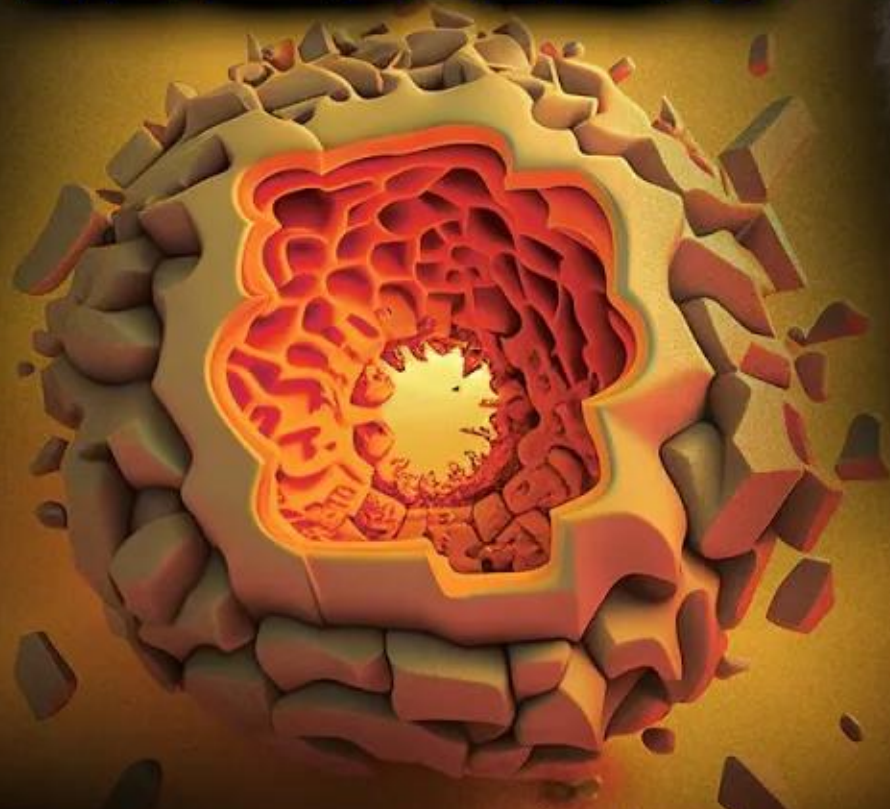


WHAT IS REAL?

