:36,149 --> 00:26:33,440

you're measuring it

745

00:26:38,549 --> 00:26:36,159

so maybe something like that is going on

746

00:26:40,630 --> 00:26:38,559

that it's we're steering the the way

747

00:26:43,190 --> 00:26:40,640

that the photons are behaving rather

748

00:26:44,630 --> 00:26:43,200

than simply collapsing something

749

00:26:47,510 --> 00:26:44,640

i was not

750

00:26:49,190 --> 00:26:47,520

upset with that kind of a result because

751  
00:26:51,430 --> 00:26:49,200  
as i said that

752  
00:26:52,870 --> 00:26:51,440  
the reason you do an experiment is to

753  
00:26:54,630 --> 00:26:52,880  
see what kind of answer the universe

754  
00:26:56,390 --> 00:26:54,640  
will give you when you when you present

755  
00:26:58,470 --> 00:26:56,400  
a question

756  
00:27:00,549 --> 00:26:58,480  
and if you're lucky

757  
00:27:02,310 --> 00:27:00,559  
it will it will give you an answer which

758  
00:27:04,070 --> 00:27:02,320  
is even more interesting than the one

759  
00:27:05,990 --> 00:27:04,080  
that you originally asked

760  
00:27:08,230 --> 00:27:06,000  
in this case that is seems to be what's

761  
00:27:10,310 --> 00:27:08,240  
happening that seems like yeah there's

762  
00:27:11,909 --> 00:27:10,320  
there's weird stuff going on

763  
00:27:13,190 --> 00:27:11,919

which we wouldn't have known before

764

00:27:15,190 --> 00:27:13,200

unless we actually went ahead and did

765

00:27:15,909 --> 00:27:15,200

the experiment

766

00:27:20,389 --> 00:27:15,919

so

767

00:27:22,389 --> 00:27:20,399

supernormal comes along at 2013 and this

768

00:27:24,549 --> 00:27:22,399

is kind of a shift i'm all these are a

769

00:27:26,870 --> 00:27:24,559

shift but this is kind of a shift in a

770

00:27:29,350 --> 00:27:26,880

different direction what's that book

771

00:27:30,789 --> 00:27:29,360

about and then experimentally

772

00:27:33,669 --> 00:27:30,799

where you at

773

00:27:35,510 --> 00:27:33,679

2010 2013

774

00:27:38,070 --> 00:27:35,520

well i also want to add in before i go

775

00:27:39,590 --> 00:27:38,080

there uh one other quantum oriented

776

00:27:41,590 --> 00:27:39,600

experiment that we more recently

777

00:27:44,470 --> 00:27:41,600

published which involved the use of

778

00:27:46,470 --> 00:27:44,480

entangled photons as the target of a

779

00:27:48,630 --> 00:27:46,480

mind matter interaction because we

780

00:27:51,029 --> 00:27:48,640

wanted to look at non-local mind

781

00:27:53,029 --> 00:27:51,039

interacting with non-local matter

782

00:27:56,549 --> 00:27:53,039

and did it do anything the short answer

783

00:27:58,070 --> 00:27:56,559

is yeah we were able to modulate it

784

00:27:59,750 --> 00:27:58,080

part of the experiment was looking at

785

00:28:01,990 --> 00:27:59,760

could you increase the strength of

786

00:28:03,990 --> 00:28:02,000

entanglement and then intentionally

787

00:28:06,950 --> 00:28:04,000

decrease the strength of entanglement

788

00:28:08,710 --> 00:28:06,960

well you would think a priori that

789

00:28:10,470 --> 00:28:08,720

decreasing the strength of entanglement

790

00:28:12,149 --> 00:28:10,480

would be relatively easy because it's

791

00:28:14,549 --> 00:28:12,159

pretty fragile it doesn't take much to

792

00:28:17,269 --> 00:28:14,559

collapse it but what we found

793

00:28:18,549 --> 00:28:17,279

uniformly even with feedback that was

794

00:28:20,630 --> 00:28:18,559

designed to

795

00:28:23,190 --> 00:28:20,640

increase it and decrease it it only

796

00:28:25,830 --> 00:28:23,200

increased the fidelity of entanglement

797

00:28:27,430 --> 00:28:25,840

increased as a result of intention

798

00:28:29,830 --> 00:28:27,440

focused on it which is really

799

00:28:31,110 --> 00:28:29,840

interesting so again that was not

800

00:28:32,710 --> 00:28:31,120

expected

801  
00:28:34,870 --> 00:28:32,720  
i mean we we hope we'd see something

802  
00:28:37,190 --> 00:28:34,880  
interesting going on but it we every

803  
00:28:39,510 --> 00:28:37,200  
time we get a nice surprise and a result

804  
00:28:41,669 --> 00:28:39,520  
like that then we think okay

805  
00:28:44,070 --> 00:28:41,679  
this is still worth pursuing because if

806  
00:28:45,750 --> 00:28:44,080  
we only ever show the results that we

807  
00:28:47,430 --> 00:28:45,760  
expect to get well that's not so

808  
00:28:49,750 --> 00:28:47,440  
interesting

809  
00:28:51,990 --> 00:28:49,760  
okay so supernova no no no i'm sorry

810  
00:28:54,070 --> 00:28:52,000  
because you're you're on tr you're so on

811  
00:28:57,029 --> 00:28:54,080  
point with that it is so

812  
00:28:59,430 --> 00:28:57,039  
important so if you can

813  
00:29:03,110 --> 00:28:59,440

back up and break that down a little bit

814

00:29:04,470 --> 00:29:03,120

fifth grade level what is entanglement

815

00:29:07,190 --> 00:29:04,480

we don't have to talk about non-local

816

00:29:09,669 --> 00:29:07,200

mind too much but the the why are you

817

00:29:13,190 --> 00:29:09,679

making that connection between

818

00:29:13,990 --> 00:29:13,200

non-local mind and entanglement why does

819

00:29:15,590 --> 00:29:14,000

that

820

00:29:17,029 --> 00:29:15,600

resonate for you

821

00:29:19,590 --> 00:29:17,039

and then

822

00:29:21,190 --> 00:29:19,600

what is what is the experimental effect

823

00:29:24,070 --> 00:29:21,200

again break that down in more simple

824

00:29:26,389 --> 00:29:24,080

terms in terms of what you're seeing

825

00:29:28,389 --> 00:29:26,399

and why we can read the kind of

826

00:29:30,310 --> 00:29:28,399

excitement in your face and in your

827

00:29:31,350 --> 00:29:30,320

voice when you talk about

828

00:29:33,110 --> 00:29:31,360

how

829

00:29:34,710 --> 00:29:33,120

it kind of doesn't really go the way

830

00:29:36,789 --> 00:29:34,720

that you thought it really just goes in

831

00:29:38,870 --> 00:29:36,799

this one direction and i can see the

832

00:29:40,870 --> 00:29:38,880

wheels turning for you in terms of what

833

00:29:43,269 --> 00:29:40,880

that means and global consciousness

834

00:29:45,029 --> 00:29:43,279

project and all the rest of this stuff

835

00:29:46,630 --> 00:29:45,039

that we're doing so

836

00:29:49,190 --> 00:29:46,640

spend some time and break this down

837

00:29:51,190 --> 00:29:49,200

break that down for us if you would

838

00:29:53,510 --> 00:29:51,200

all of the experiments involving mind

839

00:29:57,269 --> 00:29:53,520

and matter are essentially asking the

840

00:29:59,510 --> 00:29:57,279

question is mind cut is it causal or put

841

00:30:02,149 --> 00:29:59,520

it in broader sense is consciousness

842

00:30:05,510 --> 00:30:02,159

causal in the physical world does it

843

00:30:08,310 --> 00:30:05,520

play a role other than within the body

844

00:30:10,149 --> 00:30:08,320

and so one way of thinking it is that i

845

00:30:11,830 --> 00:30:10,159

can use my intention

846

00:30:13,590 --> 00:30:11,840

and make something happen with a hundred

847

00:30:15,669 --> 00:30:13,600

percent reliability

848

00:30:18,070 --> 00:30:15,679

so i should now demonstrate that

849

00:30:19,990 --> 00:30:18,080

uh right arm move up

850

00:30:22,870 --> 00:30:20,000

well it did that well it's just a mind

851  
00:30:25,110 --> 00:30:22,880  
matter interaction my intention

852  
00:30:27,430 --> 00:30:25,120  
has made something happen

853  
00:30:29,510 --> 00:30:27,440  
the question here though is what else

854  
00:30:31,350 --> 00:30:29,520  
can it do is it purely something within

855  
00:30:33,110 --> 00:30:31,360  
the body or does it act at a distance so

856  
00:30:33,990 --> 00:30:33,120  
the non-local aspect of it is saying

857  
00:30:35,669 --> 00:30:34,000  
that

858  
00:30:38,789 --> 00:30:35,679  
at a distance

859  
00:30:40,310 --> 00:30:38,799  
my thoughts can influence something else

860  
00:30:41,750 --> 00:30:40,320  
and we can measure that it actually

861  
00:30:43,830 --> 00:30:41,760  
happened

862  
00:30:45,510 --> 00:30:43,840  
uh what makes it and that's that's

863  
00:30:46,789 --> 00:30:45,520

non-local in space

864

00:30:48,549 --> 00:30:46,799

the the other part of course is

865

00:30:51,110 --> 00:30:48,559

non-local in time and there's evidence

866

00:30:53,029 --> 00:30:51,120

that that is also possible but it makes

867

00:30:55,750 --> 00:30:53,039

people's brains explode and i don't want

868

00:30:59,830 --> 00:30:57,990

so so the again the the simplest way of

869

00:31:02,470 --> 00:30:59,840

thinking of it is asking the question is

870

00:31:03,909 --> 00:31:02,480

consciousness actually causal you have

871

00:31:05,190 --> 00:31:03,919

billions of people out there who are

872

00:31:07,350 --> 00:31:05,200

praying

873

00:31:08,710 --> 00:31:07,360

that that things in ukraine will get

874

00:31:10,630 --> 00:31:08,720

better and so on

875

00:31:12,070 --> 00:31:10,640

does that do anything other than make

876

00:31:13,590 --> 00:31:12,080

you feel good

877

00:31:15,350 --> 00:31:13,600

well a lot of people believe it does do

878

00:31:17,509 --> 00:31:15,360

something either it's intercessory

879

00:31:19,350 --> 00:31:17,519

prayer with some deity or it's the

880

00:31:20,630 --> 00:31:19,360

focused attention or affirmations or

881

00:31:22,710 --> 00:31:20,640

whatever

882

00:31:24,789 --> 00:31:22,720

this is like in in the populist this is

883

00:31:26,389 --> 00:31:24,799

the way people think so these

884

00:31:28,710 --> 00:31:26,399

experiments are looking at that

885

00:31:30,630 --> 00:31:28,720

sometimes at a much more macroscopic

886

00:31:33,430 --> 00:31:30,640

level like seeing if we can affect the

887

00:31:35,269 --> 00:31:33,440

structure of water water molecule

888

00:31:37,190 --> 00:31:35,279

structure which we've done

889

00:31:38,710 --> 00:31:37,200

or many many other kinds of targets and

890

00:31:40,549 --> 00:31:38,720

the reason why you go down into the

891

00:31:43,110 --> 00:31:40,559

quantum scale is partially because

892

00:31:44,549 --> 00:31:43,120

there's a little door opened that says a

893

00:31:46,549 --> 00:31:44,559

there's a non-local things happening

894

00:31:47,430 --> 00:31:46,559

which is interesting sounds like psychic

895

00:31:48,310 --> 00:31:47,440

stuff

896

00:31:50,789 --> 00:31:48,320

and

897

00:31:52,789 --> 00:31:50,799

because of this this peculiarity which

898

00:31:54,950 --> 00:31:52,799

you don't see in classical physics which

899

00:31:56,389 --> 00:31:54,960

is that observation matters

900

00:31:58,070 --> 00:31:56,399

well of course

901  
00:32:00,230 --> 00:31:58,080  
from a physics perspective you say well

902  
00:32:02,230 --> 00:32:00,240  
no it's just about measurement well what

903  
00:32:03,990 --> 00:32:02,240  
is measurement is it about knowing

904  
00:32:05,909 --> 00:32:04,000  
what's happening or is it about an

905  
00:32:08,549 --> 00:32:05,919  
irreversible process there's lots of

906  
00:32:10,710 --> 00:32:08,559  
discussion about what that means

907  
00:32:13,110 --> 00:32:10,720  
for for those of us who

908  
00:32:15,909 --> 00:32:13,120  
are interested more in

909  
00:32:18,310 --> 00:32:15,919  
in large scale effects like i have here

910  
00:32:21,029 --> 00:32:18,320  
where do we have it yet

911  
00:32:23,350 --> 00:32:21,039  
so i bent the spoon so here's a large

912  
00:32:26,950 --> 00:32:23,360  
soup spoon which somehow

913  
00:32:29,350 --> 00:32:26,960

i i bent and as other people have said

914

00:32:31,110 --> 00:32:29,360

that it feels like taffy momentarily and

915

00:32:33,029 --> 00:32:31,120

then you just squish it it didn't take

916

00:32:34,789 --> 00:32:33,039

any force really other than just sort of

917

00:32:36,950 --> 00:32:34,799

pushing it over

918

00:32:38,870 --> 00:32:36,960

well i've tried many ways to see if i

919

00:32:40,549 --> 00:32:38,880

put it in boiling water will it revert

920

00:32:43,110 --> 00:32:40,559

will you know does it become soft all

921

00:32:44,070 --> 00:32:43,120

those questions no it's a hard piece of

922

00:32:46,230 --> 00:32:44,080

metal

923

00:32:48,549 --> 00:32:46,240

so that's a macroscopic demonstration of

924

00:32:50,710 --> 00:32:48,559

something going on which apparently it's

925

00:32:52,310 --> 00:32:50,720

something to do with the mind in some

926  
00:32:53,669 --> 00:32:52,320  
way because it does if you just have a

927  
00:32:55,269 --> 00:32:53,679  
spoon you leave it there it doesn't do

928  
00:32:59,669 --> 00:32:55,279  
that

929  
00:33:01,029 --> 00:32:59,679  
in a laboratory we we have yet to find

930  
00:33:03,509 --> 00:33:01,039  
people who can do this kind of thing on

931  
00:33:04,630 --> 00:33:03,519  
demand like take take a bar metal like

932  
00:33:06,950 --> 00:33:04,640  
this one

933  
00:33:09,029 --> 00:33:06,960  
and just bend it well we know the

934  
00:33:11,110 --> 00:33:09,039  
tensile force is and all the rest you

935  
00:33:12,070 --> 00:33:11,120  
can't do that at least not by human

936  
00:33:13,669 --> 00:33:12,080  
force

937  
00:33:15,190 --> 00:33:13,679  
but if somebody can do that and i've

938  
00:33:16,549 --> 00:33:15,200

seen pictures of people taking things

939

00:33:18,630 --> 00:33:16,559

like rebars

940

00:33:20,870 --> 00:33:18,640

and just going

941

00:33:22,070 --> 00:33:20,880

well that should be impossible but it

942

00:33:24,389 --> 00:33:22,080

happened

943

00:33:26,950 --> 00:33:24,399

so we go into the lab and we we try to

944

00:33:29,830 --> 00:33:26,960

figure out what what does this mean for

945

00:33:31,590 --> 00:33:29,840

our understanding of the physical world

946

00:33:34,549 --> 00:33:31,600

in quantum mechanics in particular for

947

00:33:35,909 --> 00:33:34,559

the entangled photons experiment

948

00:33:38,470 --> 00:33:35,919

here we're talking about one of the

949

00:33:39,590 --> 00:33:38,480

fundamental aspects maybe as schrodinger

950

00:33:42,389 --> 00:33:39,600

said the

951  
00:33:43,909 --> 00:33:42,399  
fundamental aspect of quantum mechanics

952  
00:33:46,149 --> 00:33:43,919  
is the idea that when you have two

953  
00:33:47,990 --> 00:33:46,159  
particles that interact and they go on

954  
00:33:49,269 --> 00:33:48,000  
their merry way that they share

955  
00:33:51,990 --> 00:33:49,279  
properties

956  
00:33:54,389 --> 00:33:52,000  
and independent of space and time so

957  
00:33:56,149 --> 00:33:54,399  
that it's not quite right to say that if

958  
00:33:57,669 --> 00:33:56,159  
you take two photons or two electrons

959  
00:34:00,070 --> 00:33:57,679  
and you separate them you twiddle one

960  
00:34:02,149 --> 00:34:00,080  
the other one will respond that's that's

961  
00:34:04,549 --> 00:34:02,159  
not quite right but it's close

962  
00:34:06,630 --> 00:34:04,559  
and and the idea is that they

963  
00:34:08,950 --> 00:34:06,640

they're not independent anymore they

964

00:34:11,669 --> 00:34:08,960

share properties through space and

965

00:34:13,990 --> 00:34:11,679

through time so that has been

966

00:34:14,869 --> 00:34:14,000

first predicted and then after many

967

00:34:17,270 --> 00:34:14,879

years

968

00:34:19,349 --> 00:34:17,280

verified in the lab and now

969

00:34:20,950 --> 00:34:19,359

it's being used experimentally for

970

00:34:22,950 --> 00:34:20,960

communications and cryptography and

971

00:34:24,550 --> 00:34:22,960

things like that so it's it's a real

972

00:34:26,550 --> 00:34:24,560

thing in fact quantum computers would

973

00:34:28,550 --> 00:34:26,560

not work unless that was true

974

00:34:30,149 --> 00:34:28,560

so so you have a couple points i just

975

00:34:33,109 --> 00:34:30,159

want to make sure people understand so

976  
00:34:35,669 --> 00:34:33,119  
you can create this quantum modem kind

977  
00:34:37,510 --> 00:34:35,679  
of thing and you can do this thing and

978  
00:34:39,030 --> 00:34:37,520  
you can see demonstrations of it i think

979  
00:34:40,950 --> 00:34:39,040  
china is kind of maybe ahead of the game

980  
00:34:43,510 --> 00:34:40,960  
a little bit on that although who knows

981  
00:34:45,030 --> 00:34:43,520  
who's ahead of what game but there is

982  
00:34:47,109 --> 00:34:45,040  
you know for people who need the

983  
00:34:48,790 --> 00:34:47,119  
engineering kind of proof of it there it

984  
00:34:50,470 --> 00:34:48,800  
is it kind of works and it kind of does

985  
00:34:52,629 --> 00:34:50,480  
it and it's using

986  
00:34:55,270 --> 00:34:52,639  
these same principles

987  
00:34:57,430 --> 00:34:55,280  
so again what you do the trick that you

988  
00:34:59,750 --> 00:34:57,440

do is you say okay

989

00:35:02,310 --> 00:34:59,760

you guys unknowingly have opened the

990

00:35:05,109 --> 00:35:02,320

door i like the way you said that before

991

00:35:06,630 --> 00:35:05,119

let me step all the way through and by

992

00:35:08,550 --> 00:35:06,640

the way i'm gonna bring some of my

993

00:35:10,230 --> 00:35:08,560

friends here some of my friends who are

994

00:35:12,150 --> 00:35:10,240

meditators and say oh yeah we can do

995

00:35:13,589 --> 00:35:12,160

that and some of my friends who are just

996

00:35:15,670 --> 00:35:13,599

people off the street that says hey i'll

997

00:35:17,030 --> 00:35:15,680

give it a try and now

998

00:35:18,069 --> 00:35:17,040

they're

999

00:35:21,030 --> 00:35:18,079

getting

1000

00:35:24,870 --> 00:35:21,040

into this thing at a level that

1001

00:35:27,270 --> 00:35:24,880

just kind of blows everyone up right so

1002

00:35:30,710 --> 00:35:27,280

kind of make connect some of those dots

1003

00:35:32,230 --> 00:35:30,720

that i'm loosely throwing around there

1004

00:35:33,990 --> 00:35:32,240

well it go all the way back to max

1005

00:35:37,030 --> 00:35:34,000

planck who came up with the idea of the

1006

00:35:39,030 --> 00:35:37,040

quantum and most of his contemporaries

1007

00:35:40,870 --> 00:35:39,040

at the time they were idealists

1008

00:35:43,589 --> 00:35:40,880

philosophical idealists so they they

1009

00:35:45,190 --> 00:35:43,599

felt that consciousness was fundamental

1010

00:35:48,069 --> 00:35:45,200

they came up with the idea of quantum

1011

00:35:49,990 --> 00:35:48,079

mechanics so if you we marry together

1012

00:35:51,910 --> 00:35:50,000

the underlying philosophy of the

1013

00:35:54,870 --> 00:35:51,920

founders of quantum mechanics with the

1014

00:35:56,710 --> 00:35:54,880

phenomena themselves then it it almost

1015

00:35:58,790 --> 00:35:56,720

becomes obvious that if consciousness is

1016

00:36:01,430 --> 00:35:58,800

really fundamental it should be able to

1017

00:36:04,069 --> 00:36:01,440

do something with these quantum systems

1018

00:36:06,150 --> 00:36:04,079

so that's i mean this is not genius here

1019

00:36:07,430 --> 00:36:06,160

it is it's kind of it presents itself

1020

00:36:09,510 --> 00:36:07,440

immediately

1021

00:36:11,190 --> 00:36:09,520

and you do find occasionally some

1022

00:36:13,430 --> 00:36:11,200

mainstream physicists saying oh wouldn't

1023

00:36:15,829 --> 00:36:13,440

it be interesting to test these kinds of

1024

00:36:17,670 --> 00:36:15,839

ideas maybe somebody somebody will do

1025

00:36:19,109 --> 00:36:17,680

that maybe it has a two percent chance

1026

00:36:21,349 --> 00:36:19,119

of working

1027

00:36:23,270 --> 00:36:21,359

well you know okay we've already done

1028

00:36:25,190 --> 00:36:23,280

that

1029

00:36:26,870 --> 00:36:25,200

so the second reason then for doing an

1030

00:36:28,310 --> 00:36:26,880

experiment involving entanglement in

1031

00:36:30,870 --> 00:36:28,320

particular

1032

00:36:33,589 --> 00:36:30,880

is because

1033

00:36:35,430 --> 00:36:33,599

entanglement you it we we think of

1034

00:36:37,270 --> 00:36:35,440

something as entangled or not entangled

1035

00:36:38,790 --> 00:36:37,280

but it's not binary you have a whole

1036

00:36:40,710 --> 00:36:38,800

bunch of classical systems where

1037

00:36:42,069 --> 00:36:40,720

particles really are separate so they

1038

00:36:43,910 --> 00:36:42,079

might be correlated but they're not

1039

00:36:45,670 --> 00:36:43,920

connected at all and their properties

1040

00:36:48,230 --> 00:36:45,680

are completely independent in the

1041

00:36:51,190 --> 00:36:48,240

quantum world the properties

1042

00:36:53,430 --> 00:36:51,200

are there and there's some kind of a

1043

00:36:55,750 --> 00:36:53,440

correlation going on which is stronger

1044

00:36:57,349 --> 00:36:55,760

than classical correlations so we can

1045

00:36:59,430 --> 00:36:57,359

talk about this in terms of the strength

1046

00:37:01,750 --> 00:36:59,440

of the correlation

1047

00:37:03,510 --> 00:37:01,760

but that's not a constant it's it varies

1048

00:37:06,390 --> 00:37:03,520

all over the place it goes from just

1049

00:37:10,069 --> 00:37:06,400

barely above classical which is kind of

1050

00:37:11,829 --> 00:37:10,079

a weak correlation to very strong

1051

00:37:13,270 --> 00:37:11,839

but there's an upper limit

1052

00:37:15,109 --> 00:37:13,280

and the upper limit according to

1053

00:37:17,270 --> 00:37:15,119

orthodox quantum mechanics today is

1054

00:37:19,109 --> 00:37:17,280

called the cyrelsin bound so this is

1055

00:37:21,510 --> 00:37:19,119

named after a russian mathematician

1056

00:37:23,270 --> 00:37:21,520

called boris cyrelsin who came up with

1057

00:37:25,190 --> 00:37:23,280

the idea that mathematically there

1058

00:37:27,109 --> 00:37:25,200

should be an upper limit to how strong

1059

00:37:28,630 --> 00:37:27,119

this entanglement can get

1060

00:37:30,950 --> 00:37:28,640

and so there were many experiments to

1061

00:37:32,790 --> 00:37:30,960

see could you go past that

1062

00:37:34,150 --> 00:37:32,800

because if you could it would mean that

1063

00:37:36,310 --> 00:37:34,160

the current formulation of quantum

1064

00:37:39,109 --> 00:37:36,320

mechanics is incomplete of course that

1065

00:37:40,790 --> 00:37:39,119

would be that's earth shattering

1066

00:37:42,790 --> 00:37:40,800

people getting very very close to it

1067

00:37:45,510 --> 00:37:42,800

with very sensitive equipment but no one

1068

00:37:46,710 --> 00:37:45,520

has surpassed it yet so we thought okay

1069

00:37:48,069 --> 00:37:46,720

since it looks like maybe there's

1070

00:37:50,069 --> 00:37:48,079

something going on with a double sit

1071

00:37:52,790 --> 00:37:50,079

system maybe we can modulate the

1072

00:37:55,030 --> 00:37:52,800

strength of entanglement and maybe even

1073

00:37:56,550 --> 00:37:55,040

push it above the cyrus and bound

1074

00:37:58,630 --> 00:37:56,560

if we could do that it would mean not

1075

00:38:00,870 --> 00:37:58,640

only is orthodox quantum mechanics

1076

00:38:02,470 --> 00:38:00,880

incomplete but that it requires

1077

00:38:04,390 --> 00:38:02,480

consciousness in some way in order to

1078

00:38:06,550 --> 00:38:04,400

modulate it above that bound

1079

00:38:08,550 --> 00:38:06,560

so we thought okay

1080

00:38:10,230 --> 00:38:08,560

experimentally it's interesting but if

1081

00:38:13,030 --> 00:38:10,240

it worked it would be theoretically

1082

00:38:15,270 --> 00:38:13,040

extremely important

1083

00:38:16,790 --> 00:38:15,280

so we were not able to push it above the

1084

00:38:18,710 --> 00:38:16,800

cyrus and bound

1085

00:38:20,150 --> 00:38:18,720

and we think uh one of the reasons is

1086

00:38:23,109 --> 00:38:20,160

maybe what we're dealing with is such a

1087

00:38:25,349 --> 00:38:23,119

small a weak effect from the mind that

1088

00:38:26,630 --> 00:38:25,359

it wasn't able to do it

1089

00:38:28,550 --> 00:38:26,640

but the other thing is that the

1090

00:38:30,150 --> 00:38:28,560

apparatus that we were using

1091

00:38:31,750 --> 00:38:30,160

which is the commercial apparatus

1092

00:38:33,750 --> 00:38:31,760

anybody could buy it and it sits on your

1093

00:38:36,390 --> 00:38:33,760

desktop

1094

00:38:37,910 --> 00:38:36,400

when you look at uh how far we would

1095

00:38:39,910 --> 00:38:37,920

have had to push it in order to go above

1096

00:38:43,030 --> 00:38:39,920

the cyrels and bound it was somewhere

1097

00:38:45,589 --> 00:38:43,040

between six and seven sigma so a

1098

00:38:48,630 --> 00:38:45,599

massively statistically strong effect

1099

00:38:50,550 --> 00:38:48,640

and we never saw anything that strong so

1100

00:38:52,630 --> 00:38:50,560

we it simply the apparatus wasn't

1101

00:38:54,069 --> 00:38:52,640

sensitive enough or we didn't try out

1102

00:38:55,750 --> 00:38:54,079

enough or something but we weren't able

1103

00:38:57,670 --> 00:38:55,760

to do it

1104

00:39:00,470 --> 00:38:57,680

in the description you just gave you're

1105

00:39:02,950 --> 00:39:00,480

dancing back and forth between the

1106

00:39:05,510 --> 00:39:02,960

woowoo aspect of this that people use to

1107

00:39:07,589 --> 00:39:05,520

just kind of dismiss it and then

1108

00:39:09,430 --> 00:39:07,599

the the hard science if you will like

1109

00:39:12,310 --> 00:39:09,440

the mathematics of it do you want to

1110

00:39:14,950 --> 00:39:12,320

speak to the fact that when you say

1111

00:39:17,109 --> 00:39:14,960

orthodox quantum physics

1112

00:39:21,430 --> 00:39:17,119

what that means to

1113

00:39:23,750 --> 00:39:21,440

a scientist who is in that field

1114

00:39:25,750 --> 00:39:23,760

well a minority of scientists are

1115

00:39:27,030 --> 00:39:25,760

interested in what quantum mechanics

1116

00:39:28,870 --> 00:39:27,040

means

1117

00:39:31,109 --> 00:39:28,880

most people learning quantum mechanics

1118

00:39:32,710 --> 00:39:31,119

are doing it as a mechanic

1119

00:39:34,390 --> 00:39:32,720

right you learn certain tools certain

1120

00:39:35,589 --> 00:39:34,400

mathematical tools you turn the crank

1121

00:39:37,670 --> 00:39:35,599

and you're able to predict certain

1122

00:39:40,230 --> 00:39:37,680

things and it's extremely useful our

1123

00:39:42,230 --> 00:39:40,240

whole modern world is basically uses

1124

00:39:43,829 --> 00:39:42,240

quantum mechanics to make predictions

1125

00:39:46,390 --> 00:39:43,839

about how electronics work and a whole

1126

00:39:49,589 --> 00:39:46,400

bunch of other things

1127

00:39:52,230 --> 00:39:49,599

so only a minority typically people are

1128

00:39:53,589 --> 00:39:52,240

more philosophically oriented perhaps

1129

00:39:55,589 --> 00:39:53,599

are interested well what in the world

1130

00:39:58,069 --> 00:39:55,599

does this mean because quantum mechanics

1131

00:39:59,109 --> 00:39:58,079

after all is a purely mathematical

1132

00:40:02,150 --> 00:39:59,119

theory

1133

00:40:03,990 --> 00:40:02,160

it's it's just it's math in fact the the

1134

00:40:05,510 --> 00:40:04,000

there's one equation

1135

00:40:07,030 --> 00:40:05,520

which you can use to show all the

1136

00:40:08,069 --> 00:40:07,040

quantum mechanics it's not a long

1137

00:40:09,829 --> 00:40:08,079

equation

1138

00:40:12,230 --> 00:40:09,839

it takes a lot to unpack it in order to

1139

00:40:14,470 --> 00:40:12,240

understand what it all means but

1140

00:40:16,230 --> 00:40:14,480

or at least mathematically what it means

1141

00:40:17,750 --> 00:40:16,240

but what it then means in terms of

1142

00:40:20,230 --> 00:40:17,760

fundamentals in our understanding of

1143

00:40:21,270 --> 00:40:20,240

reality that is still a completely open

1144

00:40:23,670 --> 00:40:21,280

question

1145

00:40:25,510 --> 00:40:23,680

so one of the ways of seeing that is

1146

00:40:27,670 --> 00:40:25,520

every so often there's a survey taken

1147

00:40:30,150 --> 00:40:27,680

among physicists on their

1148

00:40:31,430 --> 00:40:30,160

interpretation of quantum mechanics and

1149

00:40:33,270 --> 00:40:31,440

so they give a number of different

1150

00:40:35,589 --> 00:40:33,280

questions like do you imagine quantum

1151

00:40:37,589 --> 00:40:35,599

mechanics is this or this or this one of

1152

00:40:38,950 --> 00:40:37,599

the questions is about the role of the

1153

00:40:41,670 --> 00:40:38,960

observer

1154

00:40:43,190 --> 00:40:41,680

which is about like does consciousness

1155

00:40:45,589 --> 00:40:43,200

really matter or not

1156

00:40:48,309 --> 00:40:45,599

well of the people answering the survey

1157

00:40:49,349 --> 00:40:48,319

22 percent said yeah it is fundamentally

1158

00:40:51,190 --> 00:40:49,359

important

1159

00:40:52,710 --> 00:40:51,200

to understanding the nature of quantum

1160

00:40:55,270 --> 00:40:52,720

mechanics well these are professional

1161

00:40:57,030 --> 00:40:55,280

physicists who are working this problem

1162

00:40:59,190 --> 00:40:57,040

so it's a minority but it's not that

1163

00:41:01,190 --> 00:40:59,200

small of a minority one in five

1164

00:41:02,470 --> 00:41:01,200

physicists out there think yeah there's

1165

00:41:03,829 --> 00:41:02,480

something really important about

1166

00:41:06,309 --> 00:41:03,839

consciousness

1167

00:41:07,910 --> 00:41:06,319

the vast majority of research that goes

1168

00:41:09,349 --> 00:41:07,920

on in quantum mechanics is not looking

1169

00:41:11,190 --> 00:41:09,359

at the fundamentals

1170

00:41:14,470 --> 00:41:11,200

in a sense that is what we are looking

1171

00:41:16,230 --> 00:41:14,480

at we want to see whether uh why were

1172

00:41:18,390 --> 00:41:16,240

all of these founders of quantum

1173

00:41:20,390 --> 00:41:18,400

mechanics who are idealists which is not

1174

00:41:21,750 --> 00:41:20,400

in favor very much within physics

1175

00:41:23,270 --> 00:41:21,760

especially

1176

00:41:25,510 --> 00:41:23,280

why did how could they have come up with

1177

00:41:26,950 --> 00:41:25,520

something like this and yet hold the

1178

00:41:28,470 --> 00:41:26,960

belief that consciousness really was

1179

00:41:30,150 --> 00:41:28,480

fundamental do they know something we

1180

00:41:32,470 --> 00:41:30,160

don't know

1181

00:41:35,030 --> 00:41:32,480

well it's it comes down to philosophical

1182

00:41:36,950 --> 00:41:35,040

preference in some case but nevertheless

1183

00:41:40,630 --> 00:41:36,960

it didn't stop them from revolutionizing

1184

00:41:42,950 --> 00:41:40,640

physics so okay let's give their ideas a

1185

00:41:46,150 --> 00:41:42,960

shot and see what happens

1186

00:41:48,069 --> 00:41:46,160

okay super normal 2013

1187

00:41:50,550 --> 00:41:48,079

what's the story arc here and what's

1188

00:41:52,710 --> 00:41:50,560

going on in the lab

1189

00:41:53,589 --> 00:41:52,720

so after writing about the physics of

1190

00:41:55,670 --> 00:41:53,599

this

1191

00:41:57,750 --> 00:41:55,680