**JOHN
VERVAEKE**

**JOSCHA
BACH**



1
00:00:04,870 --> 00:00:02,710
is a cognitive scientist recognized in

2
00:00:07,190 --> 00:00:04,880
the field of artificial intelligence as

3
00:00:09,509 --> 00:00:07,200
being one of the most unexampled and

4
00:00:11,589 --> 00:00:09,519
inventive minds john verveiki is a

5
00:00:13,350 --> 00:00:11,599
professor of cognitive science at the

6
00:00:15,509 --> 00:00:13,360
university of toronto who's one of the

7
00:00:17,830 --> 00:00:15,519
few scholars taking an extensive and

8
00:00:20,950 --> 00:00:17,840
meticulous cognitive scientific approach

9
00:00:23,269 --> 00:00:20,960
to the topics of wisdom buddhism and

10
00:00:25,349 --> 00:00:23,279
consciousness now it's that latter topic

11
00:00:26,870 --> 00:00:25,359
consciousness that in more ways than one

12
00:00:28,310 --> 00:00:26,880
finds us here today click on the

13
00:00:30,150 --> 00:00:28,320

timestamps in the description if you'd

14

00:00:31,910 --> 00:00:30,160

like to skip this intro my name is

15

00:00:33,670 --> 00:00:31,920

kirchey mungle i'm a torontonian

16

00:00:35,830 --> 00:00:33,680

filmmaker with a background in

17

00:00:38,310 --> 00:00:35,840

mathematical physics dedicated to the

18

00:00:40,069 --> 00:00:38,320

explication of the variegated terrain of

19

00:00:42,150 --> 00:00:40,079

theories of everything from a

20

00:00:44,069 --> 00:00:42,160

theoretical physics perspective but as

21

00:00:45,910 --> 00:00:44,079

well as delineating the possible

22

00:00:48,150 --> 00:00:45,920

connection consciousness has to the

23

00:00:49,590 --> 00:00:48,160

fundamental laws of nature

24

00:00:51,670 --> 00:00:49,600

if those laws exist at all and are

25

00:00:53,750 --> 00:00:51,680

knowable to us if you enjoy witnessing

26
00:00:56,470 --> 00:00:53,760
and engaging with others on the topic of

27
00:00:58,229 --> 00:00:56,480
psychology consciousness physics etc

28
00:00:59,830 --> 00:00:58,239
then check the description for a link to

29
00:01:01,830 --> 00:00:59,840
the theories of everything discord as

30
00:01:05,350 --> 00:01:01,840
well as subreddit there's also a link to

31
00:01:07,190 --> 00:01:05,360
the patreon that is patreon.com

32
00:01:09,429 --> 00:01:07,200
if you'd like to contribute as the

33
00:01:11,429 --> 00:01:09,439
patrons and the sponsors are the only

34
00:01:13,350 --> 00:01:11,439
reasons that i can do podcasts with this

35
00:01:14,950 --> 00:01:13,360
level of quality and depth

36
00:01:16,789 --> 00:01:14,960
as now this is what i do full time

37
00:01:18,870 --> 00:01:16,799
thanks to their support with regard to

38
00:01:20,710 --> 00:01:18,880

sponsors there are three the first is

39

00:01:24,710 --> 00:01:20,720

joining us for the first time and that's

40

00:01:27,109 --> 00:01:24,720

the anagagi podcast that is a a gog

41

00:01:29,830 --> 00:01:27,119

podcast it's a podcast dedicated to

42

00:01:31,749 --> 00:01:29,840

philosophy psychology and consciousness

43

00:01:33,429 --> 00:01:31,759

thus if you like the conversations that

44

00:01:35,990 --> 00:01:33,439

we have on this channel with yoshibok

45

00:01:38,830 --> 00:01:36,000

verveiki bernardo castrop and donald

46

00:01:41,830 --> 00:01:38,840

hoffman etc then it's worth visiting

47

00:01:45,510 --> 00:01:41,840

youtube.com slash anagagi podcast that

48

00:01:47,510 --> 00:01:45,520

is a n a g o g podcast in the latest

49

00:01:49,510 --> 00:01:47,520

episode of their podcast they talk about

50

00:01:52,469 --> 00:01:49,520

the foundations of science and the role

51
00:01:54,389 --> 00:01:52,479
irrationality has to play in science

52
00:01:57,109 --> 00:01:54,399
they've also spoken to greg henriques

53
00:01:59,109 --> 00:01:57,119
who has what's akin to a psychological

54
00:02:01,350 --> 00:01:59,119
theory of everything called the unified

55
00:02:03,510 --> 00:02:01,360
theory of knowledge anagogi podcast is

56
00:02:04,910 --> 00:02:03,520
available on all podcast platforms and

57
00:02:08,070 --> 00:02:04,920
it's spelt

58
00:02:10,150 --> 00:02:08,080
a-n-a-g-o-g podcast the second sponsor

59
00:02:11,990 --> 00:02:10,160
is brilliant during the break i decided

60
00:02:14,309 --> 00:02:12,000
to brush up on some fundamentals in

61
00:02:17,190 --> 00:02:14,319
physics so i committed myself to

62
00:02:18,630 --> 00:02:17,200
learning one lesson per day on brilliant

63
00:02:20,869 --> 00:02:18,640

some point soon i'd like to speak to

64

00:02:22,470 --> 00:02:20,879

chiara marletto on constructor theory

65

00:02:24,790 --> 00:02:22,480

which is predicated heavily in

66

00:02:26,550 --> 00:02:24,800

information theory so i took a course on

67

00:02:28,470 --> 00:02:26,560

random variable distributions and

68

00:02:29,910 --> 00:02:28,480

knowledge and uncertainty despite

69

00:02:31,910 --> 00:02:29,920

previously knowing the formula for

70

00:02:33,910 --> 00:02:31,920

entropy as it's hammered into you as an

71

00:02:35,509 --> 00:02:33,920

undergrad it was extremely edifying to

72

00:02:37,190 --> 00:02:35,519

see a different explanation of the

73

00:02:38,390 --> 00:02:37,200

formula for entropy that doesn't seem

74

00:02:40,070 --> 00:02:38,400

like one that's been handed down

75

00:02:42,150 --> 00:02:40,080

arbitrarily from god

76

00:02:44,309 --> 00:02:42,160

instead after taking the course it's

77

00:02:45,830 --> 00:02:44,319

easy to see why the formula for entropy

78

00:02:47,830 --> 00:02:45,840

is the way that it is and how it's an

79

00:02:49,910 --> 00:02:47,840

extremely natural choice there are

80

00:02:51,509 --> 00:02:49,920

plenty of courses including ones on

81

00:02:52,630 --> 00:02:51,519

group theory which is what's being

82

00:02:55,509 --> 00:02:52,640

referenced when you hear that the

83

00:02:57,110 --> 00:02:55,519

standard model has in it u_1 cross $su-2$

84

00:02:58,550 --> 00:02:57,120

cross $su-3$

85

00:03:01,190 --> 00:02:58,560

those are technically called league

86

00:03:04,149 --> 00:03:01,200

groups visit brilliant.org

87

00:03:06,309 --> 00:03:04,159

toe t-o-e to get 20 off your annual

88

00:03:08,229 --> 00:03:06,319

subscription i recommend that you don't

89

00:03:10,229 --> 00:03:08,239

stop before four lessons and i think

90

00:03:12,229 --> 00:03:10,239

you'll be greatly surprised at the ease

91

00:03:13,990 --> 00:03:12,239

at which you can now comprehend subjects

92

00:03:16,309 --> 00:03:14,000

that you previously had a difficult time

93

00:03:18,869 --> 00:03:16,319

grokking at least i know i did the third

94

00:03:20,869 --> 00:03:18,879

sponsor is algol algo is an end-to-end

95

00:03:22,630 --> 00:03:20,879

supply chain optimization software

96

00:03:24,869 --> 00:03:22,640

company with software that helps

97

00:03:27,190 --> 00:03:24,879

business users optimize sales and

98

00:03:29,430 --> 00:03:27,200

operations planning to avoid stockouts

99

00:03:32,149 --> 00:03:29,440

reduce returns and inventory write-downs

100

00:03:35,190 --> 00:03:32,159

while reducing inventory investment it's

101

00:03:37,990 --> 00:03:35,200

a supply chain ai that drives smart roi

102

00:03:40,309 --> 00:03:38,000

headed by amjad hussein who himself has

103

00:03:42,470 --> 00:03:40,319

a podcast on artificial intelligence and

104

00:03:44,630 --> 00:03:42,480

consciousness and business growth if you

105

00:03:47,030 --> 00:03:44,640

like this podcast the toe podcast and

106

00:03:49,350 --> 00:03:47,040

want to support then visit omjad's

107

00:03:51,030 --> 00:03:49,360

podcast link is in the description as

108

00:03:53,350 --> 00:03:51,040

subscribing to amjad's channel

109

00:03:55,509 --> 00:03:53,360

indirectly supports the toe channel

110

00:03:57,670 --> 00:03:55,519

thank you and enjoy

111

00:03:59,030 --> 00:03:57,680

i did watch uh joshua's

112

00:04:01,589 --> 00:03:59,040

three videos you sent to me and there's

113

00:04:04,550 --> 00:04:01,599

stuff in there that i i would like to

114

00:04:07,270 --> 00:04:04,560

sort of pick up on so great great

115

00:04:08,229 --> 00:04:07,280

okay well i will get started on going

116

00:04:09,429 --> 00:04:08,239

live

117

00:04:10,710 --> 00:04:09,439

last time there was this thing you

118

00:04:13,270 --> 00:04:10,720

always forgot to do and then you

119

00:04:16,269 --> 00:04:13,280

remembered to do it

120

00:04:27,030 --> 00:04:16,279

entangling with the welt

121

00:04:27,040 --> 00:04:29,749

um so geist

122

00:04:32,950 --> 00:04:31,350

sometimes when this happens it's because

123

00:04:36,150 --> 00:04:32,960

i'm not awake yet it's just a lucid

124

00:04:40,710 --> 00:04:39,110

so you're supposed to start flying right

125

00:04:43,350 --> 00:04:40,720

you have a method to keep yourself lucid

126

00:04:44,950 --> 00:04:43,360

dreaming

127

00:04:47,189 --> 00:04:44,960

i used to be able to do it quite readily

128

00:04:51,590 --> 00:04:47,199

in my 20s but as i've gotten older

129

00:04:56,950 --> 00:04:53,670

okay so if you can see this type in

130

00:04:58,629 --> 00:04:56,960

ned's newt type ned's newt

131

00:04:59,990 --> 00:04:58,639

okay we're seeing there's usually a 20

132

00:05:01,990 --> 00:05:00,000

second delay between when it actually

133

00:05:07,430 --> 00:05:02,000

goes live and when people see it

134

00:05:11,029 --> 00:05:09,749

okay great

135

00:05:13,430 --> 00:05:11,039

we're live

136

00:05:14,790 --> 00:05:13,440

welcome so yosha

137

00:05:16,390 --> 00:05:14,800

why don't we start with what you find

138

00:05:17,909 --> 00:05:16,400

most interesting about john's work and

139

00:05:19,430 --> 00:05:17,919

then john you'll talk about what you

140

00:05:24,310 --> 00:05:19,440

find interesting about yoshos and then

141

00:05:29,350 --> 00:05:26,710

okay i find it uh fascinating that john

142

00:05:31,749 --> 00:05:29,360

is a broad thinker that connects many

143

00:05:33,670 --> 00:05:31,759

different angles on cognitive science

144

00:05:35,430 --> 00:05:33,680

and connects this also directly with the

145

00:05:36,870 --> 00:05:35,440

way in which he relates to the world so

146

00:05:39,590 --> 00:05:36,880

for him science is not just the

147

00:05:42,310 --> 00:05:39,600

application of methods in a certain

148

00:05:44,469 --> 00:05:42,320

circumstance area but it relates to the

149

00:05:46,790 --> 00:05:44,479

way in which he connects to others and

150

00:05:48,310 --> 00:05:46,800

to himself and to his existence in the

151
00:05:50,310 --> 00:05:48,320
world in a way and

152
00:05:53,029 --> 00:05:50,320
this means that in some sense you can

153
00:05:54,310 --> 00:05:53,039
count hold him accountable for his ideas

154
00:05:56,950 --> 00:05:54,320
because they

155
00:05:58,629 --> 00:05:56,960
directly integrate with the way in which

156
00:06:00,950 --> 00:05:58,639
he thinks about

157
00:06:01,749 --> 00:06:00,960
what's actually happening

158
00:06:12,550 --> 00:06:01,759
i

159
00:06:14,790 --> 00:06:12,560
and

160
00:06:16,390 --> 00:06:14,800
i'm not sure if this is true but there

161
00:06:17,909 --> 00:06:16,400
might be aspects where we are agreeing

162
00:06:19,430 --> 00:06:17,919
or disagreeing and

163
00:06:22,230 --> 00:06:19,440

perhaps this is a good starting point

164

00:06:24,710 --> 00:06:22,240

later to get into the discussion

165

00:06:27,189 --> 00:06:24,720

great and john

166

00:06:30,309 --> 00:06:27,199

um so

167

00:06:31,749 --> 00:06:30,319

i like that yosha is also a big picture

168

00:06:34,070 --> 00:06:31,759

cognitive scientist

169

00:06:37,189 --> 00:06:34,080

and um

170

00:06:38,150 --> 00:06:37,199

i enjoy the fact that he

171

00:06:40,550 --> 00:06:38,160

is

172

00:06:42,950 --> 00:06:40,560

willing to tackle uh philosophically

173

00:06:45,350 --> 00:06:42,960

challenging topics in his cognitive

174

00:06:46,950 --> 00:06:45,360

science and for me i think that's much

175

00:06:49,590 --> 00:06:46,960

more of that is needed in cognitive

176

00:06:52,150 --> 00:06:49,600

science today

177

00:06:53,830 --> 00:06:52,160

now he has a very sophisticated model of

178

00:06:55,670 --> 00:06:53,840

consciousness and self-hood and there

179

00:06:57,670 --> 00:06:55,680

are many points of it

180

00:06:58,629 --> 00:06:57,680

that i would like to talk to him about

181

00:07:01,110 --> 00:06:58,639

um

182

00:07:02,710 --> 00:07:01,120

there's some things that are interesting

183

00:07:03,909 --> 00:07:02,720

he talked about

184

00:07:06,469 --> 00:07:03,919

just to connect to something he said

185

00:07:08,870 --> 00:07:06,479

about my work in his mind matters uh

186

00:07:10,469 --> 00:07:08,880

talk he talked about the

187

00:07:11,670 --> 00:07:10,479

feeling of what it's like as a primary

188

00:07:14,710 --> 00:07:11,680

sense of relevance and that of course

189

00:07:16,790 --> 00:07:14,720

tweaked my ears um and then he put a

190

00:07:19,189 --> 00:07:16,800

quite a bit of importance on attention

191

00:07:20,469 --> 00:07:19,199

and as i do and trying to understand

192

00:07:22,390 --> 00:07:20,479

cognition

193

00:07:24,469 --> 00:07:22,400

um and so

194

00:07:25,350 --> 00:07:24,479

and also within his discussion of the

195

00:07:28,309 --> 00:07:25,360

self

196

00:07:30,070 --> 00:07:28,319

um he incorporates aspects of narrative

197

00:07:32,230 --> 00:07:30,080

uh and that's something i'd very much

198

00:07:33,430 --> 00:07:32,240

like to talk about uh with him so

199

00:07:35,189 --> 00:07:33,440

there's a lot that i find very

200

00:07:37,510 --> 00:07:35,199

interesting in his work but

201
00:07:38,710 --> 00:07:37,520
like i said i commend him for

202
00:07:40,230 --> 00:07:38,720
um

203
00:07:43,749 --> 00:07:40,240
the kind of big picture cognitive

204
00:07:46,150 --> 00:07:43,759
science uh it's it's it's not as common

205
00:07:47,749 --> 00:07:46,160
as it should be to my mind right now uh

206
00:07:50,390 --> 00:07:47,759
so

207
00:07:52,309 --> 00:07:50,400
joshua from your overview of john's work

208
00:07:56,309 --> 00:07:52,319
what do you see as the disagreements you

209
00:08:01,029 --> 00:07:58,790
uh i am not as familiar as i would need

210
00:08:03,110 --> 00:08:01,039
to be to point out all the disagreements

211
00:08:05,749 --> 00:08:03,120
also i don't know how much uh john's

212
00:08:08,629 --> 00:08:05,759
views have changed over the last few

213
00:08:10,869 --> 00:08:08,639

years and decades uh typically when you

214

00:08:13,510 --> 00:08:10,879

are thinking about these questions there

215

00:08:16,869 --> 00:08:13,520

is always a lot of movement in your own

216

00:08:18,790 --> 00:08:16,879

mind i think and you update on ideas and

217

00:08:20,869 --> 00:08:18,800

so i'm not quite sure what the current

218

00:08:23,830 --> 00:08:20,879

disagreements would be but i'm sure that

219

00:08:28,309 --> 00:08:26,150

just because of the multitude of things

220

00:08:30,230 --> 00:08:28,319

that have to be discussed and uh the

221

00:08:32,310 --> 00:08:30,240

angles that you can take on them let's

222

00:08:35,990 --> 00:08:32,320

talk about what the definition of

223

00:08:38,149 --> 00:08:36,000

consciousness is and sentience and mind

224

00:08:39,029 --> 00:08:38,159

so those are consciousness sentience and

225

00:08:40,469 --> 00:08:39,039

mind

226

00:08:41,670 --> 00:08:40,479

yosha why don't you start with your

227

00:08:42,949 --> 00:08:41,680

definitions of them then we'll hear

228

00:08:45,110 --> 00:08:42,959

john's because obviously we have to

229

00:08:46,550 --> 00:08:45,120

disagree with the definitions yeah sure

230

00:08:48,230 --> 00:08:46,560

the definitions i don't think that are

231

00:08:49,269 --> 00:08:48,240

necessarily contentious points we just

232

00:08:51,509 --> 00:08:49,279

need to

233

00:08:52,870 --> 00:08:51,519

anchor them somehow so we agree on what

234

00:08:55,269 --> 00:08:52,880

things we are talking about and what we

235

00:08:57,509 --> 00:08:55,279

we're not talking about i think so to me

236

00:08:59,750 --> 00:08:57,519

mind is basically um the

237

00:09:01,990 --> 00:08:59,760

vehicle in which everything plays out

238

00:09:05,670 --> 00:09:02,000

it's basically the mechanism and

239

00:09:07,990 --> 00:09:05,680

substrate that is uh emergent over

240

00:09:10,870 --> 00:09:08,000

mostly the activity of the brain i think

241

00:09:12,790 --> 00:09:10,880

and inside of the mind there happens a

242

00:09:15,350 --> 00:09:12,800

model of the world and the self and the

243

00:09:16,230 --> 00:09:15,360

mind also facilitates motivation at some

244

00:09:17,269 --> 00:09:16,240

level

245

00:09:18,150 --> 00:09:17,279

and

246

00:09:20,150 --> 00:09:18,160

then

247

00:09:21,829 --> 00:09:20,160

the next term that we wanted to talk

248

00:09:24,790 --> 00:09:21,839

about is

249

00:09:26,470 --> 00:09:24,800

sentence is the ability of a system to

250

00:09:28,150 --> 00:09:26,480

relate to its environment and to

251

00:09:30,389 --> 00:09:28,160

discover itself in the environment and

252

00:09:32,949 --> 00:09:30,399

establish this kind of relationship and

253

00:09:35,030 --> 00:09:32,959

in this way learn what it's doing

254

00:09:36,790 --> 00:09:35,040

and i don't think that sentence is the

255

00:09:38,150 --> 00:09:36,800

same thing as consciousness because for

256

00:09:40,230 --> 00:09:38,160

instance it doesn't have to happen in

257

00:09:42,389 --> 00:09:40,240

real time there doesn't need to be an

258

00:09:45,509 --> 00:09:42,399

immediate reflexive awareness of this

259

00:09:47,590 --> 00:09:45,519

process itself that is becoming aware

260

00:09:49,829 --> 00:09:47,600

in a sense i think for instance that

261

00:09:52,230 --> 00:09:49,839

corporations are usually not conscious i

262

00:09:53,750 --> 00:09:52,240

think but many corporations are sentient

263

00:09:55,910 --> 00:09:53,760

in the sense that they understand what

264

00:09:57,670 --> 00:09:55,920

the corporation is how this corporation

265

00:09:59,190 --> 00:09:57,680

relates to the world and how it

266

00:10:01,350 --> 00:09:59,200

interacts with the world and plans for

267

00:10:03,670 --> 00:10:01,360

it and of course the sentience of the

268

00:10:05,590 --> 00:10:03,680

corporation is facilitated by the people

269

00:10:08,230 --> 00:10:05,600

that work for the corporation in this

270

00:10:10,150 --> 00:10:08,240

planning role but so sentience is a

271

00:10:12,230 --> 00:10:10,160

functional properties that many

272

00:10:15,430 --> 00:10:12,240

intelligent systems develop

273

00:10:16,949 --> 00:10:15,440

and uh consciousness is

274

00:10:19,269 --> 00:10:16,959

colloquially speaking the feeling of

275

00:10:21,350 --> 00:10:19,279

what it's like it's a as a particular

276

00:10:24,069 --> 00:10:21,360

phenomenology that is

277

00:10:26,230 --> 00:10:24,079

it looks like something to the system

278

00:10:29,190 --> 00:10:26,240

that is conscious and i think that

279

00:10:31,509 --> 00:10:29,200

functionally consciousness is largely a

280

00:10:32,389 --> 00:10:31,519

control model of the attention of the

281

00:10:35,910 --> 00:10:32,399

system

282

00:10:37,750 --> 00:10:35,920

conscious for instance a cat

283

00:10:41,509 --> 00:10:37,760

or a human being what we mean is that

284

00:10:43,990 --> 00:10:41,519

this system is able to act on a model of

285

00:10:47,030 --> 00:10:44,000

its own awareness which means it knows

286

00:10:50,710 --> 00:10:47,040

that it is aware of things and uses that

287

00:10:52,230 --> 00:10:50,720

to drive its own behavior in the moment

288

00:10:55,110 --> 00:10:52,240

is that distinct from self-consciousness

289

00:10:56,790 --> 00:10:55,120

that it's aware that it's aware

290

00:10:59,190 --> 00:10:56,800

self is slightly different because you

291

00:11:00,949 --> 00:10:59,200

can be conscious without having a self

292

00:11:01,910 --> 00:11:00,959

for instance in dreams you will very

293

00:11:03,910 --> 00:11:01,920

often

294

00:11:05,350 --> 00:11:03,920

notice that you are conscious but there

295

00:11:07,190 --> 00:11:05,360

is no eye

296

00:11:09,910 --> 00:11:07,200

and also in meditative states you don't

297

00:11:11,269 --> 00:11:09,920

need to focus on the eye what typically

298

00:11:12,949 --> 00:11:11,279

happens though in the type of

299

00:11:14,710 --> 00:11:12,959

consciousness that we have is that we

300

00:11:16,870 --> 00:11:14,720

know that something is conscious so we

301
00:11:18,389 --> 00:11:16,880
are aware of the awareness but that

302
00:11:20,470 --> 00:11:18,399
doesn't need to have a first-person

303
00:11:22,230 --> 00:11:20,480
perspective in consciousness

304
00:11:23,829 --> 00:11:22,240
so i would say that first-person

305
00:11:26,069 --> 00:11:23,839
perspective and consciousness even

306
00:11:28,790 --> 00:11:26,079
though in our normal daytime wakeful

307
00:11:30,550 --> 00:11:28,800
state are largely uh related are

308
00:11:33,590 --> 00:11:30,560
actually orthogonal you can have them

309
00:11:35,910 --> 00:11:33,600
independently of each other in a way

310
00:11:38,550 --> 00:11:35,920
okay john so what are your definitions

311
00:11:39,430 --> 00:11:38,560
or what do you agree with disagree with

312
00:11:41,269 --> 00:11:39,440
well

313
00:11:42,630 --> 00:11:41,279

first of all about the reference before

314

00:11:46,069 --> 00:11:42,640

the sentence um

315

00:11:47,829 --> 00:11:46,079

yeah i take it to my mind to refer to

316

00:11:49,509 --> 00:11:47,839

um

317

00:11:51,269 --> 00:11:49,519

although whether or not it forms a

318

00:11:53,190 --> 00:11:51,279

unified entity it's perhaps part of the

319

00:11:55,509 --> 00:11:53,200

question but what we're referring to

320

00:11:57,430 --> 00:11:55,519

mine refer referring to some

321

00:11:59,829 --> 00:11:57,440

unity some system

322

00:12:01,829 --> 00:11:59,839

by which we are intelligent and

323

00:12:04,069 --> 00:12:01,839

conscious

324

00:12:07,350 --> 00:12:04,079

and i take intelligence to be the

325

00:12:09,110 --> 00:12:07,360

capacity to be a general problem solver

326
00:12:10,550 --> 00:12:09,120
and

327
00:12:11,509 --> 00:12:10,560
i'm not sure

328
00:12:12,389 --> 00:12:11,519
um

329
00:12:13,590 --> 00:12:12,399
what

330
00:12:15,350 --> 00:12:13,600
the problem i have with this in

331
00:12:16,629 --> 00:12:15,360
cognitive science is the term mind is

332
00:12:19,829 --> 00:12:16,639
equivocal

333
00:12:21,190 --> 00:12:19,839
uh people use it in different ways uh

334
00:12:22,829 --> 00:12:21,200
make different identity claims a

335
00:12:25,590 --> 00:12:22,839
neuroscientist perhaps saying it's brain

336
00:12:28,470 --> 00:12:25,600
function the ai person may say it's a

337
00:12:30,389 --> 00:12:28,480
particular kind of learning algorithm

338
00:12:32,550 --> 00:12:30,399

the psychologist will say it's you know

339

00:12:34,069 --> 00:12:32,560

that which generates behavior

340

00:12:36,230 --> 00:12:34,079

and the point about this is it's not

341

00:12:37,750 --> 00:12:36,240

just a terminological difference

342

00:12:39,269 --> 00:12:37,760

they use different methods of gathering

343

00:12:40,629 --> 00:12:39,279

evidence they make different kinds of

344

00:12:42,710 --> 00:12:40,639

arguments they have different kinds of

345

00:12:44,629 --> 00:12:42,720

theoretical entities the psychologists

346

00:12:46,069 --> 00:12:44,639

may talk about working memory

347

00:12:46,790 --> 00:12:46,079

right

348

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

the

349

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

ai person may talk about certain aspects

350

00:12:52,150 --> 00:12:50,800

of machine learning of course

351

00:12:54,310 --> 00:12:52,160

the neuroscientists may talk about

352

00:12:55,990 --> 00:12:54,320

neural net on various neural networks in

353

00:12:58,870 --> 00:12:56,000

the biological sense

354

00:13:01,670 --> 00:12:58,880

so i take it that what i'm trying to do

355

00:13:03,350 --> 00:13:01,680

as a cognitive scientist is find out if

356

00:13:04,870 --> 00:13:03,360

all of those different definitions of

357

00:13:06,550 --> 00:13:04,880

mind can

358

00:13:08,550 --> 00:13:06,560

work together

359

00:13:10,710 --> 00:13:08,560

to get back to the coherent unity that

360

00:13:12,870 --> 00:13:10,720

we traditionally met by the word mind so

361

00:13:14,389 --> 00:13:12,880

that's part of the problem but as part

362

00:13:17,269 --> 00:13:14,399

of the fun of trying to do cognitive

363

00:13:19,110 --> 00:13:17,279

scientists it's often very hard

364

00:13:20,470 --> 00:13:19,120

to get the anthropologist the linguist

365

00:13:21,590 --> 00:13:20,480

the psychologist

366

00:13:23,430 --> 00:13:21,600

um

367

00:13:25,110 --> 00:13:23,440

the neuroscientist and the ai person to

368

00:13:26,230 --> 00:13:25,120

all agree and you put them in the room

369

00:13:28,629 --> 00:13:26,240

and then usually you throw in

370

00:13:30,310 --> 00:13:28,639

philosophers who are supposed to help uh

371

00:13:31,350 --> 00:13:30,320

get all that discourse running smoothly

372

00:13:33,350 --> 00:13:31,360

and they often make things more

373

00:13:37,030 --> 00:13:33,360

challenging which is makes it especially

374

00:13:38,790 --> 00:13:37,040

fun um so i i largely agree with what uh

375

00:13:41,590 --> 00:13:38,800

joshua said uh although i want to

376

00:13:43,509 --> 00:13:41,600

problematize it um and specifically it's

377

00:13:45,350 --> 00:13:43,519

something that cognitive sciences

378

00:13:47,350 --> 00:13:45,360

asking the question what is mind is not

379

00:13:48,629 --> 00:13:47,360

a clear question anymore and i think

380

00:13:50,230 --> 00:13:48,639

getting clear about what that question

381

00:13:52,150 --> 00:13:50,240

is is one of the tasks of cognitive

382

00:13:54,550 --> 00:13:52,160

science

383

00:13:56,310 --> 00:13:54,560

so um

384

00:13:58,949 --> 00:13:56,320

sentience um

385

00:14:01,030 --> 00:13:58,959

an awareness and uh

386

00:14:02,870 --> 00:14:01,040

i i tend to have i tend to bind

387

00:14:04,069 --> 00:14:02,880

sentience to maidsen's notion of

388

00:14:05,430 --> 00:14:04,079

sentience

389

00:14:07,350 --> 00:14:05,440

uh

390

00:14:09,670 --> 00:14:07,360

which is a way i think it might overlap

391

00:14:11,350 --> 00:14:09,680

with what yoshi means by awareness but a

392

00:14:12,790 --> 00:14:11,360

sentient system is one that can in some

393

00:14:14,230 --> 00:14:12,800

sense size up

394

00:14:16,949 --> 00:14:14,240

its situation

395

00:14:18,629 --> 00:14:16,959

um it it's aware of it but not in just

396

00:14:20,949 --> 00:14:18,639

sort of the nebulous sense

397

00:14:23,350 --> 00:14:20,959

uh right it it it can foreground in

398

00:14:26,389 --> 00:14:23,360

background information uh things like

399

00:14:27,670 --> 00:14:26,399

that um so perhaps i think a little bit

400

00:14:32,150 --> 00:14:27,680

of a tighter connection between

401
00:14:34,550 --> 00:14:32,160
sentience and uh perceptual awareness um

402
00:14:35,750 --> 00:14:34,560
consciousness uh consciousness

403
00:14:38,069 --> 00:14:35,760
[Music]