uh then people started saying yeah but

1192

00:42:00,870 --> 00:41:57,760

but still the physics doesn't yet

1193

00:42:02,150 --> 00:42:00,880

explain what's going on so

1194

00:42:04,550 --> 00:42:02,160

you know is there something wrong with

1195

00:42:06,710 --> 00:42:04,560

our worldview do we need some other way

1196

00:42:08,470 --> 00:42:06,720

of looking at it and of course i already

1197

00:42:11,430 --> 00:42:08,480

knew that the the founders of quantum

1198

00:42:13,829 --> 00:42:11,440

mechanics were idealist so i said well

1199

00:42:16,950 --> 00:42:13,839

let's look actually in two parts

1200

00:42:19,589 --> 00:42:16,960

at uh traditions that are not the

1201

00:42:21,829 --> 00:42:19,599

current tradition within science so

1202

00:42:24,069 --> 00:42:21,839

science rests upon the philosophical

1203

00:42:26,069 --> 00:42:24,079

assumptions of materialism everything is

1204

00:42:28,309 --> 00:42:26,079

made out of matter and energy and that's

1205

00:42:29,750 --> 00:42:28,319

the end of it in which case your

1206

00:42:31,589 --> 00:42:29,760

your brain

1207

00:42:34,150 --> 00:42:31,599

and you are the same

1208

00:42:35,829 --> 00:42:34,160

there's like consciousness for for i

1209

00:42:37,270 --> 00:42:35,839

would say radical philosophers say that

1210

00:42:38,710 --> 00:42:37,280

there is no consciousness it's just an

1211

00:42:40,470 --> 00:42:38,720

illusion that somehow

1212

00:42:42,390 --> 00:42:40,480

associated with something to do with

1213

00:42:43,990 --> 00:42:42,400

brain activity

1214

00:42:46,390 --> 00:42:44,000

and this is still a dogma within the

1215

00:42:48,710 --> 00:42:46,400

neurosciences the the consciousness

1216

00:42:50,950 --> 00:42:48,720

doesn't really do anything but it is an

1217

00:42:52,790 --> 00:42:50,960

emergent property of brain activity

1218

00:42:55,109 --> 00:42:52,800

they'll admit that because you have

1219

00:42:56,710 --> 00:42:55,119

close uh neural correlates of

1220

00:42:58,390 --> 00:42:56,720

consciousness showing the relationship

1221

00:43:00,390 --> 00:42:58,400

there

1222

00:43:01,910 --> 00:43:00,400

i look at that correlation as the same

1223

00:43:03,910 --> 00:43:01,920

way a statistician would and would say

1224

00:43:05,190 --> 00:43:03,920

well just because you have a correlation

1225

00:43:06,870 --> 00:43:05,200

it doesn't tell you the direction of the

1226  
00:43:07,829 --> 00:43:06,880  
causation unless you have a really good

1227  
00:43:09,829 --> 00:43:07,839  
reason

1228  
00:43:11,349 --> 00:43:09,839  
to to think that you know the direction

1229  
00:43:13,270 --> 00:43:11,359  
of causation

1230  
00:43:17,510 --> 00:43:13,280  
so

1231  
00:43:20,710 --> 00:43:17,520  
looking at eastern

1232  
00:43:23,109 --> 00:43:20,720  
esoteric traditions to say well the

1233  
00:43:24,710 --> 00:43:23,119  
modern way of viewing reality is

1234  
00:43:27,109 --> 00:43:24,720  
relatively new it's only a few hundred

1235  
00:43:29,910 --> 00:43:27,119  
years old this idea of materialism you

1236  
00:43:32,630 --> 00:43:29,920  
can find instances of materialism even

1237  
00:43:35,430 --> 00:43:32,640  
in eastern philosophy and you can find

1238  
00:43:36,309 --> 00:43:35,440

it everywhere but by by look

1239

00:43:42,230 --> 00:43:36,319

more

1240

00:43:44,710 --> 00:43:42,240

esoteric traditions were all about

1241

00:43:47,829 --> 00:43:44,720

consciousness being fundamental

1242

00:43:49,990 --> 00:43:47,839

and and so i used the uh the yoga sutras

1243

00:43:52,630 --> 00:43:50,000

of patanjali as a way of demonstrating

1244

00:43:55,030 --> 00:43:52,640

that something about 2000 years or more

1245

00:43:57,190 --> 00:43:55,040

before was the first written

1246

00:43:59,829 --> 00:43:57,200

account of what happens when you do

1247

00:44:01,750 --> 00:43:59,839

diligent meditative practice

1248

00:44:03,990 --> 00:44:01,760

what happens well one of the things that

1249

00:44:06,470 --> 00:44:04,000

potentially wrote about was

1250

00:44:08,630 --> 00:44:06,480

this just happens and what is he talking

1251

00:44:10,870 --> 00:44:08,640

about 25 different kinds of psychic

1252

00:44:12,950 --> 00:44:10,880

abilities that come about as a result of

1253

00:44:14,870 --> 00:44:12,960

this discipline practice

1254

00:44:15,750 --> 00:44:14,880

so i use that as a as kind of a way of

1255

00:44:17,190 --> 00:44:15,760

saying

1256

00:44:19,589 --> 00:44:17,200

potentially was writing about these

1257

00:44:21,670 --> 00:44:19,599

superpowers a long time ago

1258

00:44:23,750 --> 00:44:21,680

is there any reason for us today to take

1259

00:44:25,270 --> 00:44:23,760

any of that seriously

1260

00:44:27,030 --> 00:44:25,280

and so i systematically went through

1261

00:44:29,030 --> 00:44:27,040

each one of the of the cities these

1262

00:44:30,470 --> 00:44:29,040

special powers to say is there any

1263

00:44:32,230 --> 00:44:30,480

laboratory evidence suggesting that

1264

00:44:34,309 --> 00:44:32,240

meditation goes anything like this and

1265

00:44:37,109 --> 00:44:34,319

the short answer is yes

1266

00:44:39,030 --> 00:44:37,119

in which case potentially also talks

1267

00:44:41,030 --> 00:44:39,040

about things like levitation and the

1268

00:44:43,349 --> 00:44:41,040

visibility and other

1269

00:44:45,750 --> 00:44:43,359

like comic book effects

1270

00:44:47,589 --> 00:44:45,760

uh what about those well we don't know

1271

00:44:49,910 --> 00:44:47,599

we can't bring that into the lab and we

1272

00:44:51,829 --> 00:44:49,920

don't never see that into the lab except

1273

00:44:54,710 --> 00:44:51,839

if he was right on these first

1274

00:44:56,870 --> 00:44:54,720

set of phenomena or was he just making

1275

00:44:59,349 --> 00:44:56,880

up the rest of it you know what that's a

1276

00:45:02,150 --> 00:44:59,359

kind of a weird way to write a book

1277

00:45:05,910 --> 00:45:02,160

so i kind of suspect that these

1278

00:45:08,150 --> 00:45:05,920

super psychic effects like levitation

1279

00:45:09,750 --> 00:45:08,160

they might be real and when you look at

1280

00:45:12,150 --> 00:45:09,760

the literature including contemporary

1281

00:45:13,589 --> 00:45:12,160

literature like in tibetan meditation

1282

00:45:15,430 --> 00:45:13,599

they will say yeah the cities are

1283

00:45:17,270 --> 00:45:15,440

definitely real but the people who can

1284

00:45:19,190 --> 00:45:17,280

do these advanced cities

1285

00:45:20,710 --> 00:45:19,200

extremely rare

1286

00:45:22,630 --> 00:45:20,720

even among people who are lifelong

1287

00:45:25,030 --> 00:45:22,640

practitioners so it's not only the

1288

00:45:27,190 --> 00:45:25,040

practice there's some talent that seems

1289

00:45:29,990 --> 00:45:27,200

to come into play that allows for these

1290

00:45:32,710 --> 00:45:30,000

super abilities to to exist

1291

00:45:35,589 --> 00:45:32,720

yeah you know yogananda the famous yogi

1292

00:45:37,510 --> 00:45:35,599

wrote autobiography of yogi hasn't had

1293

00:45:38,870 --> 00:45:37,520

an ashram it's right up the road for me

1294

00:45:40,790 --> 00:45:38,880

i go up there

1295

00:45:42,150 --> 00:45:40,800

look off to it and do yoga all the time

1296

00:45:43,349 --> 00:45:42,160

just because i like to do yoga and it's

1297

00:45:45,270 --> 00:45:43,359

a beautiful spot right there on the

1298

00:45:47,349 --> 00:45:45,280

beach you're overlooking the beach

1299

00:45:51,030 --> 00:45:47,359

but anyone who picks up that book and

1300

00:45:52,710 --> 00:45:51,040

reads the first 30 pages i mean

1301  
00:45:53,910 --> 00:45:52,720  
in the way that you're talking about it

1302  
00:45:55,670 --> 00:45:53,920  
he just talks about in a very

1303  
00:45:57,829 --> 00:45:55,680  
matter-of-fact way of you know hey this

1304  
00:45:58,710 --> 00:45:57,839  
is what happened to me this is my life

1305  
00:46:00,870 --> 00:45:58,720  
and then

1306  
00:46:02,790 --> 00:46:00,880  
my guru by located from here to there

1307  
00:46:05,270 --> 00:46:02,800  
and you know shape-shifted into you know

1308  
00:46:07,349 --> 00:46:05,280  
it's just he's not talking about it like

1309  
00:46:08,470 --> 00:46:07,359  
to shock you or anything he's just

1310  
00:46:11,910 --> 00:46:08,480  
saying

1311  
00:46:13,829 --> 00:46:11,920  
this is my life is my autobiography so

1312  
00:46:15,829 --> 00:46:13,839  
yeah i think it is interesting to look

1313  
00:46:17,750 --> 00:46:15,839

at that culturally

1314

00:46:21,190 --> 00:46:17,760

was there any i know some of the lab

1315

00:46:23,670 --> 00:46:21,200

experiments overlap with this stuff but

1316

00:46:27,510 --> 00:46:23,680

was is there anything you would kind of

1317

00:46:30,230 --> 00:46:27,520

pull out as experimentally

1318

00:46:32,790 --> 00:46:30,240

super normal where you thought maybe one

1319

00:46:34,950 --> 00:46:32,800

extraordinary person you had in the lab

1320

00:46:36,470 --> 00:46:34,960

or anything like that because that

1321

00:46:39,109 --> 00:46:36,480

that's even something to talk about you

1322

00:46:41,670 --> 00:46:39,119

know the super talented versus the

1323

00:46:43,510 --> 00:46:41,680

just person off the street offers

1324

00:46:47,109 --> 00:46:43,520

different insights as well as i've heard

1325

00:46:50,470 --> 00:46:47,119

you talk about but anything in that room

1326

00:46:52,710 --> 00:46:50,480

well are you talking about swami veda

1327

00:46:54,790 --> 00:46:52,720

sure if you want to go there i think i

1328

00:46:57,349 --> 00:46:54,800

might have mentioned about swami beta

1329

00:46:59,910 --> 00:46:57,359

participating in an experiment

1330

00:47:01,030 --> 00:46:59,920

um swami veda is part out of a himalayan

1331

00:47:02,150 --> 00:47:01,040

tradition

1332

00:47:03,829 --> 00:47:02,160

of

1333

00:47:05,750 --> 00:47:03,839

meditation

1334

00:47:08,069 --> 00:47:05,760

had been meditating since he was a child

1335

00:47:09,270 --> 00:47:08,079

so that when i met him maybe 70 years at

1336

00:47:11,990 --> 00:47:09,280

that point

1337

00:47:14,069 --> 00:47:12,000

and part of his tradition was to develop

1338

00:47:15,670 --> 00:47:14,079

or at least recognize the cities the

1339

00:47:17,510 --> 00:47:15,680

cities would develop

1340

00:47:19,670 --> 00:47:17,520

and so this was one of my in fact the

1341

00:47:22,069 --> 00:47:19,680

very first experiment they did using a

1342

00:47:24,069 --> 00:47:22,079

an optical system to see if it had if

1343

00:47:26,790 --> 00:47:24,079

you can manipulate quantum properties in

1344

00:47:28,309 --> 00:47:26,800

it and i described it to him as what he

1345

00:47:30,549 --> 00:47:28,319

would do he would sit outside her

1346

00:47:33,190 --> 00:47:30,559

shielded room and then mentally do

1347

00:47:35,109 --> 00:47:33,200

something to a light beam inside the

1348

00:47:36,630 --> 00:47:35,119

shielded room

1349

00:47:38,230 --> 00:47:36,640

and so

1350

00:47:40,870 --> 00:47:38,240

he didn't know if he'd be able to do

1351  
00:47:41,910 --> 00:47:40,880  
that or not but he's certainly willing

1352  
00:47:44,790 --> 00:47:41,920  
to try

1353  
00:47:47,109 --> 00:47:44,800  
so he sat down outside the the lab or

1354  
00:47:48,790 --> 00:47:47,119  
outside our shielded room

1355  
00:47:51,349 --> 00:47:48,800  
and then in one minute segments i would

1356  
00:47:54,470 --> 00:47:51,359  
tell him okay now put your mind in that

1357  
00:47:56,950 --> 00:47:54,480  
beam like send it in the beam over there

1358  
00:47:59,270 --> 00:47:56,960  
or not withdraw it and relax so one

1359  
00:48:00,630 --> 00:47:59,280  
minute every minute we do that

1360  
00:48:01,829 --> 00:48:00,640  
well about halfway through the

1361  
00:48:03,910 --> 00:48:01,839  
experiment

1362  
00:48:06,950 --> 00:48:03,920  
uh i mentally

1363  
00:48:09,190 --> 00:48:06,960

lost it like i kind of for a moment i

1364

00:48:11,430 --> 00:48:09,200

forgot what we were doing i didn't know

1365

00:48:13,750 --> 00:48:11,440

like what what is happening here

1366

00:48:16,230 --> 00:48:13,760

and then i brought myself back somehow

1367

00:48:18,309 --> 00:48:16,240

and kept going with the experiment

1368

00:48:19,589 --> 00:48:18,319

so later when we analyzed the data we

1369

00:48:21,430 --> 00:48:19,599

found that about halfway through the

1370

00:48:23,670 --> 00:48:21,440

experiment we started to get a really

1371

00:48:25,190 --> 00:48:23,680

big result like exactly the kind of

1372

00:48:27,430 --> 00:48:25,200

thing i was hoping we would get it was

1373

00:48:28,309 --> 00:48:27,440

as though he was able to block a light

1374

00:48:30,309 --> 00:48:28,319

beam

1375

00:48:31,990 --> 00:48:30,319

to put it in simple terms

1376

00:48:34,630 --> 00:48:32,000

so i was talking about this to the two

1377

00:48:36,069 --> 00:48:34,640

videographers we had filming the whole

1378

00:48:38,069 --> 00:48:36,079

thing from two different directions at

1379

00:48:40,630 --> 00:48:38,079

that time and they both gave me a kind

1380

00:48:43,109 --> 00:48:40,640

of startled look because they they had

1381

00:48:45,990 --> 00:48:43,119

compared notes among themselves and both

1382

00:48:48,069 --> 00:48:46,000

of them had mentally gone away

1383

00:48:49,589 --> 00:48:48,079

at the same time that i did this was

1384

00:48:51,670 --> 00:48:49,599

halfway through the experiment it's like

1385

00:48:53,910 --> 00:48:51,680

they kept filming but they they were

1386

00:48:55,430 --> 00:48:53,920

just disoriented or something for a

1387

00:48:58,069 --> 00:48:55,440

moment

1388

00:48:59,750 --> 00:48:58,079

so i asked swami beta about that later i

1389

00:49:01,510 --> 00:48:59,760

said well when you know when did you

1390

00:49:02,870 --> 00:49:01,520

think you actually were able to do this

1391

00:49:05,510 --> 00:49:02,880

because the data shows that you did

1392

00:49:06,870 --> 00:49:05,520

pretty good and so it took a while maybe

1393

00:49:09,270 --> 00:49:06,880

halfway through

1394

00:49:11,430 --> 00:49:09,280

he figured out what was necessary in

1395

00:49:13,430 --> 00:49:11,440

order to do this and it was a city it

1396

00:49:16,230 --> 00:49:13,440

was it's a mind matter interaction city

1397

00:49:18,069 --> 00:49:16,240

where you're controlling light itself

1398

00:49:20,230 --> 00:49:18,079

and they said well how did you how did

1399

00:49:22,470 --> 00:49:20,240

you jump into the room there because all

1400

00:49:24,710 --> 00:49:22,480

you have is your mind to do that and he

1401  
00:49:25,750 --> 00:49:24,720  
gave it an interesting result her answer

1402  
00:49:28,230 --> 00:49:25,760  
which was

1403  
00:49:30,790 --> 00:49:28,240  
uh i didn't go anywhere my mind didn't

1404  
00:49:32,230 --> 00:49:30,800  
go anywhere it's all in here points

1405  
00:49:35,030 --> 00:49:32,240  
pointing to his heart

1406  
00:49:37,270 --> 00:49:35,040  
so the universe is inside from the point

1407  
00:49:38,950 --> 00:49:37,280  
of view of these cities it's not outside

1408  
00:49:40,390 --> 00:49:38,960  
that's in a sense why you're able to

1409  
00:49:42,549 --> 00:49:40,400  
control it because

1410  
00:49:44,790 --> 00:49:42,559  
you're you have much better control over

1411  