404
00:14:39,750 --> 00:14:38,079
is usually sort of two aspects and of

405
00:14:41,430 --> 00:14:39,760
course there's a all of this everything

406
00:14:43,430 --> 00:14:41,440
i'm saying here is fraught and yoshi

407
00:14:44,790 --> 00:14:43,440
knows this right

408
00:14:46,150 --> 00:14:44,800
people talk about two aspects of

409
00:14:47,350 --> 00:14:46,160
consciousness

410
00:14:48,870 --> 00:14:47,360
there's one

411
00:14:51,030 --> 00:14:48,880
aspect that's often called access

412
00:14:53,910 --> 00:14:51,040
consciousness this is part of what

413
00:14:55,910 --> 00:14:53,920

consciousness means is my my i can ready

414

00:14:58,150 --> 00:14:55,920

things i can make things ready for a

415

00:14:59,990 --> 00:14:58,160

reason i can make them ready for problem

416

00:15:02,150 --> 00:15:00,000

solving

417

00:15:04,629 --> 00:15:02,160

and i can bring aspects of my you know

418

00:15:06,310 --> 00:15:04,639

of my skills and my perception and my

419

00:15:07,990 --> 00:15:06,320

understanding together

420

00:15:10,470 --> 00:15:08,000

um

421

00:15:11,829 --> 00:15:10,480

and then there's what's called the

422

00:15:13,030 --> 00:15:11,839

phenomenal and some people say

423

00:15:15,110 --> 00:15:13,040

phenomenological there's a bit of

424

00:15:16,870 --> 00:15:15,120

confusion around that but anyways as

425

00:15:19,670 --> 00:15:16,880

yoshi said this is the feeling of what

426

00:15:21,590 --> 00:15:19,680

it's like what it's like to be me here

427

00:15:22,949 --> 00:15:21,600

now in this situation

428

00:15:25,030 --> 00:15:22,959

it could mean that it can mean something

429

00:15:26,389 --> 00:15:25,040

very primitive like what is it like to

430

00:15:27,910 --> 00:15:26,399

experience green

431

00:15:29,189 --> 00:15:27,920

and this is the so-called problem of

432

00:15:30,790 --> 00:15:29,199

qualia

433

00:15:33,509 --> 00:15:30,800

and so one way people think of

434

00:15:35,269 --> 00:15:33,519

consciousness is the the place where

435

00:15:36,069 --> 00:15:35,279

qualia exists

436

00:15:38,710 --> 00:15:36,079

um

437

00:15:41,269 --> 00:15:38,720

for me there's two central questions we

438

00:15:43,030 --> 00:15:41,279

we are asking and part of what i would

439

00:15:45,110 --> 00:15:43,040

argue is we need to integrate them

440

00:15:47,590 --> 00:15:45,120

together and one of the the strengths i

441

00:15:49,030 --> 00:15:47,600

see of yoshi's work is i do see him

442

00:15:50,790 --> 00:15:49,040

attempting and i don't mean attempting

443

00:15:52,949 --> 00:15:50,800

as a as a as an insult we're all

444

00:15:54,629 --> 00:15:52,959

attempting here um

445

00:15:56,310 --> 00:15:54,639

attempting to integrate these two

446

00:15:57,670 --> 00:15:56,320

questions together one is the function

447

00:15:59,670 --> 00:15:57,680

question which is basically what the

448

00:16:01,910 --> 00:15:59,680

hell does consciousness do

449

00:16:03,430 --> 00:16:01,920

given that so much

450

00:16:05,269 --> 00:16:03,440

so much of our intelligent behavior

451
00:16:06,550 --> 00:16:05,279
happens unconsciously what is

452
00:16:07,749 --> 00:16:06,560
consciousness for some people are

453
00:16:09,350 --> 00:16:07,759
willing to say it's not for anything

454
00:16:11,189 --> 00:16:09,360
it's just an epiphenomenon it doesn't do

455
00:16:13,509 --> 00:16:11,199
anything it has no function yoshi

456
00:16:15,030 --> 00:16:13,519
doesn't say that i'm not saying he does

457
00:16:16,629 --> 00:16:15,040
the other question is the nature problem

458
00:16:19,910 --> 00:16:16,639
how is it that something like

459
00:16:21,670 --> 00:16:19,920
consciousness exists in this physical

460
00:16:23,670 --> 00:16:21,680
world which

461
00:16:26,790 --> 00:16:23,680
amongst all these objects that don't

462
00:16:28,949 --> 00:16:26,800
seem to have any of these subjective uh

463
00:16:31,189 --> 00:16:28,959

properties qualia things like that at

464

00:16:33,829 --> 00:16:31,199

least since the scientific revolution we

465

00:16:35,829 --> 00:16:33,839

separated all of those out from uh the

466

00:16:37,670 --> 00:16:35,839

physical universe and we put them in

467

00:16:39,030 --> 00:16:37,680

this place

468

00:16:40,550 --> 00:16:39,040

now i happen to think that you should

469

00:16:42,870 --> 00:16:40,560

try and answer those questions together

470

00:16:44,550 --> 00:16:42,880

in an integrated fashion

471

00:16:46,310 --> 00:16:44,560

one of the criticisms i have of some of

472

00:16:47,990 --> 00:16:46,320

the central theories is they tend to

473

00:16:49,910 --> 00:16:48,000

answer one question

474

00:16:51,269 --> 00:16:49,920

while neglecting the other and vice

475

00:16:52,629 --> 00:16:51,279

versa um

476

00:16:53,509 --> 00:16:52,639

so i think that's

477

00:16:54,790 --> 00:16:53,519

my

478

00:16:55,990 --> 00:16:54,800

best i had to say a little bit more

479

00:16:58,870 --> 00:16:56,000

because he went first so i had to sort

480

00:17:01,110 --> 00:16:58,880

of take into what uh yoshi said uh but

481

00:17:02,710 --> 00:17:01,120

that's um

482

00:17:04,549 --> 00:17:02,720

trying to answer

483

00:17:06,069 --> 00:17:04,559

any good definition of consciousness

484

00:17:07,829 --> 00:17:06,079

should try and answer the function and

485

00:17:09,909 --> 00:17:07,839

the nature questions in an integrated

486

00:17:11,909 --> 00:17:09,919

fashion

487

00:17:13,829 --> 00:17:11,919

john you said that some people say that

488

00:17:16,230 --> 00:17:13,839

consciousness is where qualia exist what

489

00:17:21,669 --> 00:17:19,110

so one way i mean this goes back largely

490

00:17:23,990 --> 00:17:21,679

to descartes and it's picked up by locke

491

00:17:25,669 --> 00:17:24,000

um so

492

00:17:27,510 --> 00:17:25,679

galileo made a distinction between

493

00:17:30,070 --> 00:17:27,520

primary qualities

494

00:17:32,470 --> 00:17:30,080

and right or qualia

495

00:17:35,190 --> 00:17:32,480

and secondary uh primary qualities are

496

00:17:37,190 --> 00:17:35,200

ones that are mathematically measurable

497

00:17:40,470 --> 00:17:37,200

in some on some sense like you know the

498

00:17:42,549 --> 00:17:40,480

length of an object its mass things like

499

00:17:45,029 --> 00:17:42,559

that and galileo proposed that those

500

00:17:46,470 --> 00:17:45,039

were real they were in the objective

501
00:17:48,549 --> 00:17:46,480
world

502
00:17:50,630 --> 00:17:48,559
and then there are all the qualia that

503
00:17:51,830 --> 00:17:50,640
are not mathematic mathematically

504
00:17:54,630 --> 00:17:51,840
measurable

505
00:17:56,549 --> 00:17:54,640
like the the experience

506
00:17:59,350 --> 00:17:56,559
not the reflectance pattern but the

507
00:18:01,110 --> 00:17:59,360
experience of greenness the experience

508
00:18:04,070 --> 00:18:01,120
of sweetness the experience of beauty

509
00:18:06,310 --> 00:18:04,080
perhaps and so for for descartes

510
00:18:08,230 --> 00:18:06,320
following up on galileo those things did

511
00:18:09,990 --> 00:18:08,240
not exist in the world they they existed

512
00:18:12,470 --> 00:18:10,000
only in the mind they were therefore

513
00:18:15,350 --> 00:18:12,480

only in the subject they were subjective

514

00:18:17,990 --> 00:18:15,360
and that's qualia now the idea is

515

00:18:19,909 --> 00:18:18,000
there's lots of your there's lots of

516

00:18:21,750 --> 00:18:19,919
stuff happening in the mind

517

00:18:23,510 --> 00:18:21,760
unconsciously that doesn't seem to be

518

00:18:27,590 --> 00:18:23,520
generating any of that qualitative

519

00:18:29,430 --> 00:18:27,600
experience it only seems to be the case

520

00:18:31,270 --> 00:18:29,440
or it seems to be the case that not only

521

00:18:33,669 --> 00:18:31,280
seems to be it seems to be the case that

522

00:18:36,549 --> 00:18:33,679
those qualia only exist when i'm awake

523

00:18:39,190 --> 00:18:36,559
alert and aware in some fashion um and

524

00:18:41,909 --> 00:18:39,200
so they seem to be in consciousness now

525

00:18:44,710 --> 00:18:41,919
that that in is at best metaphorical but

526
00:18:46,310 --> 00:18:44,720
that's how many people many people take

527
00:18:48,310 --> 00:18:46,320
that to be

528
00:18:50,230 --> 00:18:48,320
the central phenomena

529
00:18:55,430 --> 00:18:50,240
of consciousness

530
00:18:57,270 --> 00:18:55,440
largely the problem of answering that

531
00:18:58,950 --> 00:18:57,280
uh other people think other

532
00:19:00,710 --> 00:18:58,960
other aspects of consciousness aren't

533
00:19:03,110 --> 00:19:00,720
central like intentionality the

534
00:19:05,990 --> 00:19:03,120
consciousness seems to be about things

535
00:19:07,590 --> 00:19:06,000
directed at things

536
00:19:09,350 --> 00:19:07,600
josh did you have any comments on any of

537
00:19:10,470 --> 00:19:09,360
what john said so

538
00:19:13,110 --> 00:19:10,480

personally i don't think that the

539

00:19:15,190 --> 00:19:13,120

aboutness is so much the problem but

540

00:19:17,669 --> 00:19:15,200

we can go into what we personally find

541

00:19:18,549 --> 00:19:17,679

puzzling about the entire affair

542

00:19:20,630 --> 00:19:18,559

and

543

00:19:22,870 --> 00:19:20,640

with respect to qualia i think that

544

00:19:25,029 --> 00:19:22,880

there are two aspects that should be

545

00:19:27,430 --> 00:19:25,039

kept separate one is

546

00:19:29,590 --> 00:19:27,440

what is the difference between

547

00:19:32,549 --> 00:19:29,600

these elements and features of

548

00:19:34,470 --> 00:19:32,559

experience and the measurement

549

00:19:37,669 --> 00:19:34,480

and the other one is what makes them

550

00:19:38,470 --> 00:19:37,679

experiential what is experience itself

551
00:19:40,070 --> 00:19:38,480
and

552
00:19:42,710 --> 00:19:40,080
the first question is something that

553
00:19:45,110 --> 00:19:42,720
became i think quite apparent in

554
00:19:47,830 --> 00:19:45,120
early work that i participated in

555
00:19:50,789 --> 00:19:47,840
robotics we taught little sony ibro

556
00:19:53,110 --> 00:19:50,799
robots to play soccer and in the course

557
00:19:54,710 --> 00:19:53,120
of this task they had to watch balls

558
00:19:56,950 --> 00:19:54,720
moving over a field and we had to

559
00:19:58,950 --> 00:19:56,960
segment out the balls and when the task

560
00:20:00,470 --> 00:19:58,960
was set up by the people who developed

561
00:20:02,390 --> 00:20:00,480
this game

562
00:20:04,789 --> 00:20:02,400
uh we already

563
00:20:06,870 --> 00:20:04,799

made this task as easy as possible at

564

00:20:08,870 --> 00:20:06,880

least we thought we made the field

565

00:20:10,630 --> 00:20:08,880

extremely and homogeneously green there

566

00:20:13,590 --> 00:20:10,640

were some white lines on the field but

567

00:20:15,830 --> 00:20:13,600

still and the ball was very orange

568

00:20:19,430 --> 00:20:15,840

and unfortunately the ball was a little

569

00:20:21,669 --> 00:20:19,440

bit reflecting and the field was also

570

00:20:23,190 --> 00:20:21,679

taking up some of these reflections and

571

00:20:24,710 --> 00:20:23,200

we thought we could solve the problem

572

00:20:27,350 --> 00:20:24,720

basically with the lookup table where we

573

00:20:29,430 --> 00:20:27,360

just would match certain color values

574

00:20:31,590 --> 00:20:29,440

from the rgb sensors of the camera of

575

00:20:32,950 --> 00:20:31,600

the robot to whether it's wall or field

576

00:20:35,830 --> 00:20:32,960

and this didn't work

577

00:20:37,990 --> 00:20:35,840

we found that the pixels below the ball

578

00:20:41,190 --> 00:20:38,000

were more orange than the pixels at the

579

00:20:43,110 --> 00:20:41,200

bottom of the ball were not green

580

00:20:45,750 --> 00:20:43,120

so in some sense if we just did collar

581

00:20:47,350 --> 00:20:45,760

tables the the colors were at the in the

582

00:20:48,789 --> 00:20:47,360

area where the ball touched the field

583

00:20:50,630 --> 00:20:48,799

were inverted

584

00:20:53,029 --> 00:20:50,640

and so we needed to be more intelligent

585

00:20:55,590 --> 00:20:53,039

we needed to figure out ultimately of

586

00:20:57,669 --> 00:20:55,600

whether pixels that we see in a certain

587

00:20:58,630 --> 00:20:57,679

region of the

588

00:21:00,549 --> 00:20:58,640

field

589

00:21:02,870 --> 00:21:00,559

are probably part of the ball and are

590

00:21:04,630 --> 00:21:02,880

probably part of the field and depending

591

00:21:06,470 --> 00:21:04,640

on this context we would have to

592

00:21:08,549 --> 00:21:06,480

reinterpret them

593

00:21:11,110 --> 00:21:08,559

and so i noticed that

594

00:21:13,029 --> 00:21:11,120

a color is not just a certain wavelength

595

00:21:15,750 --> 00:21:13,039

or a certain rgb value that you take

596

00:21:17,909 --> 00:21:15,760

from your camera sensor it's an

597

00:21:20,710 --> 00:21:17,919

interpretation that is qualitatively

598

00:21:21,669 --> 00:21:20,720

bound to the context in which it's being

599

00:21:22,549 --> 00:21:21,679

measured

600

00:21:24,549 --> 00:21:22,559

so

601
00:21:25,750 --> 00:21:24,559
the property of redness is not just a

602
00:21:28,310 --> 00:21:25,760
certain

603
00:21:30,789 --> 00:21:28,320
rtb value it is

604
00:21:32,950 --> 00:21:30,799
given in the context of a red object um

605
00:21:35,270 --> 00:21:32,960
the interpretation of the surface

606
00:21:37,270 --> 00:21:35,280
properties in the stationary way of that

607
00:21:39,909 --> 00:21:37,280
object right so it's a property that

608
00:21:42,070 --> 00:21:39,919
attaches to to an object in a certain

609
00:21:44,390 --> 00:21:42,080
context redness is the property that is

610
00:21:46,549 --> 00:21:44,400
shared by all the right objects and you

611
00:21:47,669 --> 00:21:46,559
cannot separate redness from this in the

612
00:21:50,070 --> 00:21:47,679
processing

613
00:21:51,270 --> 00:21:50,080

if you have changing lighting and real

614

00:21:53,029 --> 00:21:51,280

world lighting

615

00:21:55,669 --> 00:21:53,039

so there needs to be some kind of

616

00:21:57,350 --> 00:21:55,679

feature processing that makes

617

00:21:59,350 --> 00:21:57,360

that turns a measurement into a

618

00:22:00,789 --> 00:21:59,360

context-dependent feature

619

00:22:03,830 --> 00:22:00,799

that is in

620

00:22:05,750 --> 00:22:03,840

multiple dimensions qualitative

621

00:22:08,149 --> 00:22:05,760

so i think it's a happy accident that

622

00:22:10,310 --> 00:22:08,159

this rhymes to qualia it's not actually

623

00:22:12,470 --> 00:22:10,320

the reason but this answers i think to

624

00:22:14,070 --> 00:22:12,480

some degree the first question

625

00:22:16,230 --> 00:22:14,080

why is

626

00:22:17,830 --> 00:22:16,240

are the elements of experience different

627

00:22:19,510 --> 00:22:17,840

for measurements and what distinguishes

628

00:22:21,830 --> 00:22:19,520

them for measurements but it doesn't

629

00:22:23,430 --> 00:22:21,840

answer the second question what is it to

630

00:22:25,510 --> 00:22:23,440

experience

631

00:22:26,710 --> 00:22:25,520

why is this thing part of my inner

632

00:22:27,909 --> 00:22:26,720

reality

633

00:22:29,590 --> 00:22:27,919

and this is to be explained in a

634

00:22:31,590 --> 00:22:29,600

different way it has to be explained by

635

00:22:33,669 --> 00:22:31,600

a certain kind of architecture and this

636

00:22:35,350 --> 00:22:33,679

is what some people find very passionate

637

00:22:37,830 --> 00:22:35,360

it doesn't look that puzzling to me and

638

00:22:39,590 --> 00:22:37,840

we can look into the details of what it

639

00:22:41,190 --> 00:22:39,600

looks like but for instance one

640

00:22:43,510 --> 00:22:41,200

important aspect is

641

00:22:45,830 --> 00:22:43,520

that we can learn to deconstruct the

642

00:22:47,270 --> 00:22:45,840

qualitative experience of the things

643

00:22:49,750 --> 00:22:47,280

that we're looking at so when we look

644

00:22:50,789 --> 00:22:49,760

for instance at a face what we typically

645

00:22:52,870 --> 00:22:50,799

see is

646

00:22:54,630 --> 00:22:52,880

an expression in the face

647

00:22:56,950 --> 00:22:54,640

it's not just a geometrical arrangement

648

00:22:58,950 --> 00:22:56,960

of features but we can't stare for a

649

00:23:00,950 --> 00:22:58,960

face for long enough until the faceness

650

00:23:02,630 --> 00:23:00,960

of the face disappears and the only

651

00:23:04,630 --> 00:23:02,640

thing that's left is the geometrical

652

00:23:06,950 --> 00:23:04,640

arrangement and we can go further and

653

00:23:09,270 --> 00:23:06,960

let the geometry disappear and we just

654

00:23:10,870 --> 00:23:09,280

see colored blobs and flickering and so

655

00:23:13,190 --> 00:23:10,880

on and

656

00:23:15,510 --> 00:23:13,200

in this way we can start deconstructing

657

00:23:17,510 --> 00:23:15,520

the elements of our experience and once

658

00:23:18,870 --> 00:23:17,520

we see how they are deconstructed we can

659

00:23:21,190 --> 00:23:18,880

also get a glimpse in how they are

660

00:23:23,430 --> 00:23:21,200

constructed in the first place

661

00:23:25,750 --> 00:23:23,440

one of my students once told me you know

662

00:23:28,789 --> 00:23:25,760

there's a via very weird thing i can see

663

00:23:31,430 --> 00:23:28,799

faces in power plugs

664

00:23:33,669 --> 00:23:31,440

and uh there's a vault software faces

665

00:23:35,750 --> 00:23:33,679

where involved sockets right if you look

666

00:23:37,270 --> 00:23:35,760

at a power socket in a wall you can uh

667

00:23:40,549 --> 00:23:37,280

people can see your face in here it said

668

00:23:42,789 --> 00:23:40,559

yeah most people can do that right it's

669

00:23:45,510 --> 00:23:42,799

called parado layer it's basically this

670

00:23:47,590 --> 00:23:45,520

ability to see uh

671

00:23:49,029 --> 00:23:47,600

faces and other things in patterns in

672

00:23:50,950 --> 00:23:49,039

our environment

673

00:23:54,470 --> 00:23:50,960

and so on and since that but you know

674

00:23:57,110 --> 00:23:54,480

there are no faces in power sockets

675

00:24:00,149 --> 00:23:57,120

and i told her yeah the dark secret is

676

00:24:02,230 --> 00:24:00,159

there are also no faces on people

677

00:24:03,510 --> 00:24:02,240

you just project them there right it's

678

00:24:05,029 --> 00:24:03,520

there intrinsically there's just

679

00:24:06,950 --> 00:24:05,039

geometry

680

00:24:08,230 --> 00:24:06,960

it's this thing that there is something

681

00:24:10,230 --> 00:24:08,240

that you look at

682

00:24:12,870 --> 00:24:10,240

another one that looks at you that looks

683

00:24:14,470 --> 00:24:12,880

out of their eyes and is interpreting

684

00:24:16,149 --> 00:24:14,480

the world in a particular vein you see

685

00:24:17,830 --> 00:24:16,159

that in their face you see in their face

686

00:24:19,669 --> 00:24:17,840

what they feel and so on how they relate

687

00:24:21,350 --> 00:24:19,679

to you this is just a projection that

688

00:24:23,269 --> 00:24:21,360

your mind is making it's not actually a

689

00:24:24,710 --> 00:24:23,279

visual feature it's a high level

690

00:24:27,669 --> 00:24:24,720

interpretation of things like the

691

00:24:29,669 --> 00:24:27,679