00:49:46,549 --> 00:49:44,800  
your what's going on inside

1412  
00:49:48,870 --> 00:49:46,559  
and we're talking about deep levels of

1413  
00:49:50,390 --> 00:49:48,880

consciousness now which you can think of

1414

00:49:52,309 --> 00:49:50,400

as pointing to your heart it's not

1415

00:49:54,309 --> 00:49:52,319

really in your heart

1416

00:49:56,790 --> 00:49:54,319

but it's it's deep somehow and it's

1417

00:49:59,589 --> 00:49:56,800

there is no outside at that point

1418

00:50:02,470 --> 00:49:59,599

which is why i also like this quip from

1419

00:50:04,790 --> 00:50:02,480

ramana maharshi who was asked

1420

00:50:07,109 --> 00:50:04,800

after listening to the guru talked for a

1421

00:50:09,270 --> 00:50:07,119

while about uh how should people behave

1422

00:50:11,430 --> 00:50:09,280

so somebody asked him

1423

00:50:13,910 --> 00:50:11,440

how should we treat other people

1424

00:50:15,829 --> 00:50:13,920

and his response is there are no other

1425

00:50:17,829 --> 00:50:15,839

people

1426

00:50:19,349 --> 00:50:17,839

it's all completely connected and it's

1427

00:50:21,349 --> 00:50:19,359

all inside

1428

00:50:23,829 --> 00:50:21,359

so i thought that was quite interesting

1429

00:50:26,069 --> 00:50:23,839

so i i don't often have the opportunity

1430

00:50:27,030 --> 00:50:26,079

to to work with somebody who's such an

1431

00:50:29,270 --> 00:50:27,040

adept

1432

00:50:31,430 --> 00:50:29,280

and unfortunately swami veda has passed

1433

00:50:33,349 --> 00:50:31,440

away now so you can't do anymore at

1434

00:50:35,670 --> 00:50:33,359

least not in this form

1435

00:50:37,430 --> 00:50:35,680

um but when you do have the opportunity

1436

00:50:40,950 --> 00:50:37,440

to work with somebody who's been

1437

00:50:42,950 --> 00:50:40,960

meditating a very long time they can do

1438

00:50:45,270 --> 00:50:42,960

not all of them because some of them are

1439

00:50:47,190 --> 00:50:45,280

not interested in developing the cities

1440

00:50:49,670 --> 00:50:47,200

i mean some of them explicitly avoid

1441

00:50:51,430 --> 00:50:49,680

doing that like in the yogic tradition

1442

00:50:53,510 --> 00:50:51,440

the usual way a teacher would say about

1443

00:50:54,870 --> 00:50:53,520

the cities is that something arises just

1444

00:50:57,190 --> 00:50:54,880

you know acknowledge it and just keep

1445

00:51:00,390 --> 00:50:57,200

going because that's not the end goal

1446

00:51:02,150 --> 00:51:00,400

okay uh this plays right into real magic

1447

00:51:04,950 --> 00:51:02,160

2018

1448

00:51:07,349 --> 00:51:04,960

but explain the the leap here

1449

00:51:09,670 --> 00:51:07,359

well super normal is all about eastern

1450

00:51:12,069 --> 00:51:09,680

philosophical ideas and the eastern

1451  
00:51:14,710 --> 00:51:12,079  
esoteric traditions supernatural is the

1452  
00:51:16,950 --> 00:51:14,720  
western esoteric traditions so in the

1453  
00:51:18,710 --> 00:51:16,960  
east you have the cities special powers

1454  
00:51:21,510 --> 00:51:18,720  
on the west you have magic

1455  
00:51:24,150 --> 00:51:21,520  
they are essentially exactly the same

1456  
00:51:27,589 --> 00:51:24,160  
and even the methods of being able to

1457  
00:51:30,069 --> 00:51:27,599  
produce magical effects you can map onto

1458  
00:51:32,630 --> 00:51:30,079  
yogic methods directly it's all about

1459  
00:51:34,710 --> 00:51:32,640  
intention it's about deep states of mind

1460  
00:51:37,109 --> 00:51:34,720  
yogi would talk about samadhi a magician

1461  
00:51:39,109 --> 00:51:37,119  
will talk about gnosis

1462  
00:51:40,710 --> 00:51:39,119  
it's basically it's a parallel to each

1463  
00:51:42,150 --> 00:51:40,720

other and of course this is not too

1464

00:51:44,230 --> 00:51:42,160

surprising because if you go back far

1465

00:51:46,150 --> 00:51:44,240

enough in history there was no east and

1466

00:51:48,829 --> 00:51:46,160

west per se

1467

00:51:51,270 --> 00:51:48,839

they all came out of one one source

1468

00:51:53,190 --> 00:51:51,280

zoroaster you know people plus or minus

1469

00:51:54,630 --> 00:51:53,200

a couple of centuries

1470

00:51:57,510 --> 00:51:54,640

so

1471

00:51:59,750 --> 00:51:57,520

well

1472

00:52:01,430 --> 00:51:59,760

i don't need to talk about yoga at all

1473

00:52:04,069 --> 00:52:01,440

in this case i can talk about magic

1474

00:52:05,270 --> 00:52:04,079

because of harry potter among other

1475

00:52:06,790 --> 00:52:05,280

things

1476  
00:52:09,349 --> 00:52:06,800  
people have learned enough about it

1477  
00:52:13,510 --> 00:52:09,359  
through stories and mythology in our

1478  
00:52:15,430 --> 00:52:13,520  
entertainment world to at least wonder

1479  
00:52:17,270 --> 00:52:15,440  
is that based on anything or is it pure

1480  
00:52:19,030 --> 00:52:17,280  
fantasy

1481  
00:52:20,549 --> 00:52:19,040  
well it appears that it is based on

1482  
00:52:22,150 --> 00:52:20,559  
something so just as they did for the

1483  
00:52:24,309 --> 00:52:22,160  
yogic cities and showing that there is

1484  
00:52:27,270 --> 00:52:24,319  
some science that can be brought to bear

1485  
00:52:29,510 --> 00:52:27,280  
for magical practices the same is true

1486  
00:52:31,750 --> 00:52:29,520  
some magical practices map on very very

1487  
00:52:34,069 --> 00:52:31,760  
nicely to the experimental work in

1488  
00:52:35,910 --> 00:52:34,079

parapsychology

1489

00:52:37,510 --> 00:52:35,920

okay so here's the part that i think

1490

00:52:40,470 --> 00:52:37,520

gets a little bit

1491

00:52:43,030 --> 00:52:40,480

tricky so you're at that level you're

1492

00:52:45,190 --> 00:52:43,040

pounding on this consciousness thing

1493

00:52:47,510 --> 00:52:45,200

because it gets the philosophical

1494

00:52:49,829 --> 00:52:47,520

assumption underlying science and i've

1495

00:52:53,270 --> 00:52:49,839

heard you talk about this before

1496

00:52:55,430 --> 00:52:53,280

in a very very eloquent way in a very

1497

00:52:57,109 --> 00:52:55,440

interesting way and because again it's

1498

00:52:59,349 --> 00:52:57,119

it's obvious

1499

00:53:01,270 --> 00:52:59,359

but it's not well understood or

1500

00:53:04,470 --> 00:53:01,280

processed and that's that

1501  
00:53:05,829 --> 00:53:04,480  
science is resting on philosophical

1502  
00:53:07,430 --> 00:53:05,839  
assumptions

1503  
00:53:09,109 --> 00:53:07,440  
the biggest one is that the world is out

1504  
00:53:10,309 --> 00:53:09,119  
there and we can measure it

1505  
00:53:12,549 --> 00:53:10,319  
which

1506  
00:53:14,549 --> 00:53:12,559  
you kind of shatter that one with every

1507  
00:53:15,430 --> 00:53:14,559  
experiment that you do

1508  
00:53:17,190 --> 00:53:15,440  
but there's a bunch of other

1509  
00:53:18,630 --> 00:53:17,200  
philosophical assumptions

1510  
00:53:21,589 --> 00:53:18,640  
kind of the main ones i mean if you

1511  
00:53:23,190 --> 00:53:21,599  
really kind of get to where people live

1512  
00:53:25,109 --> 00:53:23,200  
it's like

1513  
00:53:26,549 --> 00:53:25,119

is there good and bad

1514

00:53:28,950 --> 00:53:26,559

is there god

1515

00:53:30,470 --> 00:53:28,960

what should i do with my life

1516

00:53:33,750 --> 00:53:30,480

um

1517

00:53:35,349 --> 00:53:33,760

why am i here kind of thing and

1518

00:53:37,430 --> 00:53:35,359

so

1519

00:53:38,870 --> 00:53:37,440

magic

1520

00:53:41,270 --> 00:53:38,880

kind of

1521

00:53:43,990 --> 00:53:41,280

answers that in a different way than i

1522

00:53:45,349 --> 00:53:44,000

think most people are used to having it

1523

00:53:46,950 --> 00:53:45,359

answered

1524

00:53:47,910 --> 00:53:46,960

what are your thoughts about some of

1525

00:53:50,710 --> 00:53:47,920

those

1526  
00:53:52,390 --> 00:53:50,720  
really deep philosophical questions

1527  
00:53:55,030 --> 00:53:52,400  
yeah you're talking about issues of

1528  
00:53:58,309 --> 00:53:55,040  
morality and ethics and

1529  
00:54:01,349 --> 00:53:58,319  
uh it's it might be related to all this

1530  
00:54:04,309 --> 00:54:01,359  
but i'm i'm not sure i would go there

1531  
00:54:05,589 --> 00:54:04,319  
except for with one proviso

1532  
00:54:07,510 --> 00:54:05,599  
and that is

1533  
00:54:09,430 --> 00:54:07,520  
uh if if you completely adopt

1534  
00:54:12,150 --> 00:54:09,440  
materialism as the

1535  
00:54:14,549 --> 00:54:12,160  
your way that you'll understand reality

1536  
00:54:16,630 --> 00:54:14,559  
then that leads to a picture of the

1537  
00:54:18,710 --> 00:54:16,640  
world wiz which is nihilism

1538  
00:54:20,390 --> 00:54:18,720

which means there there is no ultimate

1539

00:54:22,309 --> 00:54:20,400

purpose to anything

1540

00:54:24,390 --> 00:54:22,319

uh when when your body dies you're dead

1541

00:54:25,829 --> 00:54:24,400

that's the end of it

1542

00:54:28,950 --> 00:54:25,839

and and is

1543

00:54:31,190 --> 00:54:28,960

collected into this equip of he who dies

1544

00:54:33,109 --> 00:54:31,200

with the most toys wins

1545

00:54:34,790 --> 00:54:33,119

that's that gives rise to the modern

1546

00:54:37,349 --> 00:54:34,800

world that we see today where

1547

00:54:39,190 --> 00:54:37,359

essentially business is extractive it is

1548

00:54:40,630 --> 00:54:39,200

it's taking things out of the natural

1549

00:54:42,470 --> 00:54:40,640

world turning into something else and

1550

00:54:44,549 --> 00:54:42,480

then selling it to you

1551

00:54:46,069 --> 00:54:44,559

well that's not sustainable

1552

00:54:48,630 --> 00:54:46,079

i mean maybe

1553

00:54:51,190 --> 00:54:48,640

wind power might be or solar power but

1554

00:54:52,630 --> 00:54:51,200

taking things out of the earth and in

1555

00:54:55,030 --> 00:54:52,640

assuming that it's going to go on

1556

00:54:56,870 --> 00:54:55,040

forever well that's not the case it

1557

00:54:59,190 --> 00:54:56,880

cannot go on forever and we're we're

1558

00:55:00,710 --> 00:54:59,200

beginning to reap the consequences of

1559

00:55:03,109 --> 00:55:00,720

that model especially when it comes to

1560

00:55:04,150 --> 00:55:03,119

things like like oil

1561

00:55:06,630 --> 00:55:04,160

so

1562

00:55:08,870 --> 00:55:06,640

we have like double whammies we have a

1563

00:55:10,549 --> 00:55:08,880

philosophy which is underlying a lot of

1564

00:55:12,069 --> 00:55:10,559

modern civilization

1565

00:55:13,670 --> 00:55:12,079

uh which says there's no purpose to

1566

00:55:15,910 --> 00:55:13,680

anything you don't really matter

1567

00:55:18,470 --> 00:55:15,920

ultimately nothing on earth matters

1568

00:55:19,430 --> 00:55:18,480

and when students go through especially

1569

00:55:21,670 --> 00:55:19,440

a

1570

00:55:23,910 --> 00:55:21,680

course in science they will they will

1571

00:55:26,230 --> 00:55:23,920

absorb materialism without even being

1572

00:55:28,789 --> 00:55:26,240

taught that it is a philosophy

1573

00:55:30,309 --> 00:55:28,799

rather than a set of assumptions and

1574

00:55:32,230 --> 00:55:30,319

assumptions by their very nature or

1575

00:55:33,990 --> 00:55:32,240

something you can't prove it's something

1576

00:55:35,829 --> 00:55:34,000

that you believe that this is a good

1577

00:55:37,829 --> 00:55:35,839

answer to something

1578

00:55:40,390 --> 00:55:37,839

one of the reasons why it continues to

1579

00:55:42,950 --> 00:55:40,400

be taught and used and a lot of people

1580

00:55:45,510 --> 00:55:42,960

defend it to their death

1581

00:55:46,309 --> 00:55:45,520

is because it's very effective

1582

00:55:49,910 --> 00:55:46,319

so

1583

00:55:52,069 --> 00:55:49,920

that is very effective materialism as a

1584

00:55:53,990 --> 00:55:52,079

doctrine within science is extremely

1585

00:55:55,990 --> 00:55:54,000

useful

1586

00:55:57,589 --> 00:55:56,000

what i would say then though is

1587

00:55:59,589 --> 00:55:57,599

is it sufficient to account for

1588

00:56:01,510 --> 00:55:59,599

everything and the answer there from the

1589

00:56:04,230 --> 00:56:01,520

kind of work i do in lots of other areas

1590

00:56:07,589 --> 00:56:04,240

now no it is not able to explain

1591

00:56:08,950 --> 00:56:07,599

everything what that tells me is that

1592

00:56:10,630 --> 00:56:08,960

just as you see again and again

1593

00:56:12,390 --> 00:56:10,640

throughout the history of science that

1594

00:56:13,990 --> 00:56:12,400

at one point people said okay now we

1595

00:56:14,950 --> 00:56:14,000

really understand what's going on we got

1596

00:56:18,630 --> 00:56:14,960

it

1597

00:56:20,549 --> 00:56:18,640

idea new experiments and so okay what we

1598

00:56:21,430 --> 00:56:20,559

thought we knew was actually a special

1599

00:56:22,870 --> 00:56:21,440

case

1600

00:56:24,630 --> 00:56:22,880

and now we have a more expansive

1601

00:56:27,589 --> 00:56:24,640

understanding of reality

1602

00:56:29,910 --> 00:56:27,599

so i see materialism as a special case

1603

00:56:32,069 --> 00:56:29,920

that pertains to certain aspects limited

1604

00:56:33,589 --> 00:56:32,079

aspects of the world which is extremely

1605

00:56:35,430 --> 00:56:33,599

powerful and a very good way of

1606

00:56:38,230 --> 00:56:35,440

understanding it but it does not account

1607

00:56:40,230 --> 00:56:38,240

for everything so how do we expand it

1608

00:56:43,190 --> 00:56:40,240

i would say one way to expand it is to

1609

00:56:44,870 --> 00:56:43,200

assume that materialism is a subset of

1610

00:56:50,549 --> 00:56:44,880

idealism

1611

00:56:53,589 --> 00:56:50,559

magic psychic stuff cities all of that

1612

00:56:56,230 --> 00:56:53,599

become easy to understand without doing

1613

00:56:58,069 --> 00:56:56,240

anything to materialism

1614

00:57:00,789 --> 00:56:58,079

so here's where i'm here's where i'm

1615

00:57:02,710 --> 00:57:00,799

kind of trying to go with that

1616

00:57:04,390 --> 00:57:02,720

your work

1617

00:57:08,150 --> 00:57:04,400

tell me if you agree with us or if you

1618

00:57:09,510 --> 00:57:08,160

don't but is not inconsistent with what

1619

00:57:11,990 --> 00:57:09,520

people are doing with the near-death

1620

00:57:14,390 --> 00:57:12,000

experience science the shared death

1621

00:57:16,309 --> 00:57:14,400

experience science which is really

1622

00:57:17,990 --> 00:57:16,319

interesting and it's

1623

00:57:20,230 --> 00:57:18,000

some people say it's anecdotal but it's

1624

00:57:21,430 --> 00:57:20,240

really not it's case work in the same

1625

00:57:23,109 --> 00:57:21,440

way that

1626

00:57:25,750 --> 00:57:23,119

medicine across the board is a

1627

00:57:26,470 --> 00:57:25,760

combination of case work and and as well

1628

00:57:29,270 --> 00:57:26,480

as

1629

00:57:31,430 --> 00:57:29,280

kind of exp experimental laboratory work

1630

00:57:33,510 --> 00:57:31,440

but

1631

00:57:34,390 --> 00:57:33,520

what you're saying what your findings

1632

00:57:41,349 --> 00:57:34,400

are

1633

00:57:42,789 --> 00:57:41,359

now let's go see what we might learn

1634

00:57:45,430 --> 00:57:42,799

about those extended consciousness

1635

00:57:48,150 --> 00:57:45,440

realms and i think you are making some

1636

00:57:51,030 --> 00:57:48,160

of those same leaps whether you like to

1637

00:57:52,150 --> 00:57:51,040

or not you are deciding that you won't

1638

00:57:54,390 --> 00:57:52,160