emotional state and so on that are all

692

00:24:33,830 --> 00:24:29,679

mixed into your interpretation of

693

00:24:38,470 --> 00:24:35,990

um so

694

00:24:40,390 --> 00:24:38,480

i guess uh what i i don't have any

695

00:24:41,750 --> 00:24:40,400

disagreement with that

696

00:24:43,350 --> 00:24:41,760

at least right now

697

00:24:46,070 --> 00:24:43,360

um i

698

00:24:49,269 --> 00:24:46,080

i'm in agreement with this idea

699

00:24:51,110 --> 00:24:49,279

that when we're talking about

700

00:24:53,110 --> 00:24:51,120

perception and

701
00:24:55,430 --> 00:24:53,120
we're talking about doing things in

702
00:24:57,669 --> 00:24:55,440
terms of a context dependence

703
00:25:00,549 --> 00:24:57,679
and then the sensitivity to that the

704
00:25:02,390 --> 00:25:00,559
sensitivity to context of conduct

705
00:25:03,669 --> 00:25:02,400
context dependence i think it's really

706
00:25:07,110 --> 00:25:03,679
really crucial

707
00:25:09,669 --> 00:25:07,120
i see that sensitivity as bound up with

708
00:25:13,750 --> 00:25:09,679
uh the capacity for interpretation

709
00:25:15,909 --> 00:25:13,760
interpretation means uh being able to

710
00:25:17,750 --> 00:25:15,919
in some way direct your attention for

711
00:25:19,110 --> 00:25:17,760
your awareness to some features rather

712
00:25:20,070 --> 00:25:19,120
than others because you can of course

713
00:25:23,269 --> 00:25:20,080

take in

714

00:25:25,750 --> 00:25:23,279

all possible features of of the object

715

00:25:28,149 --> 00:25:25,760

or the environment etc

716

00:25:31,110 --> 00:25:28,159

so i guess i see those two processes as

717

00:25:33,430 --> 00:25:31,120

a little bit more closely related and

718

00:25:36,310 --> 00:25:33,440

um i do think that part of what it's

719

00:25:38,390 --> 00:25:36,320

like to experience a face

720

00:25:41,029 --> 00:25:38,400

is to find it relevant in a particular

721

00:25:43,590 --> 00:25:41,039

fashion to find it as fitted to that

722

00:25:45,350 --> 00:25:43,600

context and fitted to your task within

723

00:25:46,870 --> 00:25:45,360

that context

724

00:25:48,870 --> 00:25:46,880

and i think that

725

00:25:51,190 --> 00:25:48,880

also as joshua said i think that goes

726
00:25:53,269 --> 00:25:51,200
into the perception of it so i see i

727
00:25:54,789 --> 00:25:53,279
guess perhaps a deeper interpenetration

728
00:25:57,269 --> 00:25:54,799
between

729
00:25:59,269 --> 00:25:57,279
the perception and the interpretation um

730
00:26:00,310 --> 00:25:59,279
this goes around uh ideas like i've been

731
00:26:01,590 --> 00:26:00,320
talking about about relevance

732
00:26:02,870 --> 00:26:01,600
realization

733
00:26:03,990 --> 00:26:02,880
um

734
00:26:06,230 --> 00:26:04,000
now

735
00:26:07,750 --> 00:26:06,240
there's there was an interesting um move

736
00:26:10,710 --> 00:26:07,760
made there and i don't know how fast we

737
00:26:12,310 --> 00:26:10,720
want to go onto logical um where there

738
00:26:14,789 --> 00:26:12,320

was um

739

00:26:15,669 --> 00:26:14,799

you know the face isn't really there

740

00:26:17,190 --> 00:26:15,679

and

741

00:26:24,630 --> 00:26:17,200

um

742

00:26:27,029 --> 00:26:24,640

means

743

00:26:29,909 --> 00:26:27,039

maybe yoshi can

744

00:26:30,870 --> 00:26:29,919

because i take it for example

745

00:26:34,230 --> 00:26:30,880

that

746

00:26:37,190 --> 00:26:34,240

my experience

747

00:26:39,669 --> 00:26:37,200

that i find meaningful um and

748

00:26:41,990 --> 00:26:39,679

like um do i want to say

749

00:26:45,350 --> 00:26:42,000

that the various you know gauges i'm

750

00:26:47,269 --> 00:26:45,360

using in science are just projections um

751
00:26:49,269 --> 00:26:47,279
do i want to say that the other people

752
00:26:52,870 --> 00:26:49,279
that are debating with me are just

753
00:26:53,669 --> 00:26:52,880
projections so i get something to do

754
00:26:56,230 --> 00:26:53,679
yeah

755
00:26:57,190 --> 00:26:56,240
uh but the problem is

756
00:26:59,350 --> 00:26:57,200
is

757
00:27:00,789 --> 00:26:59,360
um there's an implicit normativity of

758
00:27:01,830 --> 00:27:00,799
realness there

759
00:27:05,750 --> 00:27:01,840
that

760
00:27:06,710 --> 00:27:05,760
um i guess i want i i want to unpack a

761
00:27:08,149 --> 00:27:06,720
little bit

762
00:27:09,830 --> 00:27:08,159
because like i said i think the point

763
00:27:10,870 --> 00:27:09,840

that yoshi made just generalizes to

764

00:27:12,230 --> 00:27:10,880

everything

765

00:27:13,750 --> 00:27:12,240

and then

766

00:27:16,230 --> 00:27:13,760

i i have sort of epistemological and

767

00:27:18,630 --> 00:27:16,240

ontological concerns about that

768

00:27:20,789 --> 00:27:18,640

because it might i'm not saying it does

769

00:27:23,430 --> 00:27:20,799

i'm saying it might sort of lead me into

770

00:27:25,590 --> 00:27:23,440

kind of a solar cystic skepticism which

771

00:27:29,110 --> 00:27:25,600

makes the very proc the very attempt to

772

00:27:30,070 --> 00:27:29,120

do science itself kind of implausible um

773

00:27:32,470 --> 00:27:30,080

so

774

00:27:35,269 --> 00:27:32,480

what is it i mean surely there might

775

00:27:37,190 --> 00:27:35,279

surely maybe not surely

776

00:27:39,990 --> 00:27:37,200

there must be

777

00:27:43,750 --> 00:27:40,000

uh perception that counts as observation

778

00:27:46,710 --> 00:27:43,760

of the environment i take it um and

779

00:27:50,070 --> 00:27:46,720

why is it not just a projection i guess

780

00:27:53,750 --> 00:27:51,430

yes so

781

00:27:55,590 --> 00:27:53,760

this particular point relates to the

782

00:27:57,029 --> 00:27:55,600

question of whether faces are part of

783

00:27:58,710 --> 00:27:57,039

res extensor

784

00:27:59,830 --> 00:27:58,720

and

785

00:28:02,070 --> 00:27:59,840

we have to

786

00:28:04,149 --> 00:28:02,080

sort out what we mean by res extension

787

00:28:07,190 --> 00:28:04,159

the typical way in which descartes is

788

00:28:09,990 --> 00:28:07,200

interpreted is that there are two

789

00:28:11,990 --> 00:28:10,000

substances out in physics in a way

790

00:28:13,990 --> 00:28:12,000

ontologically at the level at which the

791

00:28:16,389 --> 00:28:14,000

universe exists and one of these

792

00:28:18,149 --> 00:28:16,399

substances is stuff in space

793

00:28:19,510 --> 00:28:18,159

the extended things the objects in the

794

00:28:22,389 --> 00:28:19,520

world

795

00:28:24,549 --> 00:28:22,399

and then we have res cognitives which is

796

00:28:26,630 --> 00:28:24,559

the space of ideas in which the mind

797

00:28:29,269 --> 00:28:26,640

exists and somehow they interact with

798

00:28:31,830 --> 00:28:29,279

each other so basically the mind exists

799

00:28:35,029 --> 00:28:31,840

in a different dimension of the universe

800

00:28:38,070 --> 00:28:35,039

and remote controls the physical body uh

801
00:28:40,470 --> 00:28:38,080
via the pineal gland or

802
00:28:42,870 --> 00:28:40,480
as popper and eccles suggested via the

803
00:28:44,870 --> 00:28:42,880
neocortex which is some kind of magical

804
00:28:46,710 --> 00:28:44,880
quantum antenna which talks to the mind

805
00:28:49,830 --> 00:28:46,720
in a different realm that is not in

806
00:28:51,590 --> 00:28:49,840
physics and i think this is an um

807
00:28:53,990 --> 00:28:51,600
misunderstanding that

808
00:28:56,630 --> 00:28:54,000
ultimately can be mapped to faulty on

809
00:28:58,710 --> 00:28:56,640
epistemology so there is a

810
00:28:59,830 --> 00:28:58,720
weird perspective on what we think is

811
00:29:02,470 --> 00:28:59,840
and in the way in which it is

812
00:29:03,510 --> 00:29:02,480
constituted it's also reflected in the

813
00:29:06,389 --> 00:29:03,520

christian

814

00:29:08,230 --> 00:29:06,399

interpretation of the genesis

815

00:29:10,310 --> 00:29:08,240

and maybe this is not unrelated because

816

00:29:12,070 --> 00:29:10,320

it's part of the same cultural tradition

817

00:29:14,070 --> 00:29:12,080

this interpretation of genesis and the

818

00:29:14,870 --> 00:29:14,080

interpretation of descartes

819

00:29:17,590 --> 00:29:14,880

and

820

00:29:19,590 --> 00:29:17,600

in genesis we have the creation of a

821

00:29:21,990 --> 00:29:19,600

physical universe by a supernatural

822

00:29:25,029 --> 00:29:22,000

being in the common interpretation

823

00:29:26,710 --> 00:29:25,039

and it starts out with the creation of

824

00:29:28,950 --> 00:29:26,720

light and darkness which are separated

825

00:29:30,710 --> 00:29:28,960

from each other and then the creation of

826

00:29:32,230 --> 00:29:30,720

sky and ground and then the plants and

827

00:29:33,510 --> 00:29:32,240

the animals eventually and then they all

828

00:29:35,269 --> 00:29:33,520

get their name

829

00:29:38,549 --> 00:29:35,279

but we do know that

830

00:29:40,870 --> 00:29:38,559

sky and ground are not physical entities

831

00:29:42,710 --> 00:29:40,880

and colors are not in physics there are

832

00:29:44,310 --> 00:29:42,720

constructions that only happen in our

833

00:29:45,909 --> 00:29:44,320

mind and and when we look at

834

00:29:48,549 --> 00:29:45,919

foundational physics we see a weird

835

00:29:50,789 --> 00:29:48,559

quantum graph that has

836

00:29:52,710 --> 00:29:50,799

a very complicated properties among them

837

00:29:54,470 --> 00:29:52,720

apparently the property to throws

838

00:29:56,549 --> 00:29:54,480

regular patterns at our systemic

839

00:29:58,230 --> 00:29:56,559

interface so our brain can find

840

00:30:00,149 --> 00:29:58,240

regularity in them and part of these

841

00:30:02,789 --> 00:30:00,159

regularities that our mind is

842

00:30:04,789 --> 00:30:02,799

discovering in quite reliable ways is

843

00:30:07,269 --> 00:30:04,799

darkness and brightness and sky and

844

00:30:08,870 --> 00:30:07,279

ground and plants and animals and giving

845

00:30:11,029 --> 00:30:08,880

them all their names which is cognitive

846

00:30:12,710 --> 00:30:11,039

development so the universe that you and

847

00:30:14,070 --> 00:30:12,720

me are interacting with

848

00:30:16,549 --> 00:30:14,080

experientially

849

00:30:18,950 --> 00:30:16,559

and also intersubjectively is not a

850

00:30:21,750 --> 00:30:18,960

physical universe we are not talking

851
00:30:23,590 --> 00:30:21,760
about entities in physics and we talk

852
00:30:25,830 --> 00:30:23,600
about the universe to each other we

853
00:30:27,110 --> 00:30:25,840
largely talk about entities in our

854
00:30:28,710 --> 00:30:27,120
experience

855
00:30:30,070 --> 00:30:28,720
and now it turns out that this

856
00:30:32,310 --> 00:30:30,080
experience that our brain is

857
00:30:34,789 --> 00:30:32,320
constructing for us to relate to which

858
00:30:37,269 --> 00:30:34,799
is a core screening of the patterns that

859
00:30:38,310 --> 00:30:37,279
the physical universe throws at us

860
00:30:40,310 --> 00:30:38,320
contain

861
00:30:43,669 --> 00:30:40,320
two types of entities

862
00:30:45,750 --> 00:30:43,679
and one group of entities is what we

863
00:30:47,909 --> 00:30:45,760

could call stuff in space it's like a

864

00:30:48,630 --> 00:30:47,919

physics engine in a computer game so we

865

00:30:50,389 --> 00:30:48,640

have

866

00:30:52,470 --> 00:30:50,399

a three-dimensional

867

00:30:54,470 --> 00:30:52,480

basically euclidean space in which we

868

00:30:57,029 --> 00:30:54,480

have extended objects that occupy

869

00:31:01,110 --> 00:30:57,039

volumes and these objects can be solid

870

00:31:02,630 --> 00:31:01,120

or liquid or gaseous and they displace

871

00:31:04,789 --> 00:31:02,640

each other and they have all these

872

00:31:07,350 --> 00:31:04,799

properties that we would call rest

873

00:31:09,909 --> 00:31:07,360

extensor but this res extensor is

874

00:31:12,149 --> 00:31:09,919

geometric it's mechanical

875

00:31:14,230 --> 00:31:12,159

it doesn't want something it's just

876

00:31:17,269 --> 00:31:14,240

moving in a mechanical way

877

00:31:18,789 --> 00:31:17,279

and so when the student said that there

878

00:31:21,510 --> 00:31:18,799

are no faces

879

00:31:23,909 --> 00:31:21,520

in power sockets what she meant is that

880

00:31:26,230 --> 00:31:23,919

the physical thing the rest extends i

881

00:31:28,070 --> 00:31:26,240

think the geometrical thing the face

882

00:31:30,070 --> 00:31:28,080

is not really on the power plug and i

883

00:31:32,310 --> 00:31:30,080

pointed to her out that the face itself

884

00:31:34,310 --> 00:31:32,320

is not a geometrical thing so when you

885

00:31:36,789 --> 00:31:34,320

see a face what you see is not actually

886

00:31:38,389 --> 00:31:36,799

a geometry it's not part of something

887

00:31:39,590 --> 00:31:38,399

that you would construct with a 3d

888

00:31:41,750 --> 00:31:39,600

program

889

00:31:44,470 --> 00:31:41,760

what you have to construct is a certain

890

00:31:46,870 --> 00:31:44,480

part of rescogins it's a certain

891

00:31:49,029 --> 00:31:46,880

interpretation of a high-level feature

892

00:31:51,190 --> 00:31:49,039

that is already a mental feature that we

893

00:31:54,950 --> 00:31:51,200

see this intentional entity in the world

894

00:31:58,549 --> 00:31:54,960

expressed by uh its interface to the

895

00:32:01,909 --> 00:31:58,559

world and so i think this way we can

896

00:32:03,590 --> 00:32:01,919

join in me probably agree on a way in

897

00:32:05,669 --> 00:32:03,600

which we disassemble the category or at

898

00:32:08,070 --> 00:32:05,679

least make the next step

899

00:32:10,470 --> 00:32:08,080

and so i would agree that of course

900

00:32:12,710 --> 00:32:10,480

every entity that we make out in the

901
00:32:14,389 --> 00:32:12,720
universe ultimately is an imposition

902
00:32:16,070 --> 00:32:14,399
that our mind is making

903
00:32:18,549 --> 00:32:16,080
this imposition is not necessarily an

904
00:32:20,389 --> 00:32:18,559
arbitrary one because the universe

905
00:32:21,990 --> 00:32:20,399
cannot be officially encoded in every

906
00:32:23,590 --> 00:32:22,000
possible way there are certain ways in

907
00:32:25,750 --> 00:32:23,600
which the encoding makes sense and

908
00:32:27,509 --> 00:32:25,760
others where it doesn't help you to

909
00:32:30,630 --> 00:32:27,519
interpret the world

910
00:32:32,389 --> 00:32:30,640
so the way in which we um

911
00:32:34,070 --> 00:32:32,399
draw the boundaries between objects is

912
00:32:39,509 --> 00:32:34,080
not arbitrary but the boundaries are

913
00:32:43,909 --> 00:32:41,110

okay so um

914

00:32:46,310 --> 00:32:43,919

uh uh of course you're aware of the i

915

00:32:48,789 --> 00:32:46,320

mean first of all a comment um i do

916

00:32:51,269 --> 00:32:48,799

think there's a deep connection between

917

00:32:53,029 --> 00:32:51,279

um the christian models which is sort of

918

00:32:55,590 --> 00:32:53,039

a two worlds mythology

919

00:32:57,590 --> 00:32:55,600

and descartes uh dualism of mind and

920

00:32:59,909 --> 00:32:57,600

body so i think that's an accurate

921

00:33:01,909 --> 00:32:59,919

historical observation um

922

00:33:03,590 --> 00:33:01,919

i talk a bit about that connection in my

923

00:33:05,110 --> 00:33:03,600

awakening from the meeting crisis series

924

00:33:06,470 --> 00:33:05,120

so um

925

00:33:08,549 --> 00:33:06,480

in fact i often talk about christian

926
00:33:10,549 --> 00:33:08,559
cartesianism as the as the link between

927
00:33:13,029 --> 00:33:10,559
those so i think that's a good a good

928
00:33:15,990 --> 00:33:13,039
historical observation

929
00:33:18,710 --> 00:33:16,000
of course the the deep problem uh with

930
00:33:21,190 --> 00:33:18,720
finding that division of res extension

931
00:33:23,430 --> 00:33:21,200
and res cognitives

932
00:33:24,389 --> 00:33:23,440
to be the sort of final note on your

933
00:33:26,710 --> 00:33:24,399
ontology

934
00:33:28,710 --> 00:33:26,720
is the problem that beset descartes

935
00:33:29,669 --> 00:33:28,720
which is the problem that spinoza

936
00:33:31,750 --> 00:33:29,679
immediately

937
00:33:33,990 --> 00:33:31,760
recognized is that there's no possible

938
00:33:36,310 --> 00:33:34,000

causal interaction between these domains

939

00:33:38,630 --> 00:33:36,320

and you get the separation of right

940

00:33:41,669 --> 00:33:38,640

reasons from causes and you get all of

941

00:33:44,470 --> 00:33:41,679

these kind kinds of problems um

942

00:33:47,750 --> 00:33:44,480

and so i take it that there is something

943

00:33:50,389 --> 00:33:47,760

fundamentally wrong with the ontology if

944

00:33:53,110 --> 00:33:50,399

it's giving us that kind of

945

00:33:55,669 --> 00:33:53,120

deep i mean it strikes me as absurd to

946

00:33:57,110 --> 00:33:55,679

say that my mental states whatever they

947

00:33:59,029 --> 00:33:57,120

happen to be in my physical states are

948

00:34:01,269 --> 00:33:59,039

not causally interacting with each other

949

00:34:03,909 --> 00:34:01,279

uh on an ongoing basis

950

00:34:05,509 --> 00:34:03,919

and you know that

951
00:34:07,430 --> 00:34:05,519
i if i if

952
00:34:08,869 --> 00:34:07,440
if i presume that kind of dualism then

953
00:34:10,310 --> 00:34:08,879
of course i can't also pick up on your

954
00:34:13,270 --> 00:34:10,320
mental states because all i get is your

955
00:34:14,869 --> 00:34:13,280
bodily behavior etc and if there is no

956
00:34:17,109 --> 00:34:14,879
causal relationship between your mental

957
00:34:18,710 --> 00:34:17,119
states and your bodily behavior um then

958
00:34:20,470 --> 00:34:18,720
of course i can't

959
00:34:22,629 --> 00:34:20,480
pick up on other minds

960
00:34:23,829 --> 00:34:22,639
and so

961
00:34:25,190 --> 00:34:23,839
i mean

962
00:34:26,550 --> 00:34:25,200
you i know you know this because you've

963
00:34:28,869 --> 00:34:26,560

mentioned it in one of the one of the

964

00:34:31,270 --> 00:34:28,879

talks i mean that ontology is though is

965

00:34:33,750 --> 00:34:31,280

deeply problematic because it generates

966

00:34:35,990 --> 00:34:33,760

these really really

967

00:34:37,909 --> 00:34:36,000

powerful and perfect

968

00:34:38,790 --> 00:34:37,919

yeah dualism is very difficult to get to

969

00:34:39,589 --> 00:34:38,800

work

970

00:34:40,470 --> 00:34:39,599

and

971

00:35:00,550 --> 00:34:40,480

i

972

00:35:01,510 --> 00:35:00,560

and

973

00:35:04,790 --> 00:35:01,520

the

974

00:35:07,829 --> 00:35:04,800

when a meditator believes that uh

975

00:35:10,470 --> 00:35:07,839

res cognitants is uh separate from uh

976

00:35:11,750 --> 00:35:10,480

res extenza and uh res extends us out

977

00:35:13,990 --> 00:35:11,760

there in the physical world and

978

00:35:15,349 --> 00:35:14,000

experiencing the physical world and they

979

00:35:17,589 --> 00:35:15,359

managed to

980

00:35:19,270 --> 00:35:17,599

go to the state of reality construction

981

00:35:21,510 --> 00:35:19,280

where this boundary between self and

982

00:35:23,430 --> 00:35:21,520

world is obliterated and they suddenly

983

00:35:25,750 --> 00:35:23,440

noticed this unity of the system and oh

984

00:35:29,030 --> 00:35:25,760

my god everything is consciousness uh

985

00:35:30,630 --> 00:35:29,040

they uh became panzerkists uh

986

00:35:33,270 --> 00:35:30,640