do

1639

00:57:55,349 --> 00:57:54,400

the spoon bending exercise on board a

1640

00:57:56,630 --> 00:57:55,359

plane

1641

00:57:58,390 --> 00:57:56,640

because you're like

1642

00:57:59,990 --> 00:57:58,400

is this maybe going to make the wings of

1643

00:58:03,510 --> 00:58:00,000

the plane

1644

00:58:06,150 --> 00:58:03,520

kind of go down so yes we we are in the

1645

00:58:07,990 --> 00:58:06,160

game of trying to figure out

1646

00:58:10,630 --> 00:58:08,000

what these ex what these extended

1647

00:58:11,829 --> 00:58:10,640

consciousness realms are and how we fit

1648

00:58:13,910 --> 00:58:11,839

into them

1649

00:58:16,309 --> 00:58:13,920

and i think like the near-death

1650

00:58:17,750 --> 00:58:16,319

experience science and the reincarnation

1651  
00:58:20,950 --> 00:58:17,760  
science and the shared death experience

1652  
00:58:22,710 --> 00:58:20,960  
science not just towards

1653  
00:58:24,390 --> 00:58:22,720  
there is a moral imperative i mean

1654  
00:58:25,829 --> 00:58:24,400  
that's what they're just kind of saying

1655  
00:58:27,750 --> 00:58:25,839  
consistently

1656  
00:58:29,109 --> 00:58:27,760  
over and over again

1657  
00:58:30,710 --> 00:58:29,119  
so

1658  
00:58:32,710 --> 00:58:30,720  
i'm just wondering

1659  
00:58:36,630 --> 00:58:32,720  
why

1660  
00:58:38,470 --> 00:58:36,640  
imperative

1661  
00:58:41,270 --> 00:58:38,480  
that's what's that's what's reported

1662  
00:58:43,910 --> 00:58:41,280  
like so if you start just compiling that

1663  
00:58:45,910 --> 00:58:43,920

data the best you can and you go pin von

1664

00:58:46,870 --> 00:58:45,920

lammel and you go start

1665

00:58:48,789 --> 00:58:46,880

doing

1666

00:58:51,030 --> 00:58:48,799

medical surveys of people after they

1667

00:58:52,950 --> 00:58:51,040

recover from their cardiac arrest and

1668

00:58:54,470 --> 00:58:52,960

you ask them a series of questions and

1669

00:58:56,950 --> 00:58:54,480

you do it the most scientific way you

1670

00:58:59,510 --> 00:58:56,960

can in terms of good medical survey

1671

00:59:02,069 --> 00:58:59,520

that's what they report overwhelmingly

1672

00:59:04,390 --> 00:59:02,079

like 90 percent you know these off the

1673

00:59:07,430 --> 00:59:04,400

chart kind of things so that's just the

1674

00:59:10,789 --> 00:59:09,109

yeah so

1675

00:59:14,710 --> 00:59:10,799

uh

1676  
00:59:16,470 --> 00:59:14,720  
contest which you're aware of by the

1677  
00:59:17,510 --> 00:59:16,480  
bigelow

1678  
00:59:19,349 --> 00:59:17,520  
foundation

1679  
00:59:22,710 --> 00:59:19,359  
and so we we submitted uh one of the

1680  
00:59:24,470 --> 00:59:22,720  
essays and we got uh one of the prizes

1681  
00:59:26,630 --> 00:59:24,480  
and part of the upshot of what we were

1682  
00:59:28,230 --> 00:59:26,640  
talking about is if you look at the

1683  
00:59:30,470 --> 00:59:28,240  
eight or nine different classes of

1684  
00:59:33,109 --> 00:59:30,480  
evidence for survival

1685  
00:59:34,470 --> 00:59:33,119  
uh how how should we best interpret that

1686  
00:59:36,230 --> 00:59:34,480  
does it mean that they're actually the

1687  
00:59:37,990 --> 00:59:36,240  
consciousness and the body can be

1688  
00:59:39,910 --> 00:59:38,000

separate and

1689

00:59:41,589 --> 00:59:39,920

once it's separate it retains enough

1690

00:59:43,750 --> 00:59:41,599

about your own memories and personality

1691

00:59:45,990 --> 00:59:43,760

and so on so that when a medium reports

1692

00:59:48,150 --> 00:59:46,000

talking to uncle bob it's like an

1693

00:59:49,990 --> 00:59:48,160

invisible form of uncle bob

1694

00:59:51,430 --> 00:59:50,000

so that i mean most people when they

1695

00:59:52,230 --> 00:59:51,440

think about survival they're thinking

1696

00:59:53,030 --> 00:59:52,240

about

1697

00:59:55,109 --> 00:59:53,040

you

1698

00:59:57,190 --> 00:59:55,119

survive in some other

1699

01:00:00,710 --> 00:59:57,200

world somehow and you're still connected

1700

01:00:02,150 --> 01:00:00,720

to this world that's that's sort of

1701

01:00:04,549 --> 01:00:02,160

a naive way of thinking about what

1702

01:00:06,630 --> 01:00:04,559

survival is thought about like the idea

1703

01:00:08,150 --> 01:00:06,640

of heaven you're exactly the same as now

1704

01:00:10,150 --> 01:00:08,160

except maybe you're younger and you

1705

01:00:11,750 --> 01:00:10,160

don't need to eat or something like that

1706

01:00:13,670 --> 01:00:11,760

so

1707

01:00:15,670 --> 01:00:13,680

what we're doing is is questioning there

1708

01:00:17,190 --> 01:00:15,680

first of all if you do a systematic

1709

01:00:19,430 --> 01:00:17,200

review of these various kinds of

1710

01:00:22,069 --> 01:00:19,440

evidence and you assign a letter grade

1711

01:00:23,829 --> 01:00:22,079

as to how good the evidence is from a

1712

01:00:25,910 --> 01:00:23,839

scientific perspective

1713

01:00:28,230 --> 01:00:25,920

none of them are a

1714

01:00:29,109 --> 01:00:28,240

about the best you get is a b b-plus

1715

01:00:32,870 --> 01:00:29,119

so

1716

01:00:35,510 --> 01:00:32,880

you know the whole package of these

1717

01:00:37,349 --> 01:00:35,520

stories are very impressive

1718

01:00:39,829 --> 01:00:37,359

uh but does it mean that there is

1719

01:00:41,829 --> 01:00:39,839

survival of any type

1720

01:00:43,670 --> 01:00:41,839

well we concluded that we we don't know

1721

01:00:45,349 --> 01:00:43,680

at this point and the main reason we

1722

01:00:47,349 --> 01:00:45,359

don't know is because we

1723

01:00:48,950 --> 01:00:47,359

all of the evidence a hundred percent of

1724

01:00:50,549 --> 01:00:48,960

the evidence for survival comes from the

1725

01:00:52,950 --> 01:00:50,559

living people

1726

01:00:55,829 --> 01:00:52,960

so this is and then the jargon is called

1727

01:00:57,750 --> 01:00:55,839

living agent psy it's it's it's the last

1728

01:01:00,470 --> 01:00:57,760

hypothesis that it's all based on

1729

01:01:02,390 --> 01:01:00,480

psychic stuff and i give very vigorous

1730

01:01:04,470 --> 01:01:02,400

debates going on from people saying this

1731

01:01:06,390 --> 01:01:04,480

couldn't possibly be psy because it's

1732

01:01:08,710 --> 01:01:06,400

way too complicated it's like it

1733

01:01:10,470 --> 01:01:08,720

requires some sort of departed entity or

1734

01:01:11,829 --> 01:01:10,480

something and i say well

1735

01:01:15,109 --> 01:01:11,839

that assumes that we know everything

1736

01:01:16,150 --> 01:01:15,119

about psy at this point well we don't we

1737

01:01:18,150 --> 01:01:16,160

we don't have any idea what the

1738

01:01:19,910 --> 01:01:18,160

limitations of psi is something could

1739

01:01:22,309 --> 01:01:19,920

look extremely complicated from one

1740

01:01:23,910 --> 01:01:22,319

perspective but from another if you're

1741

01:01:25,990 --> 01:01:23,920

really good at some kind of psychic

1742

01:01:28,069 --> 01:01:26,000

perception you can bypass all the

1743

01:01:29,030 --> 01:01:28,079

complexity in one shot

1744

01:01:31,910 --> 01:01:29,040

so

1745

01:01:33,910 --> 01:01:31,920

our argument was that the

1746

01:01:35,589 --> 01:01:33,920

figuring out the answer to the question

1747

01:01:37,349 --> 01:01:35,599

of is their survival is extremely

1748

01:01:38,789 --> 01:01:37,359

important for everyone we're all going

1749

01:01:40,870 --> 01:01:38,799

to encounter that

1750

01:01:43,270 --> 01:01:40,880

thing at some point

1751

01:01:45,430 --> 01:01:43,280

but can we answer it now given what we

1752

01:01:47,589 --> 01:01:45,440

know i would say the answer is no we

1753

01:01:49,589 --> 01:01:47,599

need to do a lot more research

1754

01:01:50,710 --> 01:01:49,599

sure a lot more research is always a

1755

01:01:52,309 --> 01:01:50,720

good answer

1756

01:01:54,829 --> 01:01:52,319

but the little judo that you're doing

1757

01:01:56,390 --> 01:01:54,839

that i never quite understand

1758

01:01:59,510 --> 01:01:56,400

experimentally

1759

01:02:01,349 --> 01:01:59,520

you've kind of falsified science you've

1760

01:02:03,029 --> 01:02:01,359

brought us to the edge to the limit of

1761

01:02:04,870 --> 01:02:03,039

it really in a way of saying well we

1762

01:02:05,990 --> 01:02:04,880

really can't measure any of this stuff

1763

01:02:07,910 --> 01:02:06,000

anyway

1764

01:02:09,750 --> 01:02:07,920

how do you respond to someone who says

1765

01:02:11,190 --> 01:02:09,760

well okay dean that's great you know

1766

01:02:13,829 --> 01:02:11,200

what you've just proven what i already

1767

01:02:15,430 --> 01:02:13,839

know is that there's demons in your room

1768

01:02:19,190 --> 01:02:15,440

that are controlling

1769

01:02:21,510 --> 01:02:19,200

all these experiments and you can't say

1770

01:02:24,390 --> 01:02:21,520

gee i've falsified that that doesn't

1771

01:02:26,789 --> 01:02:24,400

happen at all and you can't explain

1772

01:02:28,789 --> 01:02:26,799

you know how the swami is different from

1773

01:02:31,270 --> 01:02:28,799

the average person i have a friend

1774

01:02:33,430 --> 01:02:31,280

shirley black uh

1775

01:02:35,829 --> 01:02:33,440

amazing person has three near-death

1776

01:02:38,230 --> 01:02:35,839

experiences always had a little bit of

1777

01:02:40,549 --> 01:02:38,240

this pk thing going on but it's really

1778

01:02:42,710 --> 01:02:40,559

woken up in her third near-death

1779

01:02:45,750 --> 01:02:42,720

experience and now she can do she can

1780

01:02:47,430 --> 01:02:45,760

spin a pinwheel under a class

1781

01:02:49,829 --> 01:02:47,440

and she goes i'll go to the lab and she

1782

01:02:51,829 --> 01:02:49,839

goes to three different labs major

1783

01:02:54,470 --> 01:02:51,839

university university of virginia uh

1784

01:02:57,029 --> 01:02:54,480

ryan institute duke uh in canada i mean

1785

01:02:59,109 --> 01:02:57,039

not like fake stuff she goes oh you want

1786

01:03:01,270 --> 01:02:59,119

to study me put the wheel down there

1787

01:03:03,270 --> 01:03:01,280

inside the glass and i can spin it so

1788

01:03:05,349 --> 01:03:03,280

the whole pk thing is interesting but

1789

01:03:08,069 --> 01:03:05,359

it's connected to this near-death

1790

01:03:08,789 --> 01:03:08,079

experience at least in her mind it is

1791

01:03:10,309 --> 01:03:08,799

and

1792

01:03:12,309 --> 01:03:10,319

but i think

1793

01:03:13,670 --> 01:03:12,319

yeah but your work

1794

01:03:17,349 --> 01:03:13,680

you can't

1795

01:03:19,190 --> 01:03:17,359

your work i think puts us past the edge

1796

01:03:22,150 --> 01:03:19,200

where we can kind of pull it back in and

1797

01:03:23,910 --> 01:03:22,160

say oh wait a minute we have science to

1798

01:03:26,069 --> 01:03:23,920

say this way or that way haven't you

1799

01:03:29,109 --> 01:03:26,079

just kind of thrown us in this quandary

1800

01:03:32,309 --> 01:03:29,119

of hey the world isn't out there and we

1801  
01:03:35,190 --> 01:03:33,589  
well i'm not quite sure what you mean by

1802  
01:03:37,910 --> 01:03:35,200  
we can't measure it because all of our

1803  
01:03:38,950 --> 01:03:37,920  
experiments do involve measurement

1804  
01:03:40,390 --> 01:03:38,960  
so

1805  
01:03:42,630 --> 01:03:40,400  
i mean maybe you don't know which

1806  
01:03:44,230 --> 01:03:42,640  
measure you don't know exactly you don't

1807  
01:03:46,789 --> 01:03:44,240  
know exactly what you're measuring

1808  
01:03:49,430 --> 01:03:46,799  
there's an asteroid neither neither is

1809  
01:03:51,190 --> 01:03:49,440  
that the case in most experiments

1810  
01:03:53,029 --> 01:03:51,200  
any measurement is an indirect

1811  
01:03:54,710 --> 01:03:53,039  
measurement of something it's a

1812  
01:03:56,870 --> 01:03:54,720  
reflection of something

1813  
01:03:59,190 --> 01:03:56,880

so in the case of like say a gonswell

1814

01:04:01,829 --> 01:03:59,200

telepathy experiment we're getting in an

1815

01:04:04,390 --> 01:04:01,839

indirect measure of what people are

1816

01:04:05,910 --> 01:04:04,400

experiencing and the results of that

1817

01:04:07,270 --> 01:04:05,920

suggests that what's going on one

1818

01:04:09,349 --> 01:04:07,280

person's head can show up in the other

1819

01:04:10,630 --> 01:04:09,359

person's head so that's this is the

1820

01:04:14,390 --> 01:04:10,640

operational

1821

01:04:16,230 --> 01:04:14,400

of people's experiences in real life

1822

01:04:18,470 --> 01:04:16,240

about telepathy that somehow they're

1823

01:04:20,870 --> 01:04:18,480

sharing thoughts well in a laboratory we

1824

01:04:22,470 --> 01:04:20,880

can we can reproduce that

1825

01:04:24,069 --> 01:04:22,480

the question underneath it is well how

1826  
01:04:25,029 --> 01:04:24,079  
did the thoughts get from one person to

1827  
01:04:27,109 --> 01:04:25,039  
the other

1828  
01:04:28,870 --> 01:04:27,119  
at this point the best metaphor that we

1829  
01:04:30,549 --> 01:04:28,880  
can use is that there's something like

1830  
01:04:34,470 --> 01:04:30,559  
entanglement

1831  
01:04:37,029 --> 01:04:34,480  
least not as we see in our physics lab

1832  
01:04:39,270 --> 01:04:37,039  
but it's certainly like it

1833  
01:04:40,870 --> 01:04:39,280  
and but this this doesn't bother me very

1834  
01:04:43,510 --> 01:04:40,880  
much that we don't know exactly what's

1835  
01:04:46,230 --> 01:04:43,520  
going on because at the leading edge of

1836  
01:04:47,829 --> 01:04:46,240  
knowledge you never know what's going on

1837  
01:04:49,510 --> 01:04:47,839  
you're doing the best that you can to

1838  
01:04:50,710 --> 01:04:49,520

ask questions and hopefully get an

1839

01:04:53,829 --> 01:04:50,720

answer back

1840

01:04:55,750 --> 01:04:53,839

that will address a hypothesis and most

1841

01:04:58,069 --> 01:04:55,760

hypothesis they're not about what is the

1842

01:05:00,549 --> 01:04:58,079

fundamentally thing going on

1843

01:05:02,309 --> 01:05:00,559

that's very difficult to do a

1844

01:05:03,430 --> 01:05:02,319

an experiment looking at fundamentals at

1845

01:05:04,630 --> 01:05:03,440

that level

1846

01:05:07,589 --> 01:05:04,640

most of the time you're looking at

1847

01:05:09,349 --> 01:05:07,599

various models of the way you imagine

1848

01:05:11,430 --> 01:05:09,359

things are going on and it's through

1849

01:05:12,950 --> 01:05:11,440

testing various models that you begin to

1850

01:05:14,630 --> 01:05:12,960

develop a picture

1851

01:05:16,390 --> 01:05:14,640

of what you think might be going on

1852

01:05:18,870 --> 01:05:16,400

fundamentally but ultimately we really

1853

01:05:21,670 --> 01:05:18,880

don't know and that that goes for the

1854

01:05:23,349 --> 01:05:21,680

fundamentals in most disciplines you as

1855

01:05:25,670 --> 01:05:23,359

we start asking those annoying why

1856

01:05:27,430 --> 01:05:25,680

questions again and again

1857

01:05:30,390 --> 01:05:27,440

but we don't know yet

1858

01:05:31,829 --> 01:05:30,400

no i i hear you and believe me i'm one

1859

01:05:33,510 --> 01:05:31,839

thousand percent

1860

01:05:36,150 --> 01:05:33,520

how far you've

1861

01:05:39,029 --> 01:05:36,160

kicked the can you know down the road

1862

01:05:39,990 --> 01:05:39,039

it's tremendous i i do think though you

1863

01:05:42,230 --> 01:05:40,000

know like

1864

01:05:44,230 --> 01:05:42,240

cherylie in her near-death experiences

1865

01:05:46,710 --> 01:05:44,240

if you go back and look at her

1866

01:05:48,309 --> 01:05:46,720

near-death experiences they're amazingly

1867

01:05:50,549 --> 01:05:48,319

consistent with

1868

01:05:51,510 --> 01:05:50,559

these ones that are collected under the

1869

01:05:53,990 --> 01:05:51,520

best

1870

01:05:55,510 --> 01:05:54,000

medically controlled survey conditions

1871

01:05:57,670 --> 01:05:55,520

and by which we base all this other

1872

01:05:59,589 --> 01:05:57,680

stuff and what they consistently tell us

1873

01:06:01,190 --> 01:05:59,599

as part of that which would kind of turn

1874

01:06:02,470 --> 01:06:01,200

this thing upside down

1875

01:06:04,789 --> 01:06:02,480

is that

1876

01:06:07,910 --> 01:06:04,799

our measurements are in this reality

1877

01:06:10,150 --> 01:06:07,920

which is fundamentally a lesser reality

1878

01:06:11,990 --> 01:06:10,160

and these extended consciousness rims

1879

01:06:13,349 --> 01:06:12,000

are kind of a greater reality so we're

1880

01:06:14,630 --> 01:06:13,359

kind of looking through the wrong end of

1881

01:06:16,789 --> 01:06:14,640

the telescope

1882

01:06:18,950 --> 01:06:16,799

these people are saying hey i in that

1883

01:06:20,950 --> 01:06:18,960

mode all questions are answered you know

1884

01:06:23,910 --> 01:06:20,960

and it's i get i know everything and

1885

01:06:25,670 --> 01:06:23,920

then i'm forced down into this yeah but

1886

01:06:27,589 --> 01:06:25,680

also keep in mind

1887

01:06:28,870 --> 01:06:27,599

keep in mind that just as with mystics

1888

01:06:30,710 --> 01:06:28,880

saying they say well the actual

1889

01:06:32,470 --> 01:06:30,720

experience is ineffable

1890

01:06:34,630 --> 01:06:32,480

therefore for me to talk about it i'm

1891

01:06:36,710 --> 01:06:34,640

going to have to squash some amazing

1892

01:06:39,349 --> 01:06:36,720

thing that happened to me into words

1893

01:06:41,109 --> 01:06:39,359

that can only provide a pale expression

1894

01:06:42,390 --> 01:06:41,119

of what actually happened and more

1895

01:06:43,829 --> 01:06:42,400

importantly

1896

01:06:45,990 --> 01:06:43,839

that it

1897

01:06:48,549 --> 01:06:46,000

the paper just came out within within

1898

01:06:50,789 --> 01:06:48,559

the past month showing uh an unusual

1899

01:06:52,789 --> 01:06:50,799

case where an epileptic i guess was

1900

01:06:54,309 --> 01:06:52,799

having their brain monitored

1901

01:06:56,390 --> 01:06:54,319

and they died

1902

01:06:58,230 --> 01:06:56,400

and and they were able and remained that

1903

01:07:00,069 --> 01:06:58,240

not a near-death experience an actual

1904

01:07:02,309 --> 01:07:00,079

death experience while they're measuring

1905

01:07:03,990 --> 01:07:02,319

the eeg and they found to their

1906

01:07:07,829 --> 01:07:04,000

amazement that there's activity going on

1907

01:07:10,309 --> 01:07:07,839

for a long time yeah i saw that

1908

01:07:12,390 --> 01:07:10,319

this immediately raises questions about

1909

01:07:15,750 --> 01:07:12,400

what is going on with an nde is it a

1910

01:07:17,910 --> 01:07:15,760

dream of the brain that that data isn't

1911

01:07:19,750 --> 01:07:17,920

really consistent with

1912

01:07:21,430 --> 01:07:19,760

uh explaining a way

1913

01:07:23,510 --> 01:07:21,440

which they've been trying to do forever

1914

01:07:26,549 --> 01:07:23,520

the near-death experience it's not in

1915

01:07:28,230 --> 01:07:26,559

terms of the the patterns the eeg

1916

01:07:31,190 --> 01:07:28,240

patterns that they're saying in the

1917

01:07:32,789 --> 01:07:31,200

delta gamma range that it doesn't really

1918

01:07:35,270 --> 01:07:32,799

match that way and it really doesn't

1919

01:07:36,710 --> 01:07:35,280

match uh from a time perspective either

1920

01:07:39,029 --> 01:07:36,720

and people who report the near-death

1921

01:07:41,270 --> 01:07:39,039

experience a lot of times it's like

1922

01:07:44,069 --> 01:07:41,280

this one woman who i had on the show you

1923

01:07:46,390 --> 01:07:44,079

know she's like boom i got stabbed and

1924

01:07:48,470 --> 01:07:46,400

immediately i'm outside my body i'm not

1925

01:07:49,990 --> 01:07:48,480

dead but i see the whole thing go to the

1926

01:07:51,829 --> 01:07:50,000

ant i see the ambulance go to the

1927

01:07:53,510 --> 01:07:51,839

hospital i see all this stuff going

1928

01:07:55,190 --> 01:07:53,520

which is consistent with all these and

1929

01:07:57,750 --> 01:07:55,200

then i leave my body and then i have

1930

01:07:59,990 --> 01:07:57,760

this near-death experience so again if

1931

01:08:02,470 --> 01:08:00,000

we were going to take that tiny little

1932

01:08:06,230 --> 01:08:02,480

window that we get sometimes with uh

1933

01:08:09,349 --> 01:08:06,240

some data like this eeg eeg data and we

1934

01:08:10,870 --> 01:08:09,359

would really try and honestly apply it

1935

01:08:11,990 --> 01:08:10,880

against the best

1936

01:08:13,270 --> 01:08:12,000

evidence we have in the near death

1937

01:08:15,349 --> 01:08:13,280

experience i don't think it holds up

1938

01:08:17,110 --> 01:08:15,359

well i want to be mindful of your time

1939

01:08:19,030 --> 01:08:17,120

so i want to bounce onto a couple other

1940

01:08:21,030 --> 01:08:19,040

things i want to see if we can hit in

1941

01:08:24,070 --> 01:08:21,040

the final minutes we have

1942

01:08:26,070 --> 01:08:24,080

edgar mitchell dr edgar mitchell but his

1943

01:08:28,309 --> 01:08:26,080

11th man or whatever sixth man walk on

1944

01:08:29,510 --> 01:08:28,319

the moon

1945

01:08:32,309 --> 01:08:29,520

sixth man

1946

01:08:34,390 --> 01:08:32,319

founder of ions passed just a few years

1947

01:08:36,630 --> 01:08:34,400

ago did you have

1948

01:08:39,110 --> 01:08:36,640

opportunity to interact with

1949

01:08:41,910 --> 01:08:39,120

dr mitchell much

1950

01:08:44,630 --> 01:08:41,920

yeah he would uh in his later years he

1951

01:08:46,870 --> 01:08:44,640

would come by for board meetings at ion

1952

01:08:48,229 --> 01:08:46,880

so yeah i had many opportunities to talk

1953

01:08:49,910 --> 01:08:48,239

to him

1954

01:08:53,189 --> 01:08:49,920

because the interesting thing i think

1955

01:08:55,590 --> 01:08:53,199

about his story is like he found ions

1956

01:08:58,950 --> 01:08:55,600

because he has this unity consciousness

1957

01:09:01,910 --> 01:08:58,960

experience he's flying back and he sees

1958

01:09:03,829 --> 01:09:01,920

the little blue marble that is earth and

1959

01:09:05,110 --> 01:09:03,839

he has the unity consciousness

1960

01:09:07,349 --> 01:09:05,120

experience

1961

01:09:09,990 --> 01:09:07,359

but later in life he says what i really

1962

01:09:12,070 --> 01:09:10,000

had was an e.t experience and he said

1963

01:09:14,950 --> 01:09:12,080

and he becomes very interested and he

1964

01:09:17,110 --> 01:09:14,960

says i know it to be true that you know

1965

01:09:19,030 --> 01:09:17,120

e.t is real contact has been going on

1966

01:09:21,269 --> 01:09:19,040

for a long time i know people in the

1967

01:09:23,030 --> 01:09:21,279

military i was sworn to secrecy on this

1968

01:09:24,950 --> 01:09:23,040

i upheld the secrecy i don't think it's

1969

01:09:27,030 --> 01:09:24,960

good to uphold the secrecy anymore now

1970

01:09:30,470 --> 01:09:27,040

i'm telling the truth have you ever

1971

01:09:32,390 --> 01:09:30,480

reflected on that in terms of

1972

01:09:34,789 --> 01:09:32,400

because because that's interesting how

1973

01:09:35,990 --> 01:09:34,799

we set up ions to say here's a safe

1974

01:09:39,430 --> 01:09:36,000

little way

1975

01:09:41,269 --> 01:09:39,440

to kind of partially explore

1976

01:09:42,550 --> 01:09:41,279

what i really know i mean that's one way

1977

01:09:44,709 --> 01:09:42,560

to read that that doesn't have to be

1978

01:09:48,789 --> 01:09:44,719

your way of reading it but what do you

1979

01:09:53,749 --> 01:09:51,510

well the ions um

1980

01:09:55,510 --> 01:09:53,759

mission as described for many years was

1981

01:09:57,510 --> 01:09:55,520

uh we explore the frontiers of

1982

01:09:59,830 --> 01:09:57,520

consciousness

1983

01:10:01,430 --> 01:09:59,840

which was in alignment with what edgar

1984

01:10:02,630 --> 01:10:01,440

was interested in after all he did have

1985

01:10:04,470 --> 01:10:02,640

that experience

1986

01:10:07,430 --> 01:10:04,480

he went on to have many other very

1987

01:10:10,070 --> 01:10:07,440

strange psychic experiences

1988

01:10:11,910 --> 01:10:10,080

he didn't talk about ufos and et's for a

1989

01:10:13,350 --> 01:10:11,920

very long time because he knew how

1990

01:10:14,630 --> 01:10:13,360

people respond

1991

01:10:16,470 --> 01:10:14,640

to to that and

1992

01:10:18,709 --> 01:10:16,480

already recognizing that there's a

1993

01:10:20,709 --> 01:10:18,719

credibility problem when you start

1994

01:10:22,070 --> 01:10:20,719

talking psychic stuff to

1995

01:10:23,270 --> 01:10:22,080

other people

1996

01:10:27,590 --> 01:10:23,280

so

1997

01:10:29,910 --> 01:10:27,600

we've tend to avoid the whole ufo et

1998

01:10:32,630 --> 01:10:29,920

thing mainly because it's like a binary

1999

01:10:34,149 --> 01:10:32,640

bomb that the you you combine two things

2000

01:10:36,149 --> 01:10:34,159

that are slightly explosive and you have

2001

01:10:39,350 --> 01:10:36,159

a major problem on your hands

2002

01:10:40,790 --> 01:10:39,360

so is there a relationship well

2003

01:10:43,830 --> 01:10:40,800

maybe because

2004

01:10:46,709 --> 01:10:43,840

a lot of ufo sightings and then

2005

01:10:49,110 --> 01:10:46,719

ideas about contact with et

2006

01:10:51,030 --> 01:10:49,120

it's about consciousness apparently

2007

01:10:53,510 --> 01:10:51,040

because the communication typically is

2008

01:10:55,590 --> 01:10:53,520

telepathic and the et's can do things

2009

01:10:57,830 --> 01:10:55,600

that you shouldn't be able to do

2010

01:10:59,430 --> 01:10:57,840

like walk through walls and stuff

2011

01:11:04,149 --> 01:10:59,440

so

2012

01:11:06,070 --> 01:11:04,159

we'd start to pursue that at this point

2013

01:11:08,310 --> 01:11:06,080

i would guess probably not

2014

01:11:10,070 --> 01:11:08,320

and and the reason is that

2015

01:11:11,990 --> 01:11:10,080

much of what we do

2016

01:11:14,550 --> 01:11:12,000

from a scientific perspective requires

2017

01:11:15,990 --> 01:11:14,560

doing it in a laboratory environment

2018

01:11:18,630 --> 01:11:16,000

or at least under some kind of control

2019

01:11:21,270 --> 01:11:18,640

conditions and if we can find an et who

2020

01:11:23,270 --> 01:11:21,280

can come to the lab and do stuff we'd be

2021

01:11:24,790 --> 01:11:23,280

very happy to entertain that

2022

01:11:27,669 --> 01:11:24,800

but it's very similar to like somebody

2023

01:11:29,990 --> 01:11:27,679

who says well one time i i levitated

2024

01:11:31,590 --> 01:11:30,000

that's great can you do it now no i

2025

01:11:34,070 --> 01:11:31,600

can't do it anymore

2026

01:11:36,470 --> 01:11:34,080

sorry we you know we can't

2027

01:11:38,550 --> 01:11:36,480

what we want to do is advance through

2028

01:11:40,790 --> 01:11:38,560

science as best as we can and in the

2029

01:11:42,709 --> 01:11:40,800

process maybe slightly change some of

2030

01:11:44,790 --> 01:11:42,719

the ideas or the epistemology that's

2031

01:11:46,390 --> 01:11:44,800

used in science

2032

01:11:49,350 --> 01:11:46,400

but not to go off into what i would

2033

01:11:50,709 --> 01:11:49,360

consider left field where all you have

2034

01:11:52,390 --> 01:11:50,719

are stories

2035

01:11:54,229 --> 01:11:52,400

and yes there are similarities among the

2036

01:11:56,390 --> 01:11:54,239

stories there's some of them are very

2037

01:11:58,550 --> 01:11:56,400

compelling people have transformative

2038

01:12:00,630 --> 01:11:58,560

experiences as a result of the stories

2039

01:12:03,430 --> 01:12:00,640

or the experience that they have and

2040

01:12:05,110 --> 01:12:03,440

they come back different

2041

01:12:06,550 --> 01:12:05,120

and that's certainly valuable work

2042

01:12:09,189 --> 01:12:06,560

they're people who are studying these

2043

01:12:12,229 --> 01:12:09,199

sorts of things but it's at this point

2044

01:12:15,189 --> 01:12:12,239

not something that we want to look at

2045

01:12:17,910 --> 01:12:15,199

tell us about cognogenics

2046

01:12:19,189 --> 01:12:17,920

and particularly um

2047

01:12:21,669 --> 01:12:19,199

you know it relates back to the first

2048

01:12:24,470 --> 01:12:21,679

part of this interview in that the

2049

01:12:25,430 --> 01:12:24,480

origin story from this as i understand

2050

01:12:27,590 --> 01:12:25,440

it

2051

01:12:30,950 --> 01:12:27,600

comes directly out of

2052

01:12:32,470 --> 01:12:30,960

experimental work so tell us what it is

2053

01:12:34,709 --> 01:12:32,480

what it's about

2054

01:12:36,630 --> 01:12:34,719

and that link the origin story if you

2055

01:12:39,990 --> 01:12:36,640

would

2056

01:12:40,870 --> 01:12:40,000

i mean the origin of of county eugenics

2057

01:12:45,030 --> 01:12:40,880

yes

2058

01:12:47,669 --> 01:12:45,040

mistaken it it did

2059

01:12:50,310 --> 01:12:47,679

it did seem to come out of this research

2060

01:12:51,510 --> 01:12:50,320

like who can do this stuff better than

2061

01:12:53,990 --> 01:12:51,520

other people

2062

01:12:56,709 --> 01:12:54,000

could there possibly be a genetic link

2063

01:12:59,189 --> 01:12:56,719

to that and then that

2064

01:13:01,350 --> 01:12:59,199

go ahead it's related to that but it's

2065

01:13:03,590 --> 01:13:01,360

not directly because this is the the

2066

01:13:06,149 --> 01:13:03,600

genetics of psychic ability or psychic

2067

01:13:08,310 --> 01:13:06,159

talent that is a project that ions

2068

01:13:09,750 --> 01:13:08,320

cognogenics is of course paying

2069

01:13:10,790 --> 01:13:09,760

attention to that since i was involved

2070

01:13:12,310 --> 01:13:10,800

in that too

2071

01:13:15,350 --> 01:13:12,320

but it's a

2072

01:13:19,189 --> 01:13:15,360

neurogenetic engineering company

2073

01:13:22,470 --> 01:13:19,199

where eventually we go to a place where

2074

01:13:25,110 --> 01:13:22,480

we might be able to enhance or

2075

01:13:26,630 --> 01:13:25,120

suppress psychic abilities genetically

2076

01:13:28,709 --> 01:13:26,640

and that we think it has something to do

2077

01:13:29,990 --> 01:13:28,719

with connections in the brain

2078

01:13:31,990 --> 01:13:30,000

so

2079

01:13:33,110 --> 01:13:32,000

in order to get there though we have to

2080

01:13:36,149 --> 01:13:33,120

start with something which is much

2081

01:13:38,070 --> 01:13:36,159

simpler so what we're doing initially is

2082

01:13:40,790 --> 01:13:38,080

uh looking at the mechanism of action

2083

01:13:42,709 --> 01:13:40,800

for ssri drugs selective serotonin

2084

01:13:47,270 --> 01:13:42,719

uptake inhibitors

2085

01:13:48,790 --> 01:13:47,280

things like prozac and zoloft and all of

2086

01:13:50,470 --> 01:13:48,800

the drugs out there that are used for

2087

01:13:51,669 --> 01:13:50,480

anxiety and depression and a few other

2088

01:13:56,149 --> 01:13:51,679

things