right it's that's a fundamental

987

00:35:35,430 --> 00:35:33,280

confusion that results uh from uh this

988

00:35:36,230 --> 00:35:35,440

error in the ontology

989

00:35:38,790 --> 00:35:36,240

and

990

00:35:41,510 --> 00:35:38,800

uh when i was young i stumbled on the

991

00:35:43,589 --> 00:35:41,520

same uh issue as you just mentioned uh

992

00:35:45,910 --> 00:35:43,599

if you are a dualist

993

00:35:48,150 --> 00:35:45,920

how does this interface between

994

00:35:49,109 --> 00:35:48,160

the causally closed physical universe

995

00:35:50,870 --> 00:35:49,119

and

996

00:35:52,470 --> 00:35:50,880

the mind work

997

00:35:53,990 --> 00:35:52,480

there are some solutions to this like

998

00:35:55,750 --> 00:35:54,000

for instance

999

00:35:58,150 --> 00:35:55,760

occasionalism which means they just

1000

00:35:59,589 --> 00:35:58,160

happen to be synchronous but there is no

1001
00:36:01,510 --> 00:35:59,599
direct connection between them and

1002
00:36:04,230 --> 00:36:01,520
ultimately this is a form of epi

1003
00:36:06,390 --> 00:36:04,240
phenomenalism so it would not be a

1004
00:36:08,390 --> 00:36:06,400
violation of the causal closure of

1005
00:36:09,990 --> 00:36:08,400
physics if your

1006
00:36:11,349 --> 00:36:10,000
ontologically separate mind would be

1007
00:36:13,910 --> 00:36:11,359
reading it but wouldn't have right

1008
00:36:16,550 --> 00:36:13,920
access right so you could have this

1009
00:36:17,430 --> 00:36:16,560
physical universe mechanically clicking

1010
00:36:19,349 --> 00:36:17,440
uh

1011
00:36:21,030 --> 00:36:19,359
by itself but you could have the mind

1012
00:36:22,790 --> 00:36:21,040
looking at it from the outside but as

1013
00:36:25,030 --> 00:36:22,800

soon as the mind writes you should be

1014

00:36:26,550 --> 00:36:25,040

able sometimes to see certain violations

1015

00:36:28,710 --> 00:36:26,560

of the conservation of energy or the

1016

00:36:31,030 --> 00:36:28,720

conservation of information in the lab

1017

00:36:33,030 --> 00:36:31,040

and apparently you don't and popper and

1018

00:36:34,069 --> 00:36:33,040

eccles hope that it's possible to

1019

00:36:36,310 --> 00:36:34,079

basically

1020

00:36:37,990 --> 00:36:36,320

hide this in the randomness of quantum

1021

00:36:39,589 --> 00:36:38,000

events but still it would need to be a

1022

00:36:41,190 --> 00:36:39,599

systematic violation so i don't think

1023

00:36:43,510 --> 00:36:41,200

that this would work

1024

00:36:46,390 --> 00:36:43,520

and the attempts to

1025

00:36:48,630 --> 00:36:46,400

solve this problem i think that

1026

00:36:50,950 --> 00:36:48,640

they they don't work out

1027

00:36:53,109 --> 00:36:50,960

so i thought there is two possibilities

1028

00:36:54,710 --> 00:36:53,119

one is either we are an entirely

1029

00:36:56,950 --> 00:36:54,720

mechanical universe and there is no

1030

00:36:58,870 --> 00:36:56,960

conspiracy going on of course it's also

1031

00:37:00,710 --> 00:36:58,880

possible that the mechanical universe is

1032

00:37:02,550 --> 00:37:00,720

in some kind of simulation right so we

1033

00:37:05,030 --> 00:37:02,560

could be running in some kind of nerd's

1034

00:37:05,829 --> 00:37:05,040

computer and that is stationed in the

1035

00:37:08,390 --> 00:37:05,839

next

1036

00:37:10,150 --> 00:37:08,400

level universe and of course this nerd

1037

00:37:11,990 --> 00:37:10,160

could also interact with our world and

1038

00:37:13,510 --> 00:37:12,000

in a sense dualism in some sense might

1039

00:37:15,990 --> 00:37:13,520

be possible it could also be that our

1040

00:37:17,829 --> 00:37:16,000

minds indeed run on a separate machine

1041

00:37:19,910 --> 00:37:17,839

and interact with it but in this sense

1042

00:37:21,990 --> 00:37:19,920

every supernatural thing would have to

1043

00:37:24,150 --> 00:37:22,000

have a natural cause at some level in

1044

00:37:25,829 --> 00:37:24,160

one of the parent universes just

1045

00:37:27,510 --> 00:37:25,839

unfortunately this

1046

00:37:28,550 --> 00:37:27,520

intermediate level could be a symbolic

1047

00:37:31,190 --> 00:37:28,560

one

1048

00:37:32,630 --> 00:37:31,200

and the symbolic universe is a magical

1049

00:37:34,150 --> 00:37:32,640

universe

1050

00:37:35,990 --> 00:37:34,160

right if you have a magical interaction

1051
00:37:37,829 --> 00:37:36,000
that for instance in minecraft you can

1052
00:37:39,910 --> 00:37:37,839
open up a shell and you can say times

1053
00:37:41,910 --> 00:37:39,920
that day and the sun rises and there is

1054
00:37:43,349 --> 00:37:41,920
no process within the cellular automaton

1055
00:37:45,829 --> 00:37:43,359
of minecraft that explains this

1056
00:37:47,910 --> 00:37:45,839
mechanical you would have to go a level

1057
00:37:49,109 --> 00:37:47,920
uh behind that and understand the way in

1058
00:37:51,910 --> 00:37:49,119
which the minecraft universe is

1059
00:37:53,910 --> 00:37:51,920
constituted as some kind of simulation

1060
00:37:55,670 --> 00:37:53,920
and simulacrum and part running on a

1061
00:37:57,349 --> 00:37:55,680
computer and a parent universe that

1062
00:37:58,710 --> 00:37:57,359
allows you to do magic

1063
00:38:00,550 --> 00:37:58,720

but uh

1064

00:38:02,630 --> 00:38:00,560

a step back the alternative to the

1065

00:38:04,790 --> 00:38:02,640

mechanical universe

1066

00:38:06,390 --> 00:38:04,800

of physics and physicalism is the idea

1067

00:38:08,310 --> 00:38:06,400

that there is a mechanical universe

1068

00:38:10,150 --> 00:38:08,320

happening in base reality and we are

1069

00:38:11,589 --> 00:38:10,160

directly emergent over that base

1070

00:38:14,390 --> 00:38:11,599

universe so we don't live in some kind

1071

00:38:15,829 --> 00:38:14,400

of simulation that that is physicalism

1072

00:38:18,790 --> 00:38:15,839

and uh

1073

00:38:21,190 --> 00:38:18,800

the alternative is we live in a dream

1074

00:38:23,190 --> 00:38:21,200

and in the dream magic is possible in a

1075

00:38:25,109 --> 00:38:23,200

dream it's possible that you can break

1076

00:38:27,349 --> 00:38:25,119

the laws of physics it's possible that

1077

00:38:29,349 --> 00:38:27,359

you can have telepathy in a way that

1078

00:38:31,589 --> 00:38:29,359

violates the standard model and you can

1079

00:38:33,430 --> 00:38:31,599

have ghosts and you can have all sorts

1080

00:38:35,750 --> 00:38:33,440

of weird things for which you cannot

1081

00:38:37,030 --> 00:38:35,760

possibly have a physical explanation

1082

00:38:39,430 --> 00:38:37,040

maybe for some of them there are

1083

00:38:41,750 --> 00:38:39,440

physical explanations but by and large

1084

00:38:43,670 --> 00:38:41,760

this is the main

1085

00:38:45,589 --> 00:38:43,680

boundary and when you look at the

1086

00:38:47,750 --> 00:38:45,599

philosophies that exist

1087

00:38:50,069 --> 00:38:47,760

there are basically these two types of

1088

00:38:52,390 --> 00:38:50,079

big philosophical approaches that exist

1089

00:38:54,310 --> 00:38:52,400

in the history of humanity that either

1090

00:38:56,550 --> 00:38:54,320

are fully monistically idealist and say

1091

00:38:58,230 --> 00:38:56,560

we do live in a dream and the idealists

1092

00:39:00,470 --> 00:38:58,240

have to explain why this dream looks in

1093

00:39:01,430 --> 00:39:00,480

many parts so damn regular

1094

00:39:02,790 --> 00:39:01,440

and

1095

00:39:05,270 --> 00:39:02,800

mechanical

1096

00:39:06,950 --> 00:39:05,280

oh and the other group says the universe

1097

00:39:08,790 --> 00:39:06,960

is entirely mechanical and this group

1098

00:39:10,310 --> 00:39:08,800

has to explain why so many magic things

1099

00:39:12,069 --> 00:39:10,320

seem to be happening

1100

00:39:13,910 --> 00:39:12,079

and then we have to find an agreement

1101

00:39:17,349 --> 00:39:13,920

which of the things are mechanical and

1102

00:39:18,550 --> 00:39:17,359

which of the things are magical and why

1103

00:39:20,790 --> 00:39:18,560

right and

1104

00:39:23,510 --> 00:39:20,800

at some point it became apparent to me

1105

00:39:25,190 --> 00:39:23,520

that we obviously do live in a dream

1106

00:39:26,870 --> 00:39:25,200

but that this dream

1107

00:39:28,710 --> 00:39:26,880

would have to be dreamt

1108

00:39:31,990 --> 00:39:28,720

by some kind of

1109

00:39:33,589 --> 00:39:32,000

mind in a higher plane of existence

1110

00:39:35,270 --> 00:39:33,599

probably in some kind of mechanical

1111

00:39:37,190 --> 00:39:35,280

fashion because you need functionality

1112

00:39:39,030 --> 00:39:37,200

that facilitates the interaction of the

1113

00:39:39,990 --> 00:39:39,040

elements in your dream because it's not

1114

00:39:41,430 --> 00:39:40,000

random

1115

00:39:42,390 --> 00:39:41,440

this is also apparent when you have a

1116

00:39:43,270 --> 00:39:42,400

lucid dream

1117

00:39:45,430 --> 00:39:43,280

right

1118

00:39:47,829 --> 00:39:45,440

once you observe a number of your lucid

1119

00:39:49,910 --> 00:39:47,839

dreams you notice how they are composed

1120

00:39:51,589 --> 00:39:49,920

you notice some of the mechanisms of of

1121

00:39:53,750 --> 00:39:51,599

lucid dreaming you notice some of the

1122

00:39:55,510 --> 00:39:53,760

limitations of how many elements can be

1123

00:39:57,270 --> 00:39:55,520

stable for how long and you lose the

1124

00:39:59,030 --> 00:39:57,280

dream and so on the ways in which you

1125

00:40:00,870 --> 00:39:59,040

interact with them and so the lucid

1126

00:40:02,710 --> 00:40:00,880

dream itself becomes apparent as

1127

00:40:04,069 --> 00:40:02,720

something that is facilitated by

1128

00:40:06,390 --> 00:40:04,079

mechanisms

1129

00:40:08,790 --> 00:40:06,400

and so what would be the properties of

1130

00:40:10,470 --> 00:40:08,800

that higher plane of existence and i

1131

00:40:11,829 --> 00:40:10,480

think this higher plane of existence is

1132

00:40:13,510 --> 00:40:11,839

physics

1133

00:40:15,829 --> 00:40:13,520

right physical systems cannot be

1134

00:40:17,510 --> 00:40:15,839

conscious only simulated things can be

1135

00:40:19,589 --> 00:40:17,520

conscious consciousness is a virtual

1136

00:40:22,950 --> 00:40:19,599

property it's simulated it exists in the

1137

00:40:25,030 --> 00:40:22,960

dream and the system that dreams us

1138

00:40:27,430 --> 00:40:25,040

according to our best theories right now

1139

00:40:29,510 --> 00:40:27,440

is the brain in physics

1140

00:40:31,109 --> 00:40:29,520

and the confusion that we have about

1141

00:40:32,950 --> 00:40:31,119

this when we think about this arises

1142

00:40:34,950 --> 00:40:32,960

through the notion that what we

1143

00:40:37,510 --> 00:40:34,960

experience when we look at brains our

1144

00:40:39,829 --> 00:40:37,520

brains but we don't these squishy pink

1145

00:40:41,670 --> 00:40:39,839

things are elements of our dream that

1146

00:40:43,510 --> 00:40:41,680

are generated in non-random fashion in

1147

00:40:45,030 --> 00:40:43,520

the parent reality and the parent

1148

00:40:46,710 --> 00:40:45,040

reality is something that we can never

1149

00:40:48,950 --> 00:40:46,720

have access to we cannot experience

1150

00:40:51,270 --> 00:40:48,960

physics there is no way in which the

1151
00:40:55,030 --> 00:40:51,280
physical world can be experienced from

1152
00:40:58,150 --> 00:40:56,230
so

1153
00:41:01,430 --> 00:40:58,160
wouldn't that mean then that there's no

1154
00:41:03,910 --> 00:41:01,440
knowledge of the physics possible then

1155
00:41:05,670 --> 00:41:03,920
no that's that's uh what it means

1156
00:41:08,309 --> 00:41:05,680
we can have knowledge from first

1157
00:41:10,550 --> 00:41:08,319
principles which means we can

1158
00:41:12,230 --> 00:41:10,560
understand the way in which thinking

1159
00:41:14,550 --> 00:41:12,240
could possibly happen which means

1160
00:41:16,230 --> 00:41:14,560
understanding the realm of all languages

1161
00:41:18,550 --> 00:41:16,240
in the way in which something could mean

1162
00:41:21,349 --> 00:41:18,560
something that's one aspect so we have a

1163
00:41:24,069 --> 00:41:21,359

priori knowledge which is

1164

00:41:27,270 --> 00:41:24,079

a category of ideas that we get by

1165

00:41:29,030 --> 00:41:27,280

understanding how systems can

1166

00:41:30,630 --> 00:41:29,040

be about other things you can understand

1167

00:41:33,750 --> 00:41:30,640

how languages work

1168

00:41:36,230 --> 00:41:33,760

and the other thing is that we can

1169

00:41:38,150 --> 00:41:36,240

make observations and we can identify

1170

00:41:40,710 --> 00:41:38,160

regularities and the observations and

1171

00:41:43,670 --> 00:41:40,720

then using our understanding of first

1172

00:41:46,230 --> 00:41:43,680

principles to get a notion of what the

1173

00:41:49,670 --> 00:41:46,240

significance of these observables is

1174

00:41:51,829 --> 00:41:49,680

and so i think it's a good

1175

00:41:53,589 --> 00:41:51,839

simplification to say that we find

1176

00:41:55,270 --> 00:41:53,599

regular patterns at our systemic

1177

00:41:56,309 --> 00:41:55,280

interface and in these regular patterns

1178

00:41:59,030 --> 00:41:56,319

we find

1179

00:42:01,030 --> 00:41:59,040

um non-random ways to disassemble them

1180

00:42:04,309 --> 00:42:01,040

and build them into hierarchies of

1181

00:42:07,109 --> 00:42:05,109

um

1182

00:42:09,190 --> 00:42:07,119

i don't know if

1183

00:42:10,630 --> 00:42:09,200

i don't know i made myself clear what i

1184

00:42:11,510 --> 00:42:10,640

was trying to get at

1185

00:42:13,510 --> 00:42:11,520

are you

1186

00:42:14,950 --> 00:42:13,520

maybe i i should ask a question first

1187

00:42:17,190 --> 00:42:14,960

are you proposing that you can do

1188

00:42:20,309 --> 00:42:17,200

physics at priori

1189

00:42:21,510 --> 00:42:20,319

because that doesn't seem to be the case

1190

00:42:23,270 --> 00:42:21,520

um

1191

00:42:25,430 --> 00:42:23,280

we tried to do physics out prior that

1192

00:42:27,030 --> 00:42:25,440

state cards project and it collapses you

1193

00:42:28,790 --> 00:42:27,040

can't do physics out prior are you

1194

00:42:29,510 --> 00:42:28,800

seeing as you said and then you said we

1195

00:42:30,950 --> 00:42:29,520

can

1196

00:42:32,630 --> 00:42:30,960

observe regularities which i think is

1197

00:42:34,630 --> 00:42:32,640

what physics does but that means you're

1198

00:42:37,510 --> 00:42:34,640

saying that regularities are really

1199

00:42:38,630 --> 00:42:37,520

there um and then i guess the problem

1200

00:42:40,150 --> 00:42:38,640

becomes

1201

00:42:42,950 --> 00:42:40,160

uh uh

1202

00:42:45,030 --> 00:42:42,960

what privileges those experiences of i

1203

00:42:47,349 --> 00:42:45,040

mean i can have to use your analogy i

1204

00:42:49,829 --> 00:42:47,359

can have regularities in my dream and i

1205

00:42:52,390 --> 00:42:49,839

don't take them to have given me

1206

00:42:53,589 --> 00:42:52,400

an account of how the world really is

1207

00:42:56,790 --> 00:42:53,599

um

1208

00:42:59,430 --> 00:42:56,800

but if i do say that regularities work

1209

00:43:01,990 --> 00:42:59,440

um what is it about them that gets me

1210

00:43:03,270 --> 00:43:02,000

outside of the simulation i'm worried

1211

00:43:04,630 --> 00:43:03,280

about i'm worried about a problem of

1212

00:43:06,790 --> 00:43:04,640

skepticism here i'm worried about a

1213

00:43:09,190 --> 00:43:06,800

problem of right am i this is what you

1214

00:43:10,870 --> 00:43:09,200

know this is what hume does he says well

1215

00:43:12,309 --> 00:43:10,880

you know uh

1216

00:43:14,230 --> 00:43:12,319

you've got all these regularities but

1217

00:43:17,190 --> 00:43:14,240

those regularities are themselves only

1218

00:43:19,190 --> 00:43:17,200

projected by the mind the causation is

1219

00:43:21,190 --> 00:43:19,200

just association between

1220

00:43:23,430 --> 00:43:21,200

ideas and experiences and therefore i

1221

00:43:27,109 --> 00:43:23,440

really can't know the world

1222

00:43:29,750 --> 00:43:27,119

and kant etc and so i guess

1223

00:43:30,950 --> 00:43:29,760

i'm wondering if there seems to be a i

1224

00:43:33,190 --> 00:43:30,960

mean

1225

00:43:34,630 --> 00:43:33,200

to say things are a projection is to say

1226

00:43:36,470 --> 00:43:34,640

that other things are real because it's

1227

00:43:37,990 --> 00:43:36,480

a contrast term to say that everything

1228

00:43:39,190 --> 00:43:38,000

is an illusion for example doesn't make

1229

00:43:42,390 --> 00:43:39,200

any sense it's like saying everything's

1230

00:43:45,349 --> 00:43:42,400

tall right um so i'm trying to get at

1231

00:43:47,990 --> 00:43:45,359

what is like what surely we must have

1232

00:43:50,710 --> 00:43:48,000

experiences that count as access to the

1233

00:43:53,030 --> 00:43:50,720

real or else we are just locked inside

1234

00:43:54,790 --> 00:43:53,040

an attorney an internal self-referential

1235

00:43:56,870 --> 00:43:54,800

system that's what i'm that's what i'm

1236

00:43:59,750 --> 00:43:56,880

asking

1237

00:44:02,710 --> 00:43:59,760

did that make sense um yes but let's

1238

00:44:04,790 --> 00:44:02,720

start out with um one of these aspects

1239

00:44:06,309 --> 00:44:04,800

there are several

1240

00:44:08,230 --> 00:44:06,319

points that we i think would need to

1241

00:44:10,390 --> 00:44:08,240

address and some of them are veritable

1242

00:44:12,309 --> 00:44:10,400

rabbit holes so let's start out with the

1243

00:44:14,550 --> 00:44:12,319

problem of skepticism

1244

00:44:16,950 --> 00:44:14,560

personally i don't see skepticism as a

1245

00:44:19,030 --> 00:44:16,960

problem because i think that

1246

00:44:20,470 --> 00:44:19,040

when i am

1247

00:44:23,430 --> 00:44:20,480

observing

1248

00:44:26,150 --> 00:44:23,440

the trajectories that my mind can take

1249

00:44:27,829 --> 00:44:26,160

there is not usually many points where i

1250

00:44:29,750 --> 00:44:27,839

open a door and go through and i cannot

1251

00:44:32,230 --> 00:44:29,760

go back

1252

00:44:34,870 --> 00:44:32,240

right it's not that i uh in the course

1253

00:44:37,270 --> 00:44:34,880

of intellectual exploration uh go

1254

00:44:40,390 --> 00:44:37,280

through one-way dwarves

1255

00:44:42,790 --> 00:44:40,400

that i can see before and i say um

1256

00:44:46,630 --> 00:44:42,800

i cannot come back this might exist in

1257

00:44:48,150 --> 00:44:46,640

some religions so uh here is a wonderful

1258

00:44:50,390 --> 00:44:48,160

delicious brain worm

1259

00:44:52,870 --> 00:44:50,400

you take it on and you can give it back

1260

00:44:54,710 --> 00:44:52,880

in three weeks from now and ideologies

1261

00:44:56,470 --> 00:44:54,720

uh usually work in such a way that they

1262

00:44:58,309 --> 00:44:56,480

warp your mind in such a way that you

1263

00:45:00,550 --> 00:44:58,319

get cut off from the rest of human

1264

00:45:02,790 --> 00:45:00,560

thought space and you cannot come back

1265

00:45:04,950 --> 00:45:02,800

and i i think that in the rational world

1266

00:45:06,150 --> 00:45:04,960

this cannot happen so when you think

1267

00:45:07,990 --> 00:45:06,160

rationally

1268

00:45:09,349 --> 00:45:08,000

everything that you think is conditional

1269

00:45:10,710 --> 00:45:09,359

on something else

1270

00:45:12,950 --> 00:45:10,720

and so

1271

00:45:14,230 --> 00:45:12,960

everything that is not impossible is

1272

00:45:19,109 --> 00:45:14,240

possible

1273

00:45:20,470 --> 00:45:19,119

things has to be disputed distributed

1274

00:45:21,910 --> 00:45:20,480

according to the evidence that is

1275

00:45:24,390 --> 00:45:21,920

available

1276

00:45:26,150 --> 00:45:24,400

so uh the possibility that

1277

00:45:27,910 --> 00:45:26,160

nothing exists in the way in which i

1278

00:45:29,829 --> 00:45:27,920

perceive it and i don't exist and other

1279

00:45:31,829 --> 00:45:29,839

people don't exist or only i exist and

1280

00:45:33,670 --> 00:45:31,839

only other people exist is always a

1281

00:45:34,950 --> 00:45:33,680

possibility and there is nothing scary

1282

00:45:35,990 --> 00:45:34,960

about it and they don't need to be

1283

00:45:37,430 --> 00:45:36,000

worried about it there are no

1284

00:45:39,270 --> 00:45:37,440

assumptions that they need to make to

1285

00:45:41,349 --> 00:45:39,280

avoid this so i never fall into this

1286

00:45:43,670 --> 00:45:41,359

trap and never come back oh my god no

1287

00:45:46,150 --> 00:45:43,680

it's not not a problem the possibility

1288

00:45:47,349 --> 00:45:46,160

that there are no other people should be

1289

00:45:49,510 --> 00:45:47,359

considered

1290

00:45:51,190 --> 00:45:49,520

and i should see what observations

1291

00:45:53,670 --> 00:45:51,200

suggest that this is the case and which

1292

00:45:55,270 --> 00:45:53,680

observations speak against it and uh if

1293

00:45:57,109 --> 00:45:55,280

i ever find out that there never been

1294

00:45:59,190 --> 00:45:57,119

other people why should i be surprised

1295

00:46:00,710 --> 00:45:59,200

right it's i should consider this i

1296

00:46:02,550 --> 00:46:00,720

should see how deep the rabbit hole goes

1297

00:46:04,470 --> 00:46:02,560

there's nothing scary about it's not

1298

00:46:06,069 --> 00:46:04,480

infinitely deep they're not infinitely

1299

00:46:07,750 --> 00:46:06,079

many conclusions that i will draw from

1300

00:46:09,510 --> 00:46:07,760

this this will not lock me in an

1301
00:46:12,390 --> 00:46:09,520
inhospitable place of the intellectual

1302
00:46:13,910 --> 00:46:12,400
universe if i consider this path so i

1303
00:46:16,950 --> 00:46:13,920
would suggest basically consider the

1304
00:46:18,870 --> 00:46:16,960
entire space of possibilities and uh the

1305
00:46:20,630 --> 00:46:18,880
idea that there are other minds in the

1306
00:46:22,309 --> 00:46:20,640
world that are constituted in a quite

1307
00:46:24,150 --> 00:46:22,319
similar way to mine but have a larger

1308
00:46:25,829 --> 00:46:24,160
diversity than some people might be

1309
00:46:27,750 --> 00:46:25,839
willing to acknowledge at first glance

1310
00:46:30,230 --> 00:46:27,760
and so on right this seems to be a good

1311
00:46:32,630 --> 00:46:30,240
theory there seem to be other objects

1312
00:46:34,870 --> 00:46:32,640
that look a lot like me in this mind and

1313
00:46:36,470 --> 00:46:34,880

they seem to be like me the side effect

1314

00:46:40,470 --> 00:46:36,480

of the regulation needs of the hairless

1315

00:46:42,470 --> 00:46:40,480

monkey uh in the present universe and uh

1316

00:46:45,030 --> 00:46:42,480

this so it's a good theory it gives good

1317

00:46:46,790 --> 00:46:45,040

predictions it's a useful encoding of

1318

00:46:48,710 --> 00:46:46,800

the patterns that are thrown at my

1319

00:46:51,750 --> 00:46:48,720

systemic boundary

1320

00:46:53,910 --> 00:46:51,760

and uh this there's another aspect to uh

1321

00:46:56,630 --> 00:46:53,920

solipsism which is more an experiential

1322

00:46:58,470 --> 00:46:56,640

one this is if you cannot perceive other

1323

00:46:59,510 --> 00:46:58,480

minds as minds based on the prayers that

1324

00:47:02,230 --> 00:46:59,520

you have

1325

00:47:04,150 --> 00:47:02,240

most people don't learn a lot of wisdom

1326
00:47:06,150 --> 00:47:04,160
in their life and that their wisdom they

1327
00:47:07,910 --> 00:47:06,160
have is largely a structure that is

1328
00:47:09,430 --> 00:47:07,920
innate to them they are lucky to be born

1329
00:47:11,349 --> 00:47:09,440
wise

1330
00:47:13,990 --> 00:47:11,359
and they just converge in the

1331
00:47:16,230 --> 00:47:14,000
observation of the world to more details

1332
00:47:18,150 --> 00:47:16,240
in this structure and so only people

1333
00:47:20,550 --> 00:47:18,160
that are born unwise have difficulty to

1334
00:47:23,270 --> 00:47:20,560
ever get to wisdom so we do learn new

1335
00:47:25,109 --> 00:47:23,280
structure but largely the architecture

1336
00:47:26,069 --> 00:47:25,119
that we use to interpret the world seems

1337
00:47:27,670 --> 00:47:26,079
to be

1338
00:47:30,150 --> 00:47:27,680

something that is

1339

00:47:32,230 --> 00:47:30,160

to a large degree innate that is mapped

1340

00:47:34,470 --> 00:47:32,240

to the circumstances that our ancestors

1341

00:47:35,829 --> 00:47:34,480

found themselves in in the world and

1342

00:47:38,069 --> 00:47:35,839

what we noticed for instance many

1343

00:47:39,829 --> 00:47:38,079

europeans that live in the us

1344

00:47:41,270 --> 00:47:39,839

have all these weird quirks in which

1345

00:47:43,190 --> 00:47:41,280

they relate to the world that are the

1346

00:47:45,430 --> 00:47:43,200

remnant of non-existent european

1347

00:47:47,510 --> 00:47:45,440

societies that they're brought

1348

00:47:49,670 --> 00:47:47,520

within their own minds and the structure

1349

00:47:52,630 --> 00:47:49,680

that is built into their soul over many

1350

00:47:54,630 --> 00:47:52,640

generations and now uh they try this in

1351

00:47:56,630 --> 00:47:54,640

this very brutish and weird pioneer

1352

00:47:58,470 --> 00:47:56,640

society that is the us

1353

00:48:00,470 --> 00:47:58,480

and many of these patterns don't make

1354

00:48:02,390 --> 00:48:00,480

sense and this is not just the case for

1355

00:48:03,829 --> 00:48:02,400

europeans it's just for europeans i can

1356

00:48:05,750 --> 00:48:03,839

notice and interpret these patterns

1357

00:48:09,030 --> 00:48:05,760

better than for other cultures that are

1358

00:48:11,349 --> 00:48:09,040

part of this hodgepodge of the us

1359

00:48:13,750 --> 00:48:11,359

and so it's very interesting to see that

1360

00:48:16,230 --> 00:48:13,760

uh solipsism might be a property of some

1361

00:48:18,230 --> 00:48:16,240

people i i sometimes think that our

1362

00:48:20,069 --> 00:48:18,240

previous president has been a solipsist

1363

00:48:21,349 --> 00:48:20,079

not in the sense that he is an evil

1364

00:48:23,829 --> 00:48:21,359

person i think it's psychologically

1365

00:48:26,630 --> 00:48:23,839

interesting that uh when he talks to

1366

00:48:28,150 --> 00:48:26,640

other people his important criterion was

1367

00:48:30,390 --> 00:48:28,160

always

1368

00:48:31,750 --> 00:48:30,400

he can't say whatever he wants as long

1369

00:48:33,510 --> 00:48:31,760

as he gets away with it and

1370

00:48:34,470 --> 00:48:33,520

communication is a tool to get what he

1371

00:48:36,710 --> 00:48:34,480

wants

1372

00:48:39,670 --> 00:48:36,720

and it seems to be somewhat invariant in

1373

00:48:41,589 --> 00:48:39,680

politics but he beelines for it right he

1374

00:48:42,950 --> 00:48:41,599

is able to think outside of a box

1375

00:48:44,950 --> 00:48:42,960

because he never acknowledged the

1376

00:48:46,950 --> 00:48:44,960

existence of this box

1377

00:48:48,710 --> 00:48:46,960

there is a certain prior that there are

1378

00:48:49,510 --> 00:48:48,720

other minds that he need to share truth

1379

00:48:51,829 --> 00:48:49,520

with

1380

00:48:53,349 --> 00:48:51,839

that is absent he can just say whatever

1381

00:48:55,030 --> 00:48:53,359

he wants he's free to do this because

1382

00:48:56,710 --> 00:48:55,040

there are no other people

1383

00:48:58,710 --> 00:48:56,720

there's only something like an almost

1384

00:49:00,470 --> 00:48:58,720

faceless audience that relates to him in

1385

00:49:02,549 --> 00:49:00,480

a particular way and that he relates to

1386

00:49:04,309 --> 00:49:02,559

in a particular way that makes them fit

1387

00:49:06,390 --> 00:49:04,319

for this particular role it was probably

1388

00:49:07,750 --> 00:49:06,400

unwise to to make this

1389

00:49:09,349 --> 00:49:07,760

tangent because they don't want to make

1390

00:49:11,270 --> 00:49:09,359

a normative statement one way or the

1391

00:49:13,430 --> 00:49:11,280

other about trump they just think that

1392

00:49:14,950 --> 00:49:13,440

he happens to be somebody that we all

1393

00:49:16,390 --> 00:49:14,960

know and who's psychologically

1394

00:49:18,549 --> 00:49:16,400

interesting because i think he might be

1395

00:49:19,829 --> 00:49:18,559

as all-obsessed in an experiential

1396

00:49:22,470 --> 00:49:19,839

functional not necessarily a

1397

00:49:23,670 --> 00:49:22,480

philosophical sense

1398

00:49:24,950 --> 00:49:23,680

so don't worry josh i'm not going to

1399

00:49:26,549 --> 00:49:24,960

draw you into any kind of political

1400

00:49:28,230 --> 00:49:26,559

debate around

1401

00:49:31,190 --> 00:49:28,240

trump

1402

00:49:32,630 --> 00:49:31,200

so that uh that would be uh unfair to

1403

00:49:34,950 --> 00:49:32,640

you and unfair to the spirit in which

1404

00:49:37,270 --> 00:49:34,960

you offered the example um

1405

00:49:39,030 --> 00:49:37,280

now i i'm trying to think of what how to

1406

00:49:40,470 --> 00:49:39,040

reply because you said about seven

1407

00:49:43,430 --> 00:49:40,480

thousand really interesting things in

1408

00:49:45,030 --> 00:49:43,440

that last thing uh but one thing i i i

1409

00:49:47,589 --> 00:49:45,040

seemed to pick up on

1410

00:49:48,630 --> 00:49:47,599

uh was that

1411

00:49:51,349 --> 00:49:48,640

you know

1412

00:49:53,990 --> 00:49:51,359

reality seems to be determined by

1413

00:49:55,589 --> 00:49:54,000

rational processes of making sense

1414

00:49:57,109 --> 00:49:55,599

um which

1415

00:49:58,710 --> 00:49:57,119

i mean and that's a classical kind of

1416

00:50:00,950 --> 00:49:58,720

idealism that's sort of like hegelian

1417

00:50:02,390 --> 00:50:00,960

idealism that ultimately the real is

1418

00:50:04,870 --> 00:50:02,400

dependent on

1419

00:50:07,510 --> 00:50:04,880

on the on the capacity for rationality

1420

00:50:09,589 --> 00:50:07,520

and so rationally has to be as real as

1421

00:50:10,870 --> 00:50:09,599

anything else because of that dependency

1422

00:50:12,870 --> 00:50:10,880

relationship

1423

00:50:14,790 --> 00:50:12,880

now the thing about that is rationality

1424

00:50:18,790 --> 00:50:14,800

seems to be

1425

00:50:19,829 --> 00:50:18,800

a quintessential mental property too um

1426
00:50:21,670 --> 00:50:19,839
and

1427
00:50:23,750 --> 00:50:21,680
does that mean

1428
00:50:24,870 --> 00:50:23,760
that we don't have

1429
00:50:26,470 --> 00:50:24,880
i mean

1430
00:50:28,470 --> 00:50:26,480
you know you know you know this too i

1431
00:50:30,230 --> 00:50:28,480
know you know again i've seen your talks

1432
00:50:32,470 --> 00:50:30,240
you know the problems of deep time that

1433
00:50:34,950 --> 00:50:32,480
idealism faces right the problem with

1434
00:50:36,630 --> 00:50:34,960
deep time uh you know um there seems to

1435
00:50:38,309 --> 00:50:36,640
be a significant difference between

1436
00:50:41,190 --> 00:50:38,319
darwin discovering the theory of

1437
00:50:43,030 --> 00:50:41,200
evolution in 1859 process of rational

1438
00:50:44,870 --> 00:50:43,040

reflection gathering the evidence and

1439

00:50:46,790 --> 00:50:44,880

the process of evolution that actually

1440

00:50:48,309 --> 00:50:46,800

led to darwin's existence right they

1441

00:50:49,430 --> 00:50:48,319

have different they have different

1442

00:50:52,870 --> 00:50:49,440

temporal

1443

00:50:54,470 --> 00:50:52,880

spatial extensions et cetera and so

1444

00:50:59,270 --> 00:50:54,480

the the problem

1445

00:51:05,190 --> 00:51:01,430

when i'm talking about it that way

1446

00:51:07,589 --> 00:51:05,200

doesn't that mean that i have to

1447

00:51:08,549 --> 00:51:07,599

take it that that rationality really

1448

00:51:10,710 --> 00:51:08,559

exists

1449

00:51:12,950 --> 00:51:10,720

since my ability to

1450

00:51:15,030 --> 00:51:12,960

determine what is real is dependent on

1451

00:51:16,549 --> 00:51:15,040

my rational processes like you said

1452

00:51:20,069 --> 00:51:16,559

better theories worth series making

1453

00:51:23,030 --> 00:51:20,079

better sense uh etc etc and then that

1454

00:51:25,670 --> 00:51:23,040

seems to indicate a very high level of

1455

00:51:28,230 --> 00:51:25,680

organization at which things can be real

1456

00:51:30,710 --> 00:51:28,240

rather than just

1457

00:51:33,750 --> 00:51:30,720

what is typically taken to be

1458

00:51:35,910 --> 00:51:33,760

the physical i take it that at least

1459

00:51:37,990 --> 00:51:35,920

traditionally at least currently

1460

00:51:40,309 --> 00:51:38,000

rationality is not part of the ontology

1461

00:51:41,910 --> 00:51:40,319

of physics it's presupposed in the

1462

00:51:44,630 --> 00:51:41,920

practice of physics but it's not part of

1463

00:51:48,230 --> 00:51:44,640

the ontology um

1464

00:51:50,390 --> 00:51:48,240

and so that that means it sounds to me

1465

00:51:53,030 --> 00:51:50,400

either like you have a kind of strong

1466

00:51:54,630 --> 00:51:53,040

idealism or because you brought this up

1467

00:51:57,990 --> 00:51:54,640

as another possibility

1468

00:51:59,750 --> 00:51:58,000

you see rationality as emerging perhaps

1469

00:52:01,750 --> 00:51:59,760

out of intelligence and intelligence

1470

00:52:02,870 --> 00:52:01,760

emerging out of the behavior of the

1471

00:52:05,190 --> 00:52:02,880

brain

1472

00:52:06,790 --> 00:52:05,200

but it wouldn't be an epiphany it could

1473

00:52:08,950 --> 00:52:06,800

not be given this argument at the

1474

00:52:10,630 --> 00:52:08,960

phenomenal emergence rationality would

1475

00:52:13,190 --> 00:52:10,640

have to be a real thing

1476

00:52:15,430 --> 00:52:13,200

that really exists and really

1477

00:52:17,270 --> 00:52:15,440

directs people's behavior in some

1478

00:52:18,710 --> 00:52:17,280

fashion

1479

00:52:21,510 --> 00:52:18,720

how does that land with you or have i

1480

00:52:23,670 --> 00:52:21,520

misinterpreted you

1481

00:52:25,670 --> 00:52:23,680

so we probably have to agree on what we

1482

00:52:27,510 --> 00:52:25,680

mean by rationality

1483

00:52:29,030 --> 00:52:27,520

to be able to disassemble this term a

1484

00:52:32,309 --> 00:52:29,040

little bit further

1485

00:52:34,710 --> 00:52:32,319

typically it's the ability to uh reach a

1486

00:52:37,109 --> 00:52:34,720

certain goal in which you have reason to

1487

00:52:40,710 --> 00:52:37,119

believe that these tools that you use

1488

00:52:43,430 --> 00:52:40,720

are suitable to get to that goal

1489

00:52:45,670 --> 00:52:43,440

it's i i would add in in addition to the

1490

00:52:47,510 --> 00:52:45,680

instrumentality aspect of rationality

1491

00:52:48,870 --> 00:52:47,520

that rationality includes a capacity for

1492

00:52:50,390 --> 00:52:48,880

self-correction

1493

00:52:52,870 --> 00:52:50,400

uh so the system has to be able to

1494

00:52:54,870 --> 00:52:52,880

correct itself as it's pursuing these

1495

00:52:56,150 --> 00:52:54,880

goals and be able to seek out more

1496

00:52:58,069 --> 00:52:56,160

reliable

1497

00:53:00,230 --> 00:52:58,079

a means of achieving achieving those

1498

00:53:01,990 --> 00:53:00,240

goals so the sit and so the system is

1499

00:53:03,510 --> 00:53:02,000

inherently self-correcting

1500

00:53:05,190 --> 00:53:03,520

which means in a very important way the

1501
00:53:07,190 --> 00:53:05,200
system has to be self-transcending in

1502
00:53:08,710 --> 00:53:07,200
some fashion it has to be able to exceed

1503
00:53:10,710 --> 00:53:08,720
itself it has to be able to grow it has

1504
00:53:12,549 --> 00:53:10,720
to be able to develop so there's there's

1505
00:53:13,829 --> 00:53:12,559
something but i see this all part of the

1506
00:53:15,190 --> 00:53:13,839
uh

1507
00:53:17,430 --> 00:53:15,200
i don't think that

1508
00:53:19,670 --> 00:53:17,440
if you are in a suitably complex

1509
00:53:21,190 --> 00:53:19,680
environment with complex tasks that you

1510
00:53:23,670 --> 00:53:21,200
can be uh

1511
00:53:25,910 --> 00:53:23,680
believe that your strategy is the only

1512
00:53:27,430 --> 00:53:25,920
suitable one and doesn't need some kind

1513
00:53:29,589 --> 00:53:27,440

of mechanism of self-correction so

1514

00:53:31,990 --> 00:53:29,599

self-correction i think falls relatively

1515

00:53:33,270 --> 00:53:32,000

early out of the instrumental notion

1516

00:53:35,430 --> 00:53:33,280

yeah i don't have any problem with that

1517

00:53:36,790 --> 00:53:35,440

yeah i just want to i just wanted to

1518

00:53:39,030 --> 00:53:36,800

point out that that's often not

1519

00:53:40,710 --> 00:53:39,040

explicated in accounts of

1520

00:53:42,870 --> 00:53:40,720

instrumentality so

1521

00:53:44,870 --> 00:53:42,880

yeah go ahead but uh i don't think that

1522

00:53:47,750 --> 00:53:44,880

rationality in this sense is necessarily

1523

00:53:51,510 --> 00:53:47,760

a thing that exists as an object

1524

00:53:53,750 --> 00:53:51,520

but uh it exists as an archetype

1525

00:53:57,430 --> 00:53:53,760

it exists as a strategy that i can

1526
00:53:59,990 --> 00:53:57,440
specify from some basic desirables for

1527
00:54:02,230 --> 00:54:00,000
any kind of system that is strategizing

1528
00:54:04,390 --> 00:54:02,240
on solving a control problem in in a

1529
00:54:05,430 --> 00:54:04,400
complex world

1530
00:54:07,589 --> 00:54:05,440
so

1531
00:54:09,589 --> 00:54:07,599
basically if you have a system that is

1532
00:54:12,390 --> 00:54:09,599
has the ability to error correct on a

1533
00:54:13,990 --> 00:54:12,400
deep level and that is able to discover

1534
00:54:16,870 --> 00:54:14,000
enough regularities in the world to

1535
00:54:17,670 --> 00:54:16,880
notice its own existence in the world

1536
00:54:19,829 --> 00:54:17,680
then

1537
00:54:21,829 --> 00:54:19,839
the system as soon as it's able to

1538
00:54:23,589 --> 00:54:21,839

evaluate the strategies that it applies

1539

00:54:25,990 --> 00:54:23,599

to make sense of the world will discover

1540

00:54:26,870 --> 00:54:26,000

rationality as an option

1541

00:54:28,950 --> 00:54:26,880

and

1542

00:54:32,069 --> 00:54:28,960

there are not that many alternatives to

1543

00:54:34,710 --> 00:54:32,079

it and when you think about uh how to be

1544

00:54:37,109 --> 00:54:34,720

an a rational idealist

1545

00:54:39,270 --> 00:54:37,119

right if you are a deep idealist can you

1546

00:54:41,190 --> 00:54:39,280

afford to be rational there is in some

1547

00:54:43,910 --> 00:54:41,200

sense two possibilities in which you are

1548

00:54:45,670 --> 00:54:43,920