2089

01:13:58,390 --> 01:13:56,159

work in the brain

2090

01:14:00,470 --> 01:13:58,400

it involves a certain kind of neuronal

2091

01:14:02,310 --> 01:14:00,480

receptor that it's modulating it's

2092

01:14:04,070 --> 01:14:02,320

basically down regulating that receptor

2093

01:14:06,550 --> 01:14:04,080

you down regulate it if it's too hyper

2094

01:14:08,870 --> 01:14:06,560

excited you'll become calm and

2095

01:14:11,510 --> 01:14:08,880

depression also begins to lift

2096

01:14:14,390 --> 01:14:11,520

so we figured with modern genetic tools

2097

01:14:16,950 --> 01:14:14,400

especially crispr which is the the most

2098

01:14:19,590 --> 01:14:16,960

recent version of a genetic editing tool

2099

01:14:21,030 --> 01:14:19,600

you can very precisely target certain

2100

01:14:23,430 --> 01:14:21,040

neurons

2101  
01:14:25,990 --> 01:14:23,440  
and cause them to down regulate so we

2102  
01:14:27,709 --> 01:14:26,000  
kind of bypass all of the problems which

2103  
01:14:30,630 --> 01:14:27,719  
of which are huge problems of

2104  
01:14:32,229 --> 01:14:30,640  
contraindications in ssri drugs in most

2105  
01:14:34,390 --> 01:14:32,239  
pharma because that goes all the way

2106  
01:14:35,910 --> 01:14:34,400  
through your body and instead target

2107  
01:14:37,430 --> 01:14:35,920  
just the places in the brain that you

2108  
01:14:39,510 --> 01:14:37,440  
need to change

2109  
01:14:42,229 --> 01:14:39,520  
so we've done experiments now that we're

2110  
01:14:43,830 --> 01:14:42,239  
able to we provided proof of principle

2111  
01:14:46,390 --> 01:14:43,840  
that the method works

2112  
01:14:47,910 --> 01:14:46,400  
and our secret sauce in this is how do

2113  
01:14:49,990 --> 01:14:47,920

you get it in the brain without putting

2114

01:14:51,110 --> 01:14:50,000

a six inch needle into your head

2115

01:14:52,709 --> 01:14:51,120

because that's how a lot of these

2116

01:14:54,630 --> 01:14:52,719

studies are being done

2117

01:14:56,790 --> 01:14:54,640

and and also not having to put in your

2118

01:14:59,350 --> 01:14:56,800

cerebral spinal fluid and not having to

2119

01:15:01,030 --> 01:14:59,360

do iv and all those other methods

2120

01:15:03,270 --> 01:15:01,040

we developed a method which will get it

2121

01:15:04,950 --> 01:15:03,280

into your head and go to the right spot

2122

01:15:07,830 --> 01:15:04,960

and we can show that it actually does

2123

01:15:10,709 --> 01:15:07,840

down regulate just like an ssri does but

2124

01:15:12,470 --> 01:15:10,719

at this point we think we in fact even

2125

01:15:13,830 --> 01:15:12,480

from the mouse studies we don't see any

2126  
01:15:16,470 --> 01:15:13,840  
side effects

2127  
01:15:17,350 --> 01:15:16,480  
so this this is part of

2128  
01:15:42,550 --> 01:15:17,360  
a

2129  
01:15:44,550 --> 01:15:42,560  
extremely effective

2130  
01:15:47,110 --> 01:15:44,560  
so again does this have anything to do

2131  
01:15:49,110 --> 01:15:47,120  
with psychic stuff not yet

2132  
01:15:51,030 --> 01:15:49,120  
but down the road we think maybe we'll

2133  
01:15:52,390 --> 01:15:51,040  
be able to use the platform that we've

2134  
01:15:54,470 --> 01:15:52,400  
created to

2135  
01:15:55,830 --> 01:15:54,480  
do some interesting things for psychic

2136  
01:15:56,630 --> 01:15:55,840  
talent

2137  
01:15:59,430 --> 01:15:56,640  
so

2138  
01:16:01,750 --> 01:15:59,440

i'm not a luddite and i get that

2139

01:16:02,790 --> 01:16:01,760

what what you said is true this is going

2140

01:16:04,630 --> 01:16:02,800

to happen

2141

01:16:07,270 --> 01:16:04,640

someone's going to do it

2142

01:16:09,270 --> 01:16:07,280

get used to it and if we don't do it

2143

01:16:11,110 --> 01:16:09,280

somebody else will

2144

01:16:13,189 --> 01:16:11,120

why do you what's already happening

2145

01:16:13,910 --> 01:16:13,199

okay why do you want to be that guy i

2146

01:16:16,229 --> 01:16:13,920

mean

2147

01:16:19,189 --> 01:16:16,239

there are a lot of

2148

01:16:21,750 --> 01:16:19,199

legitimate concerns especially

2149

01:16:24,229 --> 01:16:21,760

right now we're on the heels of what

2150

01:16:25,510 --> 01:16:24,239

some scientists are calling

2151  
01:16:27,830 --> 01:16:25,520  
you know

2152  
01:16:30,709 --> 01:16:27,840  
the greatest medical

2153  
01:16:32,790 --> 01:16:30,719  
crime against humanity in history and

2154  
01:16:35,750 --> 01:16:32,800  
you know if you look at just

2155  
01:16:38,550 --> 01:16:35,760  
you know just the other day

2156  
01:16:39,350 --> 01:16:38,560  
who's the guy who presented in front of

2157  
01:16:41,270 --> 01:16:39,360  
uh

2158  
01:16:43,110 --> 01:16:41,280  
congress oh

2159  
01:16:44,390 --> 01:16:43,120  
senator ron johnson

2160  
01:16:46,870 --> 01:16:44,400  
and the

2161  
01:16:50,709 --> 01:16:46,880  
the effects of

2162  
01:16:53,510 --> 01:16:50,719  
the vaccine on the dod it's staggering

2163  
01:16:55,830 --> 01:16:53,520

300 percent increase in

2164

01:17:03,030 --> 01:17:00,229

uh miscarriages 500 increase of this 600

2165

01:17:05,669 --> 01:17:03,040

we have no idea

2166

01:17:08,630 --> 01:17:05,679

what's going on with this gene therapy

2167

01:17:10,310 --> 01:17:08,640

bio-weapon kind of stuff

2168

01:17:13,669 --> 01:17:10,320

i don't

2169

01:17:16,950 --> 01:17:13,679

i know we have to push forward but

2170

01:17:19,030 --> 01:17:16,960

how do we do it in a way that and or do

2171

01:17:21,750 --> 01:17:19,040

we have to push forward what is what is

2172

01:17:23,990 --> 01:17:21,760

going on here and

2173

01:17:24,790 --> 01:17:24,000

what do you think is the path forward

2174

01:17:26,630 --> 01:17:24,800

for

2175

01:17:27,910 --> 01:17:26,640

the legitimate concerns that a lot of

2176  
01:17:29,110 --> 01:17:27,920  
people have

2177  
01:17:32,390 --> 01:17:29,120  
and

2178  
01:17:36,310 --> 01:17:32,400  
know

2179  
01:17:36,320 --> 01:17:40,310  
every advancement carries risk

2180  
01:17:45,910 --> 01:17:43,510  
an enormous amount of medical problems

2181  
01:17:47,830 --> 01:17:45,920  
can be traced to genetic origins and

2182  
01:17:50,310 --> 01:17:47,840  
we're not talking about like single

2183  
01:17:53,910 --> 01:17:50,320  
genes that are producing a problem like

2184  
01:17:55,750 --> 01:17:53,920  
cystic fibrosis or sickle cell anemia

2185  
01:17:57,830 --> 01:17:55,760  
many are like all of the whole process

2186  
01:17:59,990 --> 01:17:57,840  
of neurodegeneration that leads to

2187  
01:18:01,990 --> 01:18:00,000  
dementia at least alzheimer's all that

2188  
01:18:05,750 --> 01:18:02,000

these are very serious problems that

2189

01:18:07,270 --> 01:18:05,760

have so far not been solved by anything

2190

01:18:09,990 --> 01:18:07,280

so there is the the pharma that's

2191

01:18:12,950 --> 01:18:10,000

available for example for alzheimer's at

2192

01:18:14,470 --> 01:18:12,960

best slows it down a tiny little bit

2193

01:18:16,070 --> 01:18:14,480

but if you have alzheimer's you're going

2194

01:18:17,669 --> 01:18:16,080

to die from alzheimer's

2195

01:18:19,910 --> 01:18:17,679

so wouldn't it be nice if we figured out

2196

01:18:22,390 --> 01:18:19,920

a way to prevent that or treat it or

2197

01:18:24,550 --> 01:18:22,400

cure it even and not just that but all

2198

01:18:26,550 --> 01:18:24,560

that like every organ has its own set of

2199

01:18:28,390 --> 01:18:26,560

things that can go wrong

2200

01:18:30,310 --> 01:18:28,400

would it be better to figure out a way

2201

01:18:32,390 --> 01:18:30,320

to fix that or not

2202

01:18:34,229 --> 01:18:32,400

yes every new treatment every every new

2203

01:18:36,870 --> 01:18:34,239

advancement in science the development

2204

01:18:39,510 --> 01:18:36,880

of the atomic bomb was a risk as a

2205

01:18:41,910 --> 01:18:39,520

result of what mary curie was doing does

2206

01:18:42,870 --> 01:18:41,920

that mean it's better not to know or to

2207

01:18:45,110 --> 01:18:42,880

know

2208

01:18:46,709 --> 01:18:45,120

and and part of the scientific creed at

2209

01:18:48,709 --> 01:18:46,719

least the one that i follow is it's

2210

01:18:50,630 --> 01:18:48,719

always better to know because at least i

2211

01:18:53,110 --> 01:18:50,640

need to make decisions

2212

01:18:55,750 --> 01:18:53,120

i know how mrna works

2213

01:18:57,830 --> 01:18:55,760

and whether the is the data that he's

2214

01:19:00,310 --> 01:18:57,840

actually using something that other

2215

01:19:01,590 --> 01:19:00,320

scientists will agree to

2216

01:19:03,669 --> 01:19:01,600

i don't know

2217

01:19:05,669 --> 01:19:03,679

but you know that i would have to go

2218

01:19:09,110 --> 01:19:05,679

into this and look in detail this is

2219

01:19:11,590 --> 01:19:09,120

actually the way it's working

2220

01:19:13,350 --> 01:19:11,600

well well dean i mean they have they

2221

01:19:16,070 --> 01:19:13,360

they got their data from the defense

2222

01:19:18,390 --> 01:19:16,080

medical epidemiology database they got

2223

01:19:21,669 --> 01:19:18,400

it from the dod's own database it's not

2224

01:19:23,750 --> 01:19:21,679

like he cooked up these numbers

2225

01:19:25,669 --> 01:19:23,760

you know and then

2226

01:19:27,590 --> 01:19:25,679

and this is similar

2227

01:19:29,750 --> 01:19:27,600

this could be similar to the other

2228

01:19:30,790 --> 01:19:29,760

databases where people put in side

2229

01:19:32,709 --> 01:19:30,800

effects

2230

01:19:34,229 --> 01:19:32,719

that they say that they had as a result

2231

01:19:36,709 --> 01:19:34,239

of getting a vaccine

2232

01:19:37,910 --> 01:19:36,719

and that's just people reporting things

2233

01:19:39,350 --> 01:19:37,920

and you have no way of knowing what's

2234

01:19:41,430 --> 01:19:39,360

going on so i don't know whether this

2235

01:19:42,390 --> 01:19:41,440

database is vetted

2236

01:19:44,550 --> 01:19:42,400

maybe

2237

01:19:46,709 --> 01:19:44,560

it's the dod's veda base of like the

2238

01:19:49,430 --> 01:19:46,719

name doesn't mean anything but hold on

2239

01:19:51,189 --> 01:19:49,440

no when you talk about miscarriages

2240

01:19:53,189 --> 01:19:51,199

you know there can be under reporting

2241

01:19:54,709 --> 01:19:53,199

over reporting but you got to believe

2242

01:19:57,270 --> 01:19:54,719

they're kind of pretty

2243

01:19:58,870 --> 01:19:57,280

spot on with the number of miscarriages

2244

01:20:01,030 --> 01:19:58,880

and then what the other thing he has is

2245

01:20:03,430 --> 01:20:01,040

he has doctors that come forward and say

2246

01:20:05,270 --> 01:20:03,440

hey yeah it's consistent with what i'm

2247

01:20:08,550 --> 01:20:05,280

observing in working with soldiers

2248

01:20:10,709 --> 01:20:08,560

there's a lot more cases of all the

2249

01:20:14,229 --> 01:20:10,719

stuff that you guys are talking about so

2250

01:20:16,310 --> 01:20:14,239

the dod's response was got

2251

01:20:18,070 --> 01:20:16,320

part of the problem in this is

2252

01:20:19,750 --> 01:20:18,080

again we're dealing with correlations as

2253

01:20:22,629 --> 01:20:19,760

opposed to causation

2254

01:20:25,110 --> 01:20:22,639

so are are people more stressed because

2255

01:20:27,510 --> 01:20:25,120

of a pandemic yes would stress lead to

2256

01:20:30,229 --> 01:20:27,520

more miscarriages yes so is that the

2257

01:20:32,070 --> 01:20:30,239

causal thing or is the vaccine

2258

01:20:33,110 --> 01:20:32,080

or is it people who took the vaccine and

2259

01:20:34,950 --> 01:20:33,120

their friends are telling them you're

2260

01:20:37,590 --> 01:20:34,960

crazy for taking the vaccine which adds

2261

01:20:39,189 --> 01:20:37,600

more stress which leads to miscarriages

2262

01:20:42,229 --> 01:20:39,199

another what i'm trying to say here is

2263

01:20:44,149 --> 01:20:42,239

that unless i go and actually dive into

2264

01:20:46,550 --> 01:20:44,159

this data and figure out what is it

2265

01:20:48,149 --> 01:20:46,560

that's actually being said and what is

2266

01:20:49,830 --> 01:20:48,159

the nature of the data

2267

01:20:51,510 --> 01:20:49,840

so i mean we're

2268

01:20:53,430 --> 01:20:51,520

part of the this of science is being

2269

01:20:55,030 --> 01:20:53,440

skeptical about everything and in this

2270

01:20:56,550 --> 01:20:55,040

particular case there is so much

2271

01:20:57,510 --> 01:20:56,560

politization

2272

01:20:58,709 --> 01:20:57,520

holid

2273

01:21:00,149 --> 01:20:58,719

politics

2274

01:21:01,910 --> 01:21:00,159

involved in the way that people are

2275

01:21:04,709 --> 01:21:01,920

interpreting what's going on

2276

01:21:07,030 --> 01:21:04,719

that i i'm not i won't accept anything

2277

01:21:09,030 --> 01:21:07,040

that people say on a pro or con

2278

01:21:10,310 --> 01:21:09,040

right i mean i tend to to pay more

2279

01:21:12,229 --> 01:21:10,320

attention to things that end up in

2280

01:21:14,070 --> 01:21:12,239

science and nature

2281

01:21:15,510 --> 01:21:14,080

but something like this i would look at

2282

01:21:17,669 --> 01:21:15,520

where's the source that's telling me

2283

01:21:19,430 --> 01:21:17,679

this why is he saying this all of these

2284

01:21:21,990 --> 01:21:19,440

other questions because now we're

2285

01:21:23,110 --> 01:21:22,000

talking about sociopolitics and not just

2286

01:21:25,110 --> 01:21:23,120

science

2287

01:21:28,149 --> 01:21:25,120

okay i'll kind of wrap it up i just have

2288

01:21:29,910 --> 01:21:28,159

to add i am apolitical i'm also kind of

2289

01:21:31,669 --> 01:21:29,920

politically ignorant to be honest with

2290

01:21:33,830 --> 01:21:31,679

you i didn't even know who the hell

2291

01:21:35,110 --> 01:21:33,840

senator ron johnson is i don't pay any

2292

01:21:37,830 --> 01:21:35,120

attention to it it just looks like

2293

01:21:39,750 --> 01:21:37,840

theater to me what i'm interested in is

2294

01:21:42,149 --> 01:21:39,760

the science and what i'm interested in

2295

01:21:45,830 --> 01:21:42,159

is the parapolitical interface to

2296

01:21:49,030 --> 01:21:45,840

science and how it's just being

2297

01:21:50,790 --> 01:21:49,040

science isn't such a threat now and so

2298

01:21:53,910 --> 01:21:50,800

you know what the dod did the department

2299

01:21:55,990 --> 01:21:53,920

of defense did in order to help you dean

2300

01:21:58,149 --> 01:21:56,000

vet this stuff and figured out what the

2301  
01:21:58,950 --> 01:21:58,159  
truth is they just took the database

2302  
01:22:00,390 --> 01:21:58,960  
down

2303  
01:22:02,470 --> 01:22:00,400  
they're no longer going to give anyone

2304  
01:22:04,390 --> 01:22:02,480  
access to it and they said oh yeah that

2305  
01:22:07,110 --> 01:22:04,400  
none of that data is it's all kind of

2306  
01:22:08,790 --> 01:22:07,120  
flawed so we're going to take it down

2307  
01:22:10,790 --> 01:22:08,800  
and then we're going to fix it and then

2308  
01:22:11,750 --> 01:22:10,800  
we'll put it back up well i mean come on

2309  
01:22:13,910 --> 01:22:11,760  
we've

2310  
01:22:15,430 --> 01:22:13,920  
heard all those maybe that's true

2311  
01:22:17,669 --> 01:22:15,440  
maybe maybe it's true

2312  
01:22:19,189 --> 01:22:17,679  
maybe yeah it's true who knows is that

2313  
01:22:21,669 --> 01:22:19,199

the very difference

2314

01:22:22,790 --> 01:22:21,679