an idealist one is an idealist that is

1549

00:54:48,069 --> 00:54:45,680

willing to deal with the french problem

1550

00:54:49,349 --> 00:54:48,079

of idealism like why is there regularity

1551
00:54:50,710 --> 00:54:49,359
in there and where does the dream come

1552
00:54:53,510 --> 00:54:50,720
from

1553
00:54:55,670 --> 00:54:53,520
and the alternative is mysterianism

1554
00:54:57,510 --> 00:54:55,680
and mysterianism is a position in

1555
00:54:59,510 --> 00:54:57,520
cognitive science that is held by

1556
00:55:01,750 --> 00:54:59,520
several people mysterianism basically

1557
00:55:03,109 --> 00:55:01,760
says that something cannot be understood

1558
00:55:05,589 --> 00:55:03,119
if it cannot be understood by norm

1559
00:55:06,710 --> 00:55:05,599
chomsky

1560
00:55:09,349 --> 00:55:06,720
and uh

1561
00:55:12,470 --> 00:55:09,359
not surprisingly uh chomsky himself is a

1562
00:55:13,270 --> 00:55:12,480
mysterionist about consciousness

1563
00:55:18,630 --> 00:55:13,280

uh

1564

00:55:20,870 --> 00:55:18,640

yeah i i think again it does similar

1565

00:55:22,630 --> 00:55:20,880

things yeah uh

1566

00:55:24,069 --> 00:55:22,640

for me before we uh i don't want to get

1567

00:55:27,270 --> 00:55:24,079

too far feel about this i think there's

1568

00:55:28,549 --> 00:55:27,280

equivocation around uh

1569

00:55:30,630 --> 00:55:28,559

miserianism

1570

00:55:32,829 --> 00:55:30,640

uh it invokes uh i think a

1571

00:55:35,270 --> 00:55:32,839

non-controversial notion of epistemic

1572

00:55:36,710 --> 00:55:35,280

boundedness like every other organism

1573

00:55:38,309 --> 00:55:36,720

it's highly probable we are

1574

00:55:39,829 --> 00:55:38,319

epistemically bounded

1575

00:55:43,270 --> 00:55:39,839

um and then it claims we're

1576
00:55:44,710 --> 00:55:43,280
epistemically bounded with respect uh to

1577
00:55:46,870 --> 00:55:44,720
um

1578
00:55:48,390 --> 00:55:46,880
to the mind like

1579
00:55:50,630 --> 00:55:48,400
having a mind doesn't mean that the mind

1580
00:55:52,150 --> 00:55:50,640
is capable of explaining itself uh and

1581
00:55:54,230 --> 00:55:52,160
and that of course is i i don't think

1582
00:55:56,630 --> 00:55:54,240
chimps will ever generate a theory

1583
00:55:58,390 --> 00:55:56,640
explaining their own cognition etc i

1584
00:56:02,150 --> 00:55:58,400
think that's non-controversial the

1585
00:56:04,150 --> 00:56:02,160
problem um is the specific argument um

1586
00:56:06,789 --> 00:56:04,160
saying that that is actually occurring

1587
00:56:10,470 --> 00:56:06,799
in our attempts to solve consciousness

1588
00:56:11,990 --> 00:56:10,480

or intelligence etc so i think i

1589

00:56:13,750 --> 00:56:12,000

well i agree about

1590

00:56:15,270 --> 00:56:13,760

the egocentrism of some of the arguments

1591

00:56:17,589 --> 00:56:15,280

that you've pointed to i think there's

1592

00:56:19,589 --> 00:56:17,599

also a deep equivocation there between

1593

00:56:21,349 --> 00:56:19,599

uh different senses of epistemic

1594

00:56:23,109 --> 00:56:21,359

boundedness that hasn't been

1595

00:56:25,030 --> 00:56:23,119

sort of properly worked out very

1596

00:56:25,990 --> 00:56:25,040

carefully of course i think like i said

1597

00:56:28,390 --> 00:56:26,000

in one sense it's got to be

1598

00:56:29,990 --> 00:56:28,400

non-controversial i think that we're

1599

00:56:32,069 --> 00:56:30,000

epistemically bounded even younger

1600

00:56:33,990 --> 00:56:32,079

versions of myself were epistemically

1601
00:56:36,789 --> 00:56:34,000
bounded with respect to these uh

1602
00:56:39,109 --> 00:56:36,799
problems and questions the idea is how

1603
00:56:40,710 --> 00:56:39,119
do i know how do i distinguish between

1604
00:56:42,309 --> 00:56:40,720
epistemic boundedness that is sort of

1605
00:56:43,750 --> 00:56:42,319
hardwired into me

1606
00:56:45,670 --> 00:56:43,760
cultural epistemic boundedness

1607
00:56:46,789 --> 00:56:45,680
historical epistemic boundedness

1608
00:56:50,069 --> 00:56:46,799
developmental

1609
00:56:52,150 --> 00:56:50,079
epistemic boundedness and so i i find

1610
00:56:53,990 --> 00:56:52,160
that that whole argument

1611
00:56:56,150 --> 00:56:54,000
um sort of deeply confused because

1612
00:56:57,589 --> 00:56:56,160
there's a lot of equivocation going on

1613
00:57:00,150 --> 00:56:57,599

so i take it that you don't like it

1614

00:57:01,750 --> 00:57:00,160

either so um

1615

00:57:04,150 --> 00:57:01,760

well i think it's it's maybe an

1616

00:57:06,390 --> 00:57:04,160

unhelpful notion because uh in the way

1617

00:57:08,390 --> 00:57:06,400

in which the term is constructed it

1618

00:57:09,670 --> 00:57:08,400

suggests that there is indeed a hard

1619

00:57:11,990 --> 00:57:09,680

bound

1620

00:57:13,750 --> 00:57:12,000

and the question is is is this a useful

1621

00:57:16,710 --> 00:57:13,760

way to think about the way in which my

1622

00:57:19,030 --> 00:57:16,720

experience works so maybe uh chimpanzees

1623

00:57:20,870 --> 00:57:19,040

are just stupid people and uh because

1624

00:57:22,990 --> 00:57:20,880

they have a very short childhood so they

1625

00:57:24,789 --> 00:57:23,000

uh before their brain loses

1626
00:57:26,390 --> 00:57:24,799
neuroplasticity and at all the

1627
00:57:28,309 --> 00:57:26,400
respective levels where they would be

1628
00:57:31,430 --> 00:57:28,319
able to form concepts it already

1629
00:57:33,030 --> 00:57:31,440
solidifies and they're not able to make

1630
00:57:34,870 --> 00:57:33,040
sense of the world at dessert beyond a

1631
00:57:37,030 --> 00:57:34,880
certain depth because it's for them

1632
00:57:39,910 --> 00:57:37,040
difficult to focus on these ideas for

1633
00:57:42,150 --> 00:57:39,920
long enough and uh to build

1634
00:57:44,150 --> 00:57:42,160
suitable representations about them and

1635
00:57:46,150 --> 00:57:44,160
a similar thing happens with people most

1636
00:57:47,829 --> 00:57:46,160
people are unable to focus on an idea

1637
00:57:50,630 --> 00:57:47,839
for more than 20 minutes if it's not

1638
00:57:51,670 --> 00:57:50,640

related to their uh social or erotic

1639

00:57:52,789 --> 00:57:51,680

success

1640

00:57:53,589 --> 00:57:52,799

and

1641

00:57:55,910 --> 00:57:53,599

so

1642

00:57:58,069 --> 00:57:55,920

you need very weird people that are able

1643

00:58:00,309 --> 00:57:58,079

to focus on certain ideas for very very

1644

00:58:01,990 --> 00:58:00,319

long and then we already die after a few

1645

00:58:04,069 --> 00:58:02,000

decades uh

1646

00:58:07,109 --> 00:58:04,079

it's uh does this imply that there is a

1647

00:58:09,430 --> 00:58:07,119

higher epidemic bound probably not

1648

00:58:12,230 --> 00:58:09,440

and there could be a harder epistemic

1649

00:58:15,190 --> 00:58:12,240

bound that is we can figure out um

1650

00:58:17,109 --> 00:58:15,200

by the timing characteristics how many

1651
00:58:18,789 --> 00:58:17,119
layers our brain effectively has our

1652
00:58:21,589 --> 00:58:18,799
brain is not organized in need layers

1653
00:58:23,910 --> 00:58:21,599
it's recurrent and so on but still

1654
00:58:25,670 --> 00:58:23,920
it seems to be difficult for us to hold

1655
00:58:27,750 --> 00:58:25,680
thoughts beyond a certain length or

1656
00:58:29,750 --> 00:58:27,760
construct thoughts beyond a certain

1657
00:58:31,589 --> 00:58:29,760
length it's for most people very

1658
00:58:34,870 --> 00:58:31,599
difficult to hold a thought in their

1659
00:58:37,109 --> 00:58:34,880
mind stable that is longer than a few

1660
00:58:38,710 --> 00:58:37,119
tens of seconds and some people are able

1661
00:58:41,270 --> 00:58:38,720
to hold the thoughts stable in their

1662
00:58:43,349 --> 00:58:41,280
mind that takes a few hours but this

1663
00:58:44,390 --> 00:58:43,359

means uninterrupted focus on this

1664

00:58:47,109 --> 00:58:44,400

thought

1665

00:58:49,589 --> 00:58:47,119

and so if you think about how many

1666

00:58:50,549 --> 00:58:49,599

oscillations can you fit into such a

1667

00:58:53,109 --> 00:58:50,559

thought

1668

00:58:55,270 --> 00:58:53,119

is is the level of complexity that this

1669

00:58:57,670 --> 00:58:55,280

model has sufficient to understand

1670

00:58:59,829 --> 00:58:57,680

foundational physics for instance and it

1671

00:59:02,230 --> 00:58:59,839

could be that uh foundational physics

1672

00:59:04,230 --> 00:59:02,240

poses a few questions that are close to

1673

00:59:06,789 --> 00:59:04,240

the boundary of what we can integrate

1674

00:59:09,670 --> 00:59:06,799

all at once and that we need machines to

1675

00:59:11,910 --> 00:59:09,680

extend our mind to keep the thought

1676

00:59:14,069 --> 00:59:11,920

stable and detailed for long enough

1677

00:59:15,589 --> 00:59:14,079

i think it is unfair to expect from

1678

00:59:17,349 --> 00:59:15,599

descartes that he is able to solve

1679

00:59:19,510 --> 00:59:17,359

foundational physics because there were

1680

00:59:21,910 --> 00:59:19,520

many fundamental insights that were not

1681

00:59:23,910 --> 00:59:21,920

available to him that were not part of

1682

00:59:26,069 --> 00:59:23,920

uh what he had time to figure out by

1683

00:59:28,789 --> 00:59:26,079

himself and uh that were not available

1684

00:59:31,270 --> 00:59:28,799

to him in books and ideas around him he

1685

00:59:33,109 --> 00:59:31,280

largely still lived in a euclidean

1686

00:59:33,990 --> 00:59:33,119

universe in which the objects were very

1687

00:59:36,230 --> 00:59:34,000

large

1688

00:59:38,069 --> 00:59:36,240

and in which it was not apparent how to

1689

00:59:39,990 --> 00:59:38,079

build more simple automata over which

1690

00:59:42,309 --> 00:59:40,000

the complexity of

1691

00:59:44,470 --> 00:59:42,319

the three-dimensional approximately

1692

00:59:47,109 --> 00:59:44,480

three-dimensional euclidean world or

1693

00:59:48,390 --> 00:59:47,119

space-time later on would emerge

1694

00:59:50,789 --> 00:59:48,400

so

1695

00:59:52,630 --> 00:59:50,799

in this time there was no way to go to

1696

00:59:54,150 --> 00:59:52,640

uh to understand the emergence of

1697

00:59:56,630 --> 00:59:54,160

physics from something that is more

1698

00:59:58,069 --> 00:59:56,640

simple and closer to first principles

1699

00:59:59,990 --> 00:59:58,079

and i think this is only just now

1700

01:00:01,589 --> 01:00:00,000

happening

1701

01:00:03,990 --> 01:00:01,599

that i i think

1702

01:00:06,390 --> 01:00:04,000

that's what i was trying to say

1703

01:00:08,230 --> 01:00:06,400

and issues of epistemic boundedness are

1704

01:00:10,309 --> 01:00:08,240

mixing up and confusing together

1705

01:00:13,109 --> 01:00:10,319

biological issues cultural issues

1706

01:00:14,870 --> 01:00:13,119

historical issues yes right so maybe

1707

01:00:17,349 --> 01:00:14,880

epistemic boundaries is not a thing so

1708

01:00:20,309 --> 01:00:17,359

that was my point uh so it might exist

1709

01:00:22,069 --> 01:00:20,319

approximately but uh if you treat it as

1710

01:00:23,750 --> 01:00:22,079

that oh my god there's this boundary

1711

01:00:26,630 --> 01:00:23,760

there it is there is the wall that

1712

01:00:28,390 --> 01:00:26,640

separates us uh from um

1713

01:00:30,470 --> 01:00:28,400

from the next country and we will never

1714

01:00:32,630 --> 01:00:30,480

be able to cross it because this is uh

1715

01:00:34,549 --> 01:00:32,640

for some a natural law the reason in

1716

01:00:36,230 --> 01:00:34,559

which human minds have to be constructed

1717

01:00:37,829 --> 01:00:36,240

i am not sure if you can actually make

1718

01:00:39,270 --> 01:00:37,839

that claim if you can prove that there

1719

01:00:41,510 --> 01:00:39,280

is a boundary that we need to run

1720

01:00:44,069 --> 01:00:41,520

against well this is hegel's argument

1721

01:00:45,430 --> 01:00:44,079

and maybe i can use that to circle back

1722

01:00:46,870 --> 01:00:45,440

because hegel's argument is you can

1723

01:00:48,870 --> 01:00:46,880

actually only uh

1724

01:00:51,109 --> 01:00:48,880

uh talk about a limit if you have the

1725

01:00:53,670 --> 01:00:51,119

capacity to exceed it uh it doesn't make

1726

01:00:55,030 --> 01:00:53,680

any sense to say from just this side

1727

01:00:58,630 --> 01:00:55,040

that there's a limit

1728

01:01:00,870 --> 01:00:58,640

so there are boundaries uh one is

1729

01:01:02,789 --> 01:01:00,880

there is loops theorem which says that a

1730

01:01:06,549 --> 01:01:02,799

system basically cannot make statements

1731

01:01:08,069 --> 01:01:06,559

uh about something outside of itself

1732

01:01:09,750 --> 01:01:08,079

also the way in which griddle for

1733

01:01:11,349 --> 01:01:09,760

instance talks about the whole of

1734

01:01:13,109 --> 01:01:11,359

mathematics and these properties of

1735

01:01:15,589 --> 01:01:13,119

mathematics works by building an

1736

01:01:17,270 --> 01:01:15,599

automaton that reconstructs the whole of

1737

01:01:19,670 --> 01:01:17,280

mathematics that he wants to talk about

1738

01:01:21,030 --> 01:01:19,680

from first principles so it talks about

1739

01:01:23,270 --> 01:01:21,040

something that is contained in the

1740

01:01:24,470 --> 01:01:23,280

system if i want to talk about the whole

1741

01:01:25,990 --> 01:01:24,480

of mathematics

1742

01:01:28,150 --> 01:01:26,000

i have to talk about it by

1743

01:01:29,910 --> 01:01:28,160

reconstructing it from first principles

1744

01:01:32,309 --> 01:01:29,920

if i cannot make such a definition i

1745

01:01:34,390 --> 01:01:32,319

don't know what i'm talking about right

1746

01:01:35,829 --> 01:01:34,400

so the world that i am talking about is

1747

01:01:37,990 --> 01:01:35,839

one that i need to construct in the

1748

01:01:39,750 --> 01:01:38,000

first place and i'm not able to talk

1749

01:01:42,150 --> 01:01:39,760

about something that exists outside of

1750

01:01:43,829 --> 01:01:42,160

these constructions unless i can prove

1751

01:01:45,670 --> 01:01:43,839

that i have constructed things in the

1752

01:01:47,270 --> 01:01:45,680

only possible way

1753

01:01:48,870 --> 01:01:47,280

which means i have to make statements

1754

01:01:51,030 --> 01:01:48,880

about the possible nature of language

1755

01:01:52,950 --> 01:01:51,040

itself so this is one of the boundaries

1756

01:01:54,150 --> 01:01:52,960

that i can run into

1757

01:01:57,510 --> 01:01:54,160

and

1758

01:01:59,910 --> 01:01:57,520

the other one is has to do with uh

1759

01:02:03,109 --> 01:01:59,920

the problem of the access to

1760

01:02:05,030 --> 01:02:03,119

of the universe itself and this is much

1761

01:02:07,430 --> 01:02:05,040

more um

1762

01:02:08,870 --> 01:02:07,440

obvious to people then live theory even

1763

01:02:10,710 --> 01:02:08,880

though it's related

1764

01:02:11,910 --> 01:02:10,720

you cannot exclude the possibility that

1765

01:02:13,829 --> 01:02:11,920

for instance that you could be a brain

1766

01:02:15,670 --> 01:02:13,839

in the vet some philosophers have tried

1767

01:02:17,829 --> 01:02:15,680

to do this but there are slate of hands

1768

01:02:20,950 --> 01:02:17,839

and wishful thinking

1769

01:02:22,230 --> 01:02:20,960

there is no way that you and me cannot

1770

01:02:23,750 --> 01:02:22,240

know beforehand of whether we are

1771

01:02:25,829 --> 01:02:23,760

currently in

1772

01:02:28,150 --> 01:02:25,839

some kind of weird dream from which we

1773

01:02:30,710 --> 01:02:28,160

wake up in the next moment and realize

1774

01:02:33,589 --> 01:02:30,720

oh my god this actually didn't happen it

1775

01:02:35,030 --> 01:02:33,599

was a fake memory this uh was not true

1776

01:02:37,270 --> 01:02:35,040

this is not a description of the

1777

01:02:39,589 --> 01:02:37,280

physical universe this was just a weird

1778

01:02:41,349 --> 01:02:39,599

illusion that i had in a night dream but

1779

01:02:43,910 --> 01:02:41,359

there is no way in which we can in

1780

01:02:46,150 --> 01:02:43,920

principle exclude this possibility there

1781

01:02:48,230 --> 01:02:46,160

is only ways in which we can

1782

01:02:51,190 --> 01:02:48,240

deal with the probabilities based on our

1783

01:02:52,710 --> 01:02:51,200

past experiences but uh if we have never

1784

01:02:54,950 --> 01:02:52,720

experienced a certain thing before in

1785

01:02:58,549 --> 01:02:54,960

this fundamental way for instance after

1786

01:03:01,030 --> 01:02:58,559

i had a long surgery for eight hours i

1787

01:03:03,109 --> 01:03:01,040

had extremely lucid dreams that had uh

1788

01:03:05,030 --> 01:03:03,119

that were so intense that i could not in

1789

01:03:07,109 --> 01:03:05,040

the intensity distinguish them from

1790

01:03:09,109 --> 01:03:07,119

daytime experiences

1791

01:03:10,630 --> 01:03:09,119

and it was because of the narcotics that

1792

01:03:12,789 --> 01:03:10,640

were still in my bloodstream and i never

1793

01:03:14,230 --> 01:03:12,799

had experiences like that before

1794

01:03:15,990 --> 01:03:14,240

of course these experiences were just

1795

01:03:17,829 --> 01:03:16,000

brain states they had nothing prophetic

1796

01:03:19,750 --> 01:03:17,839

about this this was not an alternate

1797

01:03:22,230 --> 01:03:19,760

universe that i was dropping in but the

1798

01:03:24,950 --> 01:03:22,240

experiential qualities were very similar

1799

01:03:26,549 --> 01:03:24,960

and i so my argument is that you can not

1800

01:03:28,150 --> 01:03:26,559

possibly make such a distinction

1801
01:03:29,910 --> 01:03:28,160
beforehand and that's why you can also

1802
01:03:31,750 --> 01:03:29,920
not exclude the possibility of

1803
01:03:33,990 --> 01:03:31,760
skepticism and this is one of the

1804
01:03:35,750 --> 01:03:34,000
boundaries of what we can be achieving

1805
01:03:37,029 --> 01:03:35,760
as a mind we cannot rely on our own

1806
01:03:40,950 --> 01:03:37,039
coherence

1807
01:03:43,589 --> 01:03:40,960
in a fundamental sense we always have to

1808
01:03:45,910 --> 01:03:43,599
hope and pray that the world

1809
01:03:49,430 --> 01:03:45,920
remains as coherent as it appears to me

1810
01:03:55,589 --> 01:03:53,430
so that that gets i that um

1811
01:03:58,390 --> 01:03:55,599
that gets me back to the point

1812
01:04:00,549 --> 01:03:58,400
that realness seems to be bound

1813
01:04:03,430 --> 01:04:00,559

uh to some normative notion of

1814

01:04:04,710 --> 01:04:03,440

rationality you've invoked a priori a

1815

01:04:07,029 --> 01:04:04,720

couple times

1816

01:04:08,549 --> 01:04:07,039

uh the problem with that priori is again

1817

01:04:10,829 --> 01:04:08,559

that hasn't been stable what khan

1818

01:04:14,630 --> 01:04:10,839

thought was that priori and he

1819

01:04:17,510 --> 01:04:14,640

famously um positive the opera ri right

1820

01:04:20,309 --> 01:04:17,520

as central um you know many people don't

1821

01:04:22,549 --> 01:04:20,319

agree with his set uh uh our priority

1822

01:04:24,150 --> 01:04:22,559

that you know that logic that that logic

1823

01:04:25,349 --> 01:04:24,160

is aristotelian logic there's many

1824

01:04:26,900 --> 01:04:25,359

logicians that say no that's not the

1825

01:04:28,069 --> 01:04:26,910

only possible logic

1826

01:04:30,789 --> 01:04:28,079

[Music]

1827

01:04:34,789 --> 01:04:30,799

euclidean geometry is the only geometry

1828

01:04:37,589 --> 01:04:34,799

that's not true etc um and so again it

1829

01:04:41,029 --> 01:04:37,599

seems that even the app priori is

1830

01:04:42,870 --> 01:04:41,039

dependent on these more basic processes

1831

01:04:45,190 --> 01:04:42,880

of how we

1832

01:04:47,029 --> 01:04:45,200

think everything's hangs together how

1833

01:04:49,029 --> 01:04:47,039

everything is intelligible how it all

1834

01:04:52,309 --> 01:04:49,039

makes sense to us

1835

01:04:53,510 --> 01:04:52,319

and for me that um

1836

01:04:54,549 --> 01:04:53,520

that's the thing i really want to

1837

01:04:59,109 --> 01:04:54,559

understand

1838

01:05:03,430 --> 01:04:59,119

how and why

1839

01:05:05,990 --> 01:05:03,440

um we find the universe intelligible

1840

01:05:07,910 --> 01:05:06,000

and if we're justified in doing so and

1841

01:05:10,150 --> 01:05:07,920

then how does that relate to

1842

01:05:12,309 --> 01:05:10,160

intelligence and consciousness

1843

01:05:14,230 --> 01:05:12,319

that's the sort of that's the issue

1844

01:05:16,230 --> 01:05:14,240

and i take it that there are sort of

1845

01:05:18,150 --> 01:05:16,240

certain central problems

1846

01:05:20,829 --> 01:05:18,160

and that go back to

1847

01:05:22,710 --> 01:05:20,839

um this fundamental act of

1848

01:05:24,309 --> 01:05:22,720

interpretation uh which is what are you

1849

01:05:25,910 --> 01:05:24,319

going to pay attention to how long

1850

01:05:27,270 --> 01:05:25,920

you're going to pay attention to it how

1851

01:05:28,470 --> 01:05:27,280

much importance are you going to give to

1852

01:05:31,910 --> 01:05:28,480

it how are you going to prioritize one

1853

01:05:33,349 --> 01:05:31,920

thing over another um etc

1854

01:05:35,270 --> 01:05:33,359

and

1855

01:05:37,349 --> 01:05:35,280

interestingly enough these are kind of a

1856

01:05:40,549 --> 01:05:37,359

lot of the contending candidates for

1857

01:05:42,549 --> 01:05:40,559

theories of what attention is um and i

1858

01:05:45,109 --> 01:05:42,559

know you put a lot of

1859

01:05:46,390 --> 01:05:45,119

centrality on attention in your meant in

1860

01:05:48,829 --> 01:05:46,400

your

1861

01:05:52,710 --> 01:05:48,839

model of consciousness

1862

01:05:54,630 --> 01:05:52,720

um and so i'm very interested and i talk

1863

01:05:57,589 --> 01:05:54,640

about this process

1864

01:05:59,109 --> 01:05:57,599

by which we attend to things

1865

01:06:01,829 --> 01:05:59,119

in the right way

1866

01:06:04,230 --> 01:06:01,839

so that we're capable of making

1867

01:06:06,630 --> 01:06:04,240

um intelligible sense of our experience

1868

01:06:07,990 --> 01:06:06,640

in a way that gives us some

1869

01:06:10,230 --> 01:06:08,000

good reason i'm not saying

1870

01:06:11,670 --> 01:06:10,240

demonstratively certain but some good

1871

01:06:12,710 --> 01:06:11,680

reason it could be probabilistic if you

1872

01:06:15,910 --> 01:06:12,720

want

1873

01:06:17,349 --> 01:06:15,920

for saying x is real and y is not

1874

01:06:19,750 --> 01:06:17,359

um because

1875

01:06:21,190 --> 01:06:19,760

if we can't do that if we can't make

1876

01:06:23,670 --> 01:06:21,200

those basic kinds of distinctions we

1877

01:06:25,349 --> 01:06:23,680

can't do science itself and then a lot

1878

01:06:27,270 --> 01:06:25,359

of the data that we're using to make our

1879

01:06:29,589 --> 01:06:27,280

arguments falls through the bottom

1880

01:06:32,230 --> 01:06:29,599

because we have no ontological ground

1881

01:06:33,190 --> 01:06:32,240

for science itself

1882

01:06:35,670 --> 01:06:33,200

so

1883

01:06:39,029 --> 01:06:35,680

i'm very interested in exactly those

1884

01:06:39,829 --> 01:06:39,039

kinds of fundamental issues

1885

01:06:40,950 --> 01:06:39,839

of

1886

01:06:42,870 --> 01:06:40,960

how

1887

01:06:46,230 --> 01:06:42,880

so for me

1888

01:06:48,309 --> 01:06:46,240

the problem of consciousness ultimately

1889

01:06:51,190 --> 01:06:48,319

is bound up with the problem of

1890

01:06:54,309 --> 01:06:51,200

intelligence the problem of making sense

1891

01:06:55,910 --> 01:06:54,319

but those are not just psychological

1892

01:06:59,829 --> 01:06:55,920

problems they are ultimately

1893

01:07:01,990 --> 01:06:59,839

epistemological ontological problems and

1894

01:07:03,510 --> 01:07:02,000

answering them together i think is

1895

01:07:05,430 --> 01:07:03,520

something well that's what i'm trying to

1896

01:07:06,470 --> 01:07:05,440

do with you here now i'm trying to get

1897

01:07:07,990 --> 01:07:06,480

um

1898

01:07:09,829 --> 01:07:08,000

how it is

1899

01:07:12,630 --> 01:07:09,839

that i'm trying to get your model of

1900

01:07:14,309 --> 01:07:12,640

ontology um and

1901

01:07:17,029 --> 01:07:14,319

where because you you do you have to

1902

01:07:18,630 --> 01:07:17,039

rely on judgment so like you went back

1903

01:07:20,230 --> 01:07:18,640

uh it's only a projection there's not

1904

01:07:22,069 --> 01:07:20,240

really a face there

1905

01:07:24,630 --> 01:07:22,079

that's a that's a positing of what's

1906

01:07:29,589 --> 01:07:24,640

real versus not real

1907

01:07:32,870 --> 01:07:32,069

is your account

1908

01:07:36,309 --> 01:07:32,880

of

1909

01:07:39,109 --> 01:07:36,319

rationality bound up with your account

1910

01:07:42,870 --> 01:07:39,119

of consciousness and intelligence it

1911

01:07:44,549 --> 01:07:42,880

seems like it is um and doesn't that

1912

01:07:46,390 --> 01:07:44,559

mean therefore that we have to posit a

1913

01:07:48,150 --> 01:07:46,400

certain kind of realness

1914

01:07:50,470 --> 01:07:48,160

to intelligence and consciousness the

1915

01:07:53,430 --> 01:07:50,480

way we have to for rationality because

1916

01:07:55,990 --> 01:07:53,440

rationality is how we determine what's

1917

01:07:57,750 --> 01:07:56,000

real in the world again i acknowledge

1918

01:07:58,470 --> 01:07:57,760

with you i'm not saying that i can do

1919

01:08:01,109 --> 01:07:58,480

that

1920

01:08:03,029 --> 01:08:01,119

uh you know with any kind of certainty

1921

01:08:05,190 --> 01:08:03,039

but nevertheless i have to be able to do

1922

01:08:06,789 --> 01:08:05,200

it in some kind of fashion i have to be

1923

01:08:09,430 --> 01:08:06,799

able to make judgments about real versus

1924

01:08:11,670 --> 01:08:09,440

not real in order to be generating the

1925

01:08:13,510 --> 01:08:11,680

kind of data we're both using when we're

1926

01:08:16,950 --> 01:08:13,520

talking here right now

1927

01:08:19,269 --> 01:08:16,960

so here's the argument in a nutshell

1928

01:08:21,829 --> 01:08:19,279

it seems that what's real depends on

1929

01:08:22,789 --> 01:08:21,839

what's rational and being rational seems

1930

01:08:25,510 --> 01:08:22,799

to

1931

01:08:26,630 --> 01:08:25,520

require some kind of self-awareness

1932

01:08:28,709 --> 01:08:26,640

not

1933

01:08:32,630 --> 01:08:28,719

some kind of consciousness and rational

1934

01:08:35,910 --> 01:08:32,640

seems to also uh require some kind of

1935

01:08:37,269 --> 01:08:35,920

basic ability to be intelligent

1936

01:08:39,269 --> 01:08:37,279

uh to

1937

01:08:42,070 --> 01:08:39,279

find certain things relevant rather than

1938

01:08:44,070 --> 01:08:42,080

others to pay attention to here uh to

1939

01:08:47,269 --> 01:08:44,080

see the relevance of certain acts to

1940

01:08:50,950 --> 01:08:48,709

and doesn't that mean therefore that

1941

01:08:54,070 --> 01:08:50,960

consciousness and

1942

01:08:55,110 --> 01:08:54,080

intelligence and rationality are just as

1943

01:08:57,430 --> 01:08:55,120

real

1944

01:09:03,269 --> 01:08:57,440

as anything else that we posit to be

1945

01:09:08,950 --> 01:09:06,070

the question is what is real and it's a

1946

01:09:10,870 --> 01:09:08,960

it's a tricky question it's one question

1947

01:09:13,430 --> 01:09:10,880

yes uh

1948

01:09:15,430 --> 01:09:13,440

the property of ex being experientially

1949

01:09:16,789 --> 01:09:15,440

real requires i think that it needs to

1950

01:09:19,110 --> 01:09:16,799

be in our mind

1951

01:09:20,950 --> 01:09:19,120

so uh there is no way in which you can

1952

01:09:22,630 --> 01:09:20,960

wake up from the dream in your mind and

1953

01:09:23,910 --> 01:09:22,640

still exist because

1954

01:09:25,430 --> 01:09:23,920

out there in physics you are not

1955

01:09:27,590 --> 01:09:25,440

conscious neurons are not conscious

1956

01:09:29,430 --> 01:09:27,600

brains are not conscious physical

1957

01:09:31,189 --> 01:09:29,440

apparatuses are not conscious you need

1958

01:09:33,990 --> 01:09:31,199

to be inside of that dream

1959

01:09:36,149 --> 01:09:34,000

so if you ever transcend the dream

1960

01:09:37,829 --> 01:09:36,159

you will not be there the experience of

1961

01:09:39,829 --> 01:09:37,839

waking up is something that you dream

1962

01:09:41,910 --> 01:09:39,839

you can only

1963

01:09:43,910 --> 01:09:41,920

experience waking up while you are still

1964

01:09:45,269 --> 01:09:43,920

in a dream

1965

01:09:47,030 --> 01:09:45,279

and so

1966

01:09:48,789 --> 01:09:47,040

you're not going to wake up in some any

1967

01:09:49,669 --> 01:09:48,799

kind of reality

1968

01:09:51,510 --> 01:09:49,679

and

1969

01:09:53,110 --> 01:09:51,520

there is this big question why there is

1970

01:09:55,830 --> 01:09:53,120

something rather than nothing it seems

1971

01:09:57,590 --> 01:09:55,840

to be hard to deny that something exists

1972

01:09:59,510 --> 01:09:57,600

and it's difficult to figure out how

1973

01:10:01,189 --> 01:09:59,520

it's possible that there is something

1974

01:10:04,550 --> 01:10:01,199

rather than nothing

1975

01:10:06,709 --> 01:10:04,560

and the easiest explanation that uh

1976

01:10:07,750 --> 01:10:06,719

the foundational physicists that i've so

1977

01:10:10,870 --> 01:10:07,760

far been

1978

01:10:13,189 --> 01:10:10,880

talked to have come up with is is

1979

01:10:15,430 --> 01:10:13,199

always the same

1980

01:10:17,990 --> 01:10:15,440

so and rather than positioning that for

1981

01:10:20,229 --> 01:10:18,000

some funny reason something exists and

1982

01:10:23,910 --> 01:10:20,239

all the other things do not exist

1983

01:10:24,950 --> 01:10:23,920

uh maybe existence is the default

1984

01:10:30,870 --> 01:10:24,960

so

1985

01:10:32,630 --> 01:10:30,880

as our intuition says that

1986

01:10:34,470 --> 01:10:32,640

basically nothing exists by itself by

1987

01:10:36,149 --> 01:10:34,480

default and then something needs to be

1988

01:10:38,149 --> 01:10:36,159

brought into existence somehow from

1989

01:10:40,310 --> 01:10:38,159

first principles the an easier

1990

01:10:42,630 --> 01:10:40,320

explanation is to reduce this depth is

1991

01:10:45,110 --> 01:10:42,640

to say that well just everything exists

1992

01:10:47,669 --> 01:10:45,120

and we have to now explain why something

1993

01:10:49,669 --> 01:10:47,679

don't seem to be the case

1994

01:10:51,830 --> 01:10:49,679

and so what would it mean for something

1995

01:10:53,270 --> 01:10:51,840

to exist in in my understanding for

1996

01:10:55,669 --> 01:10:53,280

something to exist it needs to be

1997

01:10:58,149 --> 01:10:55,679

implemented

1998

01:11:00,310 --> 01:10:58,159

and i i would say that

1999

01:11:01,590 --> 01:11:00,320

many things only exist to an approximate

2000

01:11:04,470 --> 01:11:01,600

degree

2001

01:11:06,870 --> 01:11:04,480

so for instance um this cup here exists

2002

01:11:08,950 --> 01:11:06,880

to a very good approximate degree right

2003

01:11:10,550 --> 01:11:08,960

it's a certain idea that i can project

2004

01:11:12,550 --> 01:11:10,560

consistently in the universe that gives

2005

01:11:13,750 --> 01:11:12,560

me certain affordances and it's stable

2006

01:11:15,430 --> 01:11:13,760

for a pretty long time and there are

2007

01:11:17,510 --> 01:11:15,440

well-defined conditions for the most

2008

01:11:20,149 --> 01:11:17,520

part for when this model falls apart and

2009

01:11:20,950 --> 01:11:20,159

i can no longer treat this as a cup

2010

01:11:23,030 --> 01:11:20,960

and

2011

01:11:25,110 --> 01:11:23,040

for instance when it breaks or when my

2012

01:11:27,270 --> 01:11:25,120

ability to interact with it breaks or

2013

01:11:28,950 --> 01:11:27,280

when the local physical continuum breaks

2014

01:11:31,030 --> 01:11:28,960

in such a way that the parts no longer

2015

01:11:32,790 --> 01:11:31,040

neatly assemble into a cup and so on

2016

01:11:34,229 --> 01:11:32,800

right so there are certain boundary

2017

01:11:36,950 --> 01:11:34,239

conditions where the cupness would no

2018

01:11:39,669 --> 01:11:36,960

longer hold but for the most part the

2019

01:11:41,590 --> 01:11:39,679

cup is very stable if i take rationality

2020

01:11:44,470 --> 01:11:41,600

as an object become slightly more fishy

2021

01:11:45,590 --> 01:11:44,480

or if i take my own personal identity as

2022

01:11:48,310 --> 01:11:45,600

an object

2023

01:11:49,590 --> 01:11:48,320

my own existence it becomes superficial

2024

01:11:51,830 --> 01:11:49,600

because

2025

01:11:53,510 --> 01:11:51,840

to which degree do i really stably exist

2026

01:11:55,430 --> 01:11:53,520

and to which degree is this a fiction

2027

01:11:57,350 --> 01:11:55,440

that i conveniently maintain to be able

2028

01:12:00,390 --> 01:11:57,360

to reason about myself over extended

2029

01:12:02,550 --> 01:12:00,400

time spans i think that i probably don't

2030

01:12:05,270 --> 01:12:02,560

exist in to the same

2031

01:12:07,270 --> 01:12:05,280

degree of solidity as the cup exists i'm

2032

01:12:08,950 --> 01:12:07,280

much more approximate i'm much more like

2033

01:12:09,990 --> 01:12:08,960

a voice in the wind blowing through the

2034

01:12:12,550 --> 01:12:10,000

mountains

2035

01:12:13,430 --> 01:12:12,560

my existence is much more virtual and

2036

01:12:15,430 --> 01:12:13,440

vague

2037

01:12:16,950 --> 01:12:15,440

and approximate than the existence of

2038

01:12:19,270 --> 01:12:16,960

the cup itself

2039

01:12:21,189 --> 01:12:19,280

if i go back to this notion of why there

2040

01:12:22,950 --> 01:12:21,199

is something rather than nothing and all

2041

01:12:25,430 --> 01:12:22,960

these things that can be implemented

2042

01:12:27,030 --> 01:12:25,440

exist that cup is implemented in physics

2043

01:12:28,950 --> 01:12:27,040

to uh to a

2044

01:12:31,189 --> 01:12:28,960

tighter degree than i am implemented in

2045

01:12:33,110 --> 01:12:31,199

physics i'm much more approximately

2046

01:12:35,110 --> 01:12:33,120

implemented

2047

01:12:37,030 --> 01:12:35,120

i would say that

2048

01:12:39,270 --> 01:12:37,040

what can be implemented are ultimately

2049

01:12:41,750 --> 01:12:39,280

finite automata it's also the only part

2050

01:12:44,070 --> 01:12:41,760

of mathematics that works that's

2051

01:12:46,070 --> 01:12:44,080

the implication of goodwill's discovery

2052

01:12:47,990 --> 01:12:46,080

that we have to go away from stateless

2053

01:12:50,790 --> 01:12:48,000

mathematics and instead what we get are

2054

01:12:52,550 --> 01:12:50,800

automata and we cannot define infinity

2055

01:12:55,189 --> 01:12:52,560

without running into contradictions in

2056

01:12:56,390 --> 01:12:55,199

the languages in which we do it

2057

01:12:58,630 --> 01:12:56,400

you mentioned that there are many

2058

01:13:00,709 --> 01:12:58,640

different ways to define logic and

2059

01:13:02,550 --> 01:13:00,719

different logics ultimately they come

2060

01:13:04,630 --> 01:13:02,560

down to the same thing that was also

2061

01:13:07,110 --> 01:13:04,640

part of this big discovery that we made

2062

01:13:09,189 --> 01:13:07,120

in the 20th century that all the ways in

2063

01:13:11,270 --> 01:13:09,199

which we can define logic and

2064

01:13:12,550 --> 01:13:11,280
computation and so on are

2065

01:13:16,630 --> 01:13:12,560
the same

2066

01:13:18,709 --> 01:13:16,640
so the turing machine and the post

2067

01:13:21,510 --> 01:13:18,719
machine and the lambda calculus and the

2068

01:13:24,390 --> 01:13:21,520
combinators and boolean logic

2069

01:13:25,830 --> 01:13:24,400
and specific programming languages and

2070

01:13:27,750 --> 01:13:25,840
the different approaches to define

2071

01:13:29,750 --> 01:13:27,760
constructive mathematics turn out to be

2072

01:13:31,030 --> 01:13:29,760
equivalent

2073

01:13:33,110 --> 01:13:31,040
there are some

2074

01:13:35,030 --> 01:13:33,120
tight small elements at the boundaries

2075

01:13:37,510 --> 01:13:35,040
and so on where we could uh get into

2076

01:13:40,070 --> 01:13:37,520

debates but by and large uh they

2077

01:13:42,070 --> 01:13:40,080

all turn out to be uh

2078

01:13:44,470 --> 01:13:42,080

this mappings between these systems and

2079

01:13:47,270 --> 01:13:44,480

these mappings can all happen in

2080

01:13:50,149 --> 01:13:47,280

polynomial time or in constant time

2081

01:13:51,910 --> 01:13:50,159

and uh so it's not so bad

2082

01:13:54,070 --> 01:13:51,920

the logic can be solved if you look at

2083

01:13:55,590 --> 01:13:54,080

geometry there is not this question oh

2084

01:13:57,669 --> 01:13:55,600

my god there is not just euclidean

2085

01:13:59,750 --> 01:13:57,679

geometry but there's also non-euclidean

2086

01:14:00,790 --> 01:13:59,760

geometry these are not fundamentally

2087

01:14:03,350 --> 01:14:00,800

different it's just that the

2088

01:14:05,830 --> 01:14:03,360

non-occlusion geometry relaxes one of

2089

01:14:07,750 --> 01:14:05,840

the conditions which means the space in

2090

01:14:10,070 --> 01:14:07,760

which geometry takes place doesn't need

2091

01:14:12,390 --> 01:14:10,080

to be flat the space can have curvature

2092

01:14:14,709 --> 01:14:12,400

or it can be we can go beyond this and

2093

01:14:16,709 --> 01:14:14,719

it can be very irregular and so on and

2094

01:14:19,270 --> 01:14:16,719

it turns out that geometry is the

2095

01:14:20,149 --> 01:14:19,280

mathematics of too many parts to count i

2096

01:14:22,070 --> 01:14:20,159

think

2097

01:14:25,189 --> 01:14:22,080

so as soon as we have too many parts to

2098

01:14:28,070 --> 01:14:25,199

count uh the way in which we can perform

2099

01:14:30,149 --> 01:14:28,080

calculations is that we need to identify

2100

01:14:32,630 --> 01:14:30,159

operators that converge in the limit

2101

01:14:34,310 --> 01:14:32,640

which means if you have trillions of

2102

01:14:36,149 --> 01:14:34,320

parts and you add one more part the

2103

01:14:38,470 --> 01:14:36,159

result doesn't change perceptively in

2104

01:14:39,830 --> 01:14:38,480

any way right and this is uh when you

2105

01:14:41,590 --> 01:14:39,840

have something where you converge

2106

01:14:43,669 --> 01:14:41,600

approximately against infinity when you

2107

01:14:46,070 --> 01:14:43,679

have approximate continuity

2108

01:14:47,350 --> 01:14:46,080

and the set of operators that converge

2109

01:14:48,870 --> 01:14:47,360

in the limit when you have too many

2110

01:14:50,630 --> 01:14:48,880

parts to count this is practically what

2111

01:14:53,270 --> 01:14:50,640

we mean by geometry

2112

01:14:55,189 --> 01:14:53,280

so it's a particular way to model worlds

2113

01:14:57,189 --> 01:14:55,199

that are made of too many parts to keep

2114

01:14:59,110 --> 01:14:57,199

track of the individual parts

2115

01:15:00,870 --> 01:14:59,120

and of course our brain is largely

2116

01:15:02,870 --> 01:15:00,880

confronted with the world at such a

2117

01:15:05,350 --> 01:15:02,880

level where there are too many atoms to

2118

01:15:06,709 --> 01:15:05,360

count too many molecules too many people

2119

01:15:08,310 --> 01:15:06,719

to count

2120

01:15:10,630 --> 01:15:08,320

too many uh

2121

01:15:12,390 --> 01:15:10,640

dollars to count and so on and so we

2122

01:15:13,830 --> 01:15:12,400

treat them as continuous values and we

2123

01:15:16,470 --> 01:15:13,840

look at the limit dynamics and we have

2124

01:15:19,590 --> 01:15:16,480

geometric models

2125

01:15:21,830 --> 01:15:19,600

um two points the the first is um i i'm

2126

01:15:24,149 --> 01:15:21,840

not going to make arguments about uh the

2127

01:15:26,229 --> 01:15:24,159

interrelations of logic i i was making

2128

01:15:28,070 --> 01:15:26,239

an argument that kant took something to

2129

01:15:30,229 --> 01:15:28,080

be a priori he didn't know everything

2130

01:15:32,870 --> 01:15:30,239

you just said and so his judgments about

2131

01:15:34,790 --> 01:15:32,880

what was the priority were incorrect um

2132

01:15:37,750 --> 01:15:34,800

it's plausible that uh

2133

01:15:39,910 --> 01:15:37,760

that's also the case for us um and so

2134

01:15:42,630 --> 01:15:39,920

that's all i meant to say about that um

2135

01:15:45,430 --> 01:15:42,640

i want to go back to the cup and me

2136

01:15:47,430 --> 01:15:45,440

um or the cup and you um because it

2137

01:15:49,270 --> 01:15:47,440

seems to me given your ontology and your

2138

01:15:51,030 --> 01:15:49,280

epistemology the cup is and i think

2139

01:15:54,070 --> 01:15:51,040

you're saying that the cup is a fiction

2140

01:15:55,510 --> 01:15:54,080

as well um and so you're a fiction the

2141

01:15:58,310 --> 01:15:55,520

cup is a fiction

2142

01:15:59,830 --> 01:15:58,320

and yet the physics seems to not be

2143

01:16:03,110 --> 01:15:59,840

fictional for you

2144

01:16:05,750 --> 01:16:03,120

and yet i don't know how we get to the

2145

01:16:08,630 --> 01:16:05,760

physics without objects like cops and

2146

01:16:11,189 --> 01:16:08,640

people like you and i uh the physics is

2147

01:16:13,270 --> 01:16:11,199

generated by people like you and i using

2148

01:16:15,270 --> 01:16:13,280

instruments that are like microscopes

2149

01:16:17,750 --> 01:16:15,280

and whatever that are just like the cop

2150

01:16:20,070 --> 01:16:17,760

um and therefore

2151
01:16:22,870 --> 01:16:20,080
how do all these fictional beings using

2152
01:16:25,750 --> 01:16:22,880
fictional devices come up with the

2153
01:16:27,030 --> 01:16:25,760
physics that is really the case

2154
01:16:27,910 --> 01:16:27,040
it seems to me

2155
01:16:32,870 --> 01:16:27,920
that

2156
01:16:34,630 --> 01:16:32,880
people doing the science are as as real

2157
01:16:37,189 --> 01:16:34,640
as the science itself

2158
01:16:39,910 --> 01:16:37,199
um and that

2159
01:16:42,870 --> 01:16:39,920
would tend to say that the cup has a

2160
01:16:45,350 --> 01:16:42,880
kind of reality to it um

2161
01:16:47,350 --> 01:16:45,360
and you have a kind of reality to it

2162
01:16:49,590 --> 01:16:47,360
that are have to be assumed for the

2163
01:16:52,149 --> 01:16:49,600

practice of physics itself that's that's

2164

01:16:53,590 --> 01:16:52,159

what i was trying to say now you may be

2165

01:16:55,270 --> 01:16:53,600

saying

2166

01:16:56,229 --> 01:16:55,280

physics doesn't have an ontology for

2167

01:16:58,070 --> 01:16:56,239

cups

2168

01:17:00,630 --> 01:16:58,080

i i totally get that

2169

01:17:03,030 --> 01:17:00,640

what i'm saying is why should physics

2170

01:17:04,790 --> 01:17:03,040

have the monopoly on our ontology what's

2171

01:17:08,070 --> 01:17:04,800

the argument for that given the

2172

01:17:10,630 --> 01:17:08,080

epistemology and the the psychology that

2173

01:17:13,350 --> 01:17:10,640

you're advancing here it seems to me

2174

01:17:17,750 --> 01:17:13,360

like our ontology is much more rich

2175

01:17:19,110 --> 01:17:17,760

than our current physics is capable of

2176

01:17:21,110 --> 01:17:19,120

incorporating

2177

01:17:24,550 --> 01:17:21,120

that's what i'm trying to get at uh for

2178

01:17:26,550 --> 01:17:24,560

example um you you said you're not as

2179

01:17:28,390 --> 01:17:26,560

stable as the cop well you sort of have

2180

01:17:30,229 --> 01:17:28,400

to be i mean

2181

01:17:31,510 --> 01:17:30,239

there has to be a continuity in you

2182

01:17:33,590 --> 01:17:31,520

there's a right

2183

01:17:35,030 --> 01:17:33,600

as i move around the object it's not

2184

01:17:37,270 --> 01:17:35,040

just that i have to find a continuity in

2185

01:17:39,590 --> 01:17:37,280

the object there has to be a continuity

2186

01:17:42,470 --> 01:17:39,600

in me as a knower in order for the

2187

01:17:43,830 --> 01:17:42,480

stability of that object to be possible

2188

01:17:45,910 --> 01:17:43,840

i also have to

2189

01:17:48,870 --> 01:17:45,920

have some kind of continuity

2190

01:17:50,310 --> 01:17:48,880

i again i'm trying to get at

2191

01:17:51,350 --> 01:17:50,320

well

2192

01:17:53,030 --> 01:17:51,360

because

2193

01:17:55,910 --> 01:17:53,040

i'm sorry

2194

01:17:58,470 --> 01:17:55,920

we got into this and and maybe we both

2195

01:18:00,470 --> 01:17:58,480

uh have taken each other too far afield

2196

01:18:02,550 --> 01:18:00,480

uh we got into this because i asked you

2197

01:18:04,470 --> 01:18:02,560

just like what you you

2198

01:18:07,270 --> 01:18:04,480

were dealing with uh you know the

2199

01:18:08,870 --> 01:18:07,280

dualism problem that descartes gave us

2200

01:18:10,630 --> 01:18:08,880

and then you said there isn't a problem

2201

01:18:11,830 --> 01:18:10,640

because it's all sort of

2202

01:18:13,830 --> 01:18:11,840

i heard you saying sort of all

2203

01:18:15,510 --> 01:18:13,840

constructed in the mind

2204

01:18:17,430 --> 01:18:15,520

but then if it's all constructed in the

2205

01:18:19,510 --> 01:18:17,440

mind so is all the things and all the

2206

01:18:21,189 --> 01:18:19,520

tools by which we did the physics

2207

01:18:22,870 --> 01:18:21,199

like i would be

2208

01:18:24,709 --> 01:18:22,880

let's use your analogy

2209

01:18:26,310 --> 01:18:24,719

the physics i wouldn't trust the physics

2210

01:18:28,229 --> 01:18:26,320

i'm doing in a dream if i knew it was a

2211

01:18:30,870 --> 01:18:28,239

dream

2212

01:18:32,229 --> 01:18:30,880

and if i know it's a simulation which

2213

01:18:34,709 --> 01:18:32,239

you were claiming

2214

01:18:35,910 --> 01:18:34,719

why should i trust the physics

2215

01:18:39,189 --> 01:18:35,920

that are occurring within that

2216

01:18:42,310 --> 01:18:39,199

simulation it seems to me that there is

2217

01:18:44,630 --> 01:18:42,320

an ontology richer than physics that is

2218

01:18:46,950 --> 01:18:44,640

needed in order to make the kind of

2219

01:18:49,350 --> 01:18:46,960

arguments you're making

2220

01:18:51,350 --> 01:18:49,360

so uh first of all don't worry you don't

2221

01:18:52,950 --> 01:18:51,360

need to apologize for taking us too far

2222

01:18:54,870 --> 01:18:52,960

afield that can take us back it's no

2223

01:18:57,430 --> 01:18:54,880

issue if we feel that we are going too

2224

01:18:58,390 --> 01:18:57,440

far out here there are two ways in which

2225

01:19:00,470 --> 01:18:58,400

i can

2226

01:19:02,870 --> 01:19:00,480

experience physics one is in a lucid

2227

01:19:04,870 --> 01:19:02,880

dream for instance i can test whether

2228

01:19:06,870 --> 01:19:04,880

i'm in dream or not usually for instance

2229

01:19:08,390 --> 01:19:06,880

by operating a light switch i found that

2230

01:19:10,070 --> 01:19:08,400

in lucid dreams light switches for the

2231

01:19:11,830 --> 01:19:10,080

most part don't work

2232

01:19:14,149 --> 01:19:11,840

it's a funny thing but they don't

2233

01:19:15,590 --> 01:19:14,159

another thing is when you read uh text

2234

01:19:17,270 --> 01:19:15,600

on a page

2235

01:19:18,310 --> 01:19:17,280

it's difficult to read the same text

2236

01:19:19,830 --> 01:19:18,320

twice

2237

01:19:22,790 --> 01:19:19,840

you might have noticed this in dreams

2238

01:19:24,630 --> 01:19:22,800

right and this seems to be a limitation

2239

01:19:26,950 --> 01:19:24,640

of the way in which our working memory

2240

01:19:29,189 --> 01:19:26,960

works so i suspect that the lucid dream

2241

01:19:31,430 --> 01:19:29,199

has to store all its state in working

2242

01:19:33,510 --> 01:19:31,440

memory and the causal structure that is

2243

01:19:36,790 --> 01:19:33,520

stable in the dream has to be held there

2244

01:19:38,870 --> 01:19:36,800

and as the limit to how many bits can be

2245

01:19:41,669 --> 01:19:38,880

held in our working memory and as a

2246

01:19:43,830 --> 01:19:41,679

result the complexity of the physics

2247

01:19:45,030 --> 01:19:43,840

simulation in our own dream

2248

01:19:47,030 --> 01:19:45,040

is limited

2249

01:19:48,470 --> 01:19:47,040

and this means that when we want to have

2250

01:19:50,470 --> 01:19:48,480

a physics simulation that is more

2251

01:19:52,790 --> 01:19:50,480

detailed we probably need to have state

2252

01:19:53,990 --> 01:19:52,800

that is stored outside of our mind for

2253

01:19:55,510 --> 01:19:54,000

practical reasons it's not a

2254

01:19:58,149 --> 01:19:55,520

philosophical argument it's just

2255

01:20:00,229 --> 01:19:58,159

practical observation so if you uh want

2256

01:20:02,950 --> 01:20:00,239

to experience a world in which light

2257

01:20:05,350 --> 01:20:02,960

switches work you need to store some

2258

01:20:07,430 --> 01:20:05,360

state outside of your working memory uh

2259

01:20:09,430 --> 01:20:07,440

in in the in some substrate that is

2260

01:20:12,149 --> 01:20:09,440

outside of your mind and this could be a

2261

01:20:13,669 --> 01:20:12,159

physical room so for practical purposes

2262

01:20:15,189 --> 01:20:13,679

if you ever find yourself in the

2263

01:20:17,110 --> 01:20:15,199

situation that you need to figure out

2264

01:20:18,630 --> 01:20:17,120

whether you are dreaming this or not you

2265

01:20:19,590 --> 01:20:18,640

could uh try

2266

01:20:21,669 --> 01:20:19,600

uh

2267

01:20:23,350 --> 01:20:21,679

to rely on processes the environment and

2268

01:20:25,510 --> 01:20:23,360

test for the existence of process

2269

01:20:27,270 --> 01:20:25,520

environment that you need to update a

2270

01:20:29,590 --> 01:20:27,280

lot of state to be stable and you check

2271

01:20:30,870 --> 01:20:29,600

for the stability of the state of course

2272

01:20:32,470 --> 01:20:30,880

there could still be some kind of

2273

01:20:34,390 --> 01:20:32,480

conspiracy going on so this is not

2274

01:20:36,470 --> 01:20:34,400

foolproof if an evil scientist is

2275

01:20:38,070 --> 01:20:36,480

messing with you then the evil scientist

2276

01:20:40,470 --> 01:20:38,080

might be able to change your memories of

2277

01:20:42,070 --> 01:20:40,480

what just happened and or might be

2278

01:20:44,390 --> 01:20:42,080

interjecting

2279

01:20:45,669 --> 01:20:44,400

weird things in there but the question

2280

01:20:49,110 --> 01:20:45,679

that we want to answer on the other

2281

01:20:52,310 --> 01:20:49,120

level is is there a conspiracy going on

2282

01:20:54,630 --> 01:20:52,320

and the idea that is underlying physics

2283

01:20:56,630 --> 01:20:54,640

is not complicated assumptions about the

2284

01:21:00,630 --> 01:20:56,640

notion of energy time space and

2285

01:21:02,390 --> 01:21:00,640

causality and so on these are all uh

2286

01:21:04,310 --> 01:21:02,400

things that we infer at some level

2287

01:21:06,550 --> 01:21:04,320

they're not assumptions that we need to

2288

01:21:07,510 --> 01:21:06,560

presuppose to make physics work the

2289

01:21:09,669 --> 01:21:07,520

basic

2290

01:21:12,070 --> 01:21:09,679

assumption in physics is maybe there is

2291

01:21:14,390 --> 01:21:12,080

no conspiracy

2292

01:21:16,470 --> 01:21:14,400

maybe this is just mechanical

2293

01:21:19,270 --> 01:21:16,480

and we have to understand why that is

2294

01:21:21,510 --> 01:21:19,280

the case and uh the uh idealist

2295

01:21:24,790 --> 01:21:21,520

assumption is there is a conspiracy we

2296

01:21:26,870 --> 01:21:24,800

do live in a simulation and uh this uh

2297

01:21:27,910 --> 01:21:26,880

idealism is not solving anything in a

2298

01:21:29,910 --> 01:21:27,920

way that

2299

01:21:32,149 --> 01:21:29,920

physics is not solving it

2300

01:21:34,709 --> 01:21:32,159

you still have to if you want to explain

2301

01:21:36,310 --> 01:21:34,719

what's going on uh and make a claim that

2302

01:21:38,550 --> 01:21:36,320

you now understand how the universe

2303

01:21:39,350 --> 01:21:38,560

works how that conspiracy could possibly

2304

01:21:41,189 --> 01:21:39,360

work

2305

01:21:43,189 --> 01:21:41,199

and explaining the conspiracy is

2306

01:21:45,830 --> 01:21:43,199

intrinsically harder

2307

01:21:47,110 --> 01:21:45,840

if you deny the possibility of any kind

2308

01:21:49,030 --> 01:21:47,120

of physics

2309

01:21:51,189 --> 01:21:49,040

and physics just being the mechanical

2310

01:21:53,510 --> 01:21:51,199

explanation

2311

01:21:55,750 --> 01:21:53,520

i'll come back to the point of i

2312

01:21:57,830 --> 01:21:55,760

i don't know if we infer certain things

2313

01:22:00,229 --> 01:21:57,840

or our inferences presuppose them we can

2314

01:22:02,470 --> 01:22:00,239

come back to that in a minute um

2315

01:22