that puts it down yeah

2315

01:22:24,629 --> 01:22:22,800

we don't know

2316

01:22:25,350 --> 01:22:24,639

yeah and so to

2317

01:22:27,430 --> 01:22:25,360

yeah

2318

01:22:28,870 --> 01:22:27,440

glitch in this

2319

01:22:30,470 --> 01:22:28,880

glitch in the system until somebody

2320

01:22:33,590 --> 01:22:30,480

points out that it's wrong and then we

2321

01:22:35,510 --> 01:22:33,600

find it out okay well so so again so on

2322

01:22:38,229 --> 01:22:35,520

cognogenics the reason why i think it's

2323

01:22:40,390 --> 01:22:38,239

very valuable is because again it's

2324

01:22:42,229 --> 01:22:40,400

better to know than not to know

2325

01:22:45,110 --> 01:22:42,239

it is also the case that i just this

2326

01:22:47,590 --> 01:22:45,120

morning saw a talk on this that

2327

01:22:49,510 --> 01:22:47,600

the ability to do genetic very precise

2328

01:22:52,070 --> 01:22:49,520

editing at this point is coming along

2329

01:22:54,950 --> 01:22:52,080

very fast and a lot of people who know a

2330

01:22:56,870 --> 01:22:54,960

lot about this i'm i'm kind of a a

2331

01:22:58,310 --> 01:22:56,880

newbie when it comes to this this kind

2332

01:22:59,990 --> 01:22:58,320

of topic

2333

01:23:01,669 --> 01:23:00,000

and it is amazing

2334

01:23:03,910 --> 01:23:01,679

what can be done

2335

01:23:06,310 --> 01:23:03,920

and so if it can if just like i mean

2336

01:23:07,590 --> 01:23:06,320

people will take some kind of normal off

2337

01:23:10,470 --> 01:23:07,600

the counter

2338

01:23:12,950 --> 01:23:10,480

or over-the-counter pharma drug and die

2339

01:23:15,030 --> 01:23:12,960

as a result because people are different

2340

01:23:17,030 --> 01:23:15,040

any medication involves risk

2341

01:23:18,629 --> 01:23:17,040

there certainly will be risk for some

2342

01:23:21,350 --> 01:23:18,639

people with

2343

01:23:23,510 --> 01:23:21,360

rna or dna edits

2344

01:23:25,430 --> 01:23:23,520

uh it's for those people it's very

2345

01:23:27,189 --> 01:23:25,440

unfortunate that something happened but

2346

01:23:28,870 --> 01:23:27,199

for the vast majority people it actually

2347

01:23:30,550 --> 01:23:28,880

will be very helpful

2348

01:23:33,510 --> 01:23:30,560

well you know the light at the end of

2349

01:23:35,590 --> 01:23:33,520

the tunnel for me is that i want you to

2350

01:23:38,390 --> 01:23:35,600

be one of the guys with their hand on

2351  
01:23:40,629 --> 01:23:38,400  
the switch because this is going to go

2352  
01:23:41,990 --> 01:23:40,639  
forward this is going to be part of our

2353  
01:23:44,390 --> 01:23:42,000  
future and as you keep pointing out

2354  
01:23:46,070 --> 01:23:44,400  
whenever i say that you say quit talking

2355  
01:23:47,590 --> 01:23:46,080  
about the future it's here now it's like

2356  
01:23:49,830 --> 01:23:47,600  
when i talk to people say talk about the

2357  
01:23:52,070 --> 01:23:49,840  
future of ai i like quit talking about

2358  
01:23:54,709 --> 01:23:52,080  
the future of ai you're interfacing with

2359  
01:23:56,950 --> 01:23:54,719  
ai all the time right now and it's just

2360  
01:23:59,030 --> 01:23:56,960  
going to get more and more so the the

2361  
01:24:00,950 --> 01:23:59,040  
fact that that you've established a

2362  
01:24:04,229 --> 01:24:00,960  
track record of

2363  
01:24:06,149 --> 01:24:04,239

being careful about understanding the

2364

01:24:08,229 --> 01:24:06,159

the limits and opportunities of science

2365

01:24:10,149 --> 01:24:08,239

and how to do science right

2366

01:24:12,310 --> 01:24:10,159

and how to

2367

01:24:15,189 --> 01:24:12,320

maintain the the beauty of the

2368

01:24:18,870 --> 01:24:15,199

scientific method certainly gives me

2369

01:24:21,189 --> 01:24:18,880

hope this i gotta believe is occupying a

2370

01:24:23,590 --> 01:24:21,199

lot of your time and attention right now

2371

01:24:26,070 --> 01:24:23,600

cognogenics is a super

2372

01:24:27,510 --> 01:24:26,080

i mean how far it can go is amazing as

2373

01:24:29,430 --> 01:24:27,520

you've alluded to

2374

01:24:34,709 --> 01:24:29,440

what else are you

2375

01:24:37,030 --> 01:24:34,719

your main focus right now are you still

2376

01:24:39,669 --> 01:24:37,040

doing the ions kind of stuff and are you

2377

01:24:45,830 --> 01:24:43,990

i'm chronogenics is uh is not my day job

2378

01:24:47,830 --> 01:24:45,840

it's it's my night job

2379

01:24:49,750 --> 01:24:47,840

uh but the other thing i'm working on is

2380

01:24:52,950 --> 01:24:49,760

uh i've written a

2381

01:24:54,390 --> 01:24:52,960

a science fiction tv series with with a

2382

01:24:56,790 --> 01:24:54,400

writing partner

2383

01:24:59,110 --> 01:24:56,800

uh and we're shopping it around now

2384

01:25:00,709 --> 01:24:59,120

and the the idea is that uh just to the

2385

01:25:03,590 --> 01:25:00,719

re the same reason they would write a

2386

01:25:05,430 --> 01:25:03,600

popular book that narrative

2387

01:25:06,790 --> 01:25:05,440

narratives are what convince people

2388

01:25:08,390 --> 01:25:06,800

where we're used to sitting and

2389

01:25:10,790 --> 01:25:08,400

listening to stories

2390

01:25:13,430 --> 01:25:10,800

so i wrote a story which is designed to

2391

01:25:15,750 --> 01:25:13,440

be an antidote to

2392

01:25:18,629 --> 01:25:15,760

the way that psychic phenomena are

2393

01:25:20,310 --> 01:25:18,639

usually portrayed in entertainment it's

2394

01:25:21,910 --> 01:25:20,320

usually portrayed or linked with a

2395

01:25:24,790 --> 01:25:21,920

horror story

2396

01:25:27,510 --> 01:25:24,800

and that's not good for anybody i mean

2397

01:25:28,709 --> 01:25:27,520

it works as a story but i don't see it

2398

01:25:30,870 --> 01:25:28,719

that way at all

2399

01:25:33,350 --> 01:25:30,880

so the story that i wrote is actually

2400

01:25:35,350 --> 01:25:33,360

has a very positive spin on it and

2401

01:25:37,189 --> 01:25:35,360

challenges many of the tropes that are

2402

01:25:38,870 --> 01:25:37,199

used in science fiction

2403

01:25:41,590 --> 01:25:38,880

entertainment having to do with psychic

2404

01:25:44,629 --> 01:25:41,600

phenomena give us a little taste of how

2405

01:25:47,110 --> 01:25:44,639

that might play out story-wise in a very

2406

01:25:49,590 --> 01:25:47,120

snippet

2407

01:25:51,669 --> 01:25:49,600

well so think about the invasion of the

2408

01:25:54,470 --> 01:25:51,679

body snatchers and the borg and star

2409

01:25:56,629 --> 01:25:54,480

trek and virtually every other example

2410

01:25:58,390 --> 01:25:56,639

where you have a hive mind which is

2411

01:25:59,990 --> 01:25:58,400

presented as the most horrific thing

2412

01:26:02,149 --> 01:26:00,000

that you can possibly do

2413

01:26:04,470 --> 01:26:02,159

and we're saying in the story no it is

2414

01:26:06,870 --> 01:26:04,480

not only not horrific it is the best

2415

01:26:08,950 --> 01:26:06,880

possible thing that we can do to because

2416

01:26:10,629 --> 01:26:08,960

it pulls together something which is

2417

01:26:13,030 --> 01:26:10,639

already interconnected

2418

01:26:15,270 --> 01:26:13,040

but we be we sort of behave in an

2419

01:26:17,110 --> 01:26:15,280

illusory way that we're separate and

2420

01:26:19,350 --> 01:26:17,120

we're not really not connected it is

2421

01:26:20,790 --> 01:26:19,360

that disconnection that leads to the

2422

01:26:22,550 --> 01:26:20,800

kind of madness that we're currently

2423

01:26:24,550 --> 01:26:22,560

seeing in ukraine

2424

01:26:26,470 --> 01:26:24,560

right you have you know people and

2425

01:26:27,750 --> 01:26:26,480

literally shooting at each other

2426  
01:26:29,830 --> 01:26:27,760  
and not

2427  
01:26:31,430 --> 01:26:29,840  
appreciating the fact that at a deeper

2428  
01:26:33,590 --> 01:26:31,440  
level everything it really is

2429  
01:26:35,750 --> 01:26:33,600  
interconnected including us

2430  
01:26:38,390 --> 01:26:35,760  
so this is part of the the plot line in

2431  
01:26:40,870 --> 01:26:38,400  
the story where there's a tension then

2432  
01:26:42,950 --> 01:26:40,880  
between people who

2433  
01:26:46,229 --> 01:26:42,960  
who in this case take a genetic

2434  
01:26:48,390 --> 01:26:46,239  
enhancement and become a

2435  
01:26:50,229 --> 01:26:48,400  
a group mind essentially

2436  
01:26:52,709 --> 01:26:50,239  
everyone outside the group mind thinks

2437  
01:26:56,149 --> 01:26:52,719  
that this is scary we need to stop that

2438  
01:26:57,990 --> 01:26:56,159

it's bad from inside this is the best

2439

01:26:59,990 --> 01:26:58,000

thing that ever happened this is like

2440

01:27:02,550 --> 01:27:00,000

the difference between

2441

01:27:04,390 --> 01:27:02,560

homo sapiens and homo superior

2442

01:27:06,950 --> 01:27:04,400

if we if we're going to survive we need

2443

01:27:08,950 --> 01:27:06,960

to advance as a species

2444

01:27:12,229 --> 01:27:08,960

and so the story is basically making the

2445

01:27:14,629 --> 01:27:12,239

case that homo sapiens is dying

2446

01:27:15,669 --> 01:27:14,639

and we have to we either die or we

2447

01:27:17,990 --> 01:27:15,679

evolve

2448

01:27:20,470 --> 01:27:18,000

well the evolution is going towards a

2449

01:27:22,790 --> 01:27:20,480

new kind of human and if it needs a

2450

01:27:23,830 --> 01:27:22,800

little genetic push to get there so be

2451

01:27:25,110 --> 01:27:23,840

it

2452

01:27:27,430 --> 01:27:25,120

you know an interesting connection to

2453

01:27:29,990 --> 01:27:27,440

that i don't know if you know whitley

2454

01:27:31,430 --> 01:27:30,000

strieber but i'm sure you know of him

2455

01:27:34,629 --> 01:27:31,440

probably the most

2456

01:27:40,149 --> 01:27:37,189

his contact experience his ongoing

2457

01:27:42,390 --> 01:27:40,159

contact experience includes

2458

01:27:44,470 --> 01:27:42,400

an understanding of the hive mind an

2459

01:27:46,390 --> 01:27:44,480

understanding of the others who are

2460

01:27:49,750 --> 01:27:46,400

visiting him

2461

01:27:51,110 --> 01:27:49,760

have a hive mind

2462

01:27:53,669 --> 01:27:51,120

orientation

2463

01:27:56,950 --> 01:27:53,679

worldview reality i i guess you'd really

2464

01:27:59,110 --> 01:27:56,960

have to say reality and that

2465

01:28:01,350 --> 01:27:59,120

in whitley's words and i'm not down with

2466

01:28:03,270 --> 01:28:01,360

everything whitley has to say but it is

2467

01:28:04,629 --> 01:28:03,280

somewhat of a barrier in terms of

2468

01:28:06,550 --> 01:28:04,639

understanding us

2469

01:28:07,430 --> 01:28:06,560

because once you're in that mindset

2470

01:28:10,070 --> 01:28:07,440

you're like

2471

01:28:11,750 --> 01:28:10,080

why would you think that's real and it

2472

01:28:12,950 --> 01:28:11,760

also has an interesting tie back doesn't

2473

01:28:15,910 --> 01:28:12,960

it to

2474

01:28:18,390 --> 01:28:15,920

the quote that you've used earlier in

2475

01:28:19,590 --> 01:28:18,400

that i don't think of others you know

2476

01:28:21,189 --> 01:28:19,600

what do you how do you get along with

2477

01:28:22,149 --> 01:28:21,199

that i don't think that there are no

2478

01:28:23,430 --> 01:28:22,159

others

2479

01:28:27,270 --> 01:28:23,440

yeah

2480

01:28:29,510 --> 01:28:27,280

we used in this story is

2481

01:28:31,270 --> 01:28:29,520

uh because initially people involved are

2482

01:28:33,510 --> 01:28:31,280

very resistant to it

2483

01:28:35,590 --> 01:28:33,520

but they it's that uh

2484

01:28:36,709 --> 01:28:35,600

it is as though you are a neuron in a

2485

01:28:38,790 --> 01:28:36,719

brain

2486

01:28:40,310 --> 01:28:38,800

well you as the neuron could have

2487

01:28:41,990 --> 01:28:40,320

certain capabilities and neurons are

2488

01:28:44,149 --> 01:28:42,000

pretty clever

2489

01:28:46,390 --> 01:28:44,159

but a single neuron would have no

2490

01:28:48,950 --> 01:28:46,400

concept of what a hundred billion

2491

01:28:49,910 --> 01:28:48,960

neurons with a trillion interconnections

2492

01:28:52,470 --> 01:28:49,920

can do

2493

01:28:54,229 --> 01:28:52,480

it's like totally different well the

2494

01:28:56,470 --> 01:28:54,239

same is true here if we really are

2495

01:28:57,669 --> 01:28:56,480

interconnected in in consciousness in

2496

01:29:00,070 --> 01:28:57,679

some way

2497

01:29:02,550 --> 01:29:00,080

we feel like we're an individual but as

2498

01:29:04,390 --> 01:29:02,560

a collective what we can do

2499

01:29:05,270 --> 01:29:04,400

not i mean what we can

2500

01:29:07,030 --> 01:29:05,280

the

2501  
01:29:08,790 --> 01:29:07,040  
take everything we know about being

2502  
01:29:10,149 --> 01:29:08,800  
human our cognition perception all the

2503  
01:29:12,149 --> 01:29:10,159  
rest of it and some little bits of

2504  
01:29:14,629 --> 01:29:12,159  
psychic phenomena

2505  
01:29:16,310 --> 01:29:14,639  
times 8 billion

2506  
01:29:18,310 --> 01:29:16,320  
that's that's the direction that the

2507  
01:29:20,310 --> 01:29:18,320  
story takes and then it explores the

2508  
01:29:21,750 --> 01:29:20,320  
notion of what would happen if that were

2509  
01:29:24,709 --> 01:29:21,760  
true

2510  
01:29:27,910 --> 01:29:24,719  
final question what do you think of

2511  
01:29:29,510 --> 01:29:27,920  
the fuss over the transhumanism agenda

2512  
01:29:31,990 --> 01:29:29,520  
what do they get right what do they get

2513  
01:29:36,709 --> 01:29:34,390

i'm not deep enough into that to have a

2514

01:29:38,550 --> 01:29:36,719

good opinion i think there's also i need

2515

01:29:40,229 --> 01:29:38,560

to go on to it i have another meeting

2516

01:29:42,310 --> 01:29:40,239

coming up i get with dean you've been

2517

01:29:44,550 --> 01:29:42,320

super generous with your time and uh

2518

01:29:46,550 --> 01:29:44,560

super open yeah i always expect that you

2519

01:29:47,910 --> 01:29:46,560

guys just answer everything knock them

2520

01:29:49,910 --> 01:29:47,920

all out of the park

2521

01:29:51,590 --> 01:29:49,920

terrific having you on thanks so much

2522

01:29:52,790 --> 01:29:51,600

for being here

2523

01:29:54,470 --> 01:29:52,800

thank you

2524

01:29:56,790 --> 01:29:54,480

thanks again to dean raiden for joining

2525

01:29:58,790 --> 01:29:56,800

me today on skeptico the one question i

2526

01:30:01,430 --> 01:29:58,800

t up from this interview is

2527

01:30:03,830 --> 01:30:01,440

what do you make of the dna fiddling

2528

01:30:05,830 --> 01:30:03,840

that is coming down the road and in

2529

01:30:08,070 --> 01:30:05,840

particular what dean really brings into

2530

01:30:09,830 --> 01:30:08,080

focus here in this interview is

2531

01:30:11,270 --> 01:30:09,840

what does that mean for

2532

01:30:15,430 --> 01:30:11,280

consciousness

2533

01:30:17,189 --> 01:30:15,440

however you understand your interface to

2534

01:30:18,629 --> 01:30:17,199

consciousness whether it's a blob of

2535

01:30:21,030 --> 01:30:18,639

consciousness or a hierarchy of

2536

01:30:23,270 --> 01:30:21,040

consciousness what do you think there's

2537

01:30:25,189 --> 01:30:23,280

a lot to discuss here

2538

01:30:27,510 --> 01:30:25,199

and do stick around i have some more

2539

01:30:29,750 --> 01:30:27,520

pretty good interviews coming up so

2540

01:30:33,520 --> 01:30:29,760

stay with me for all of that until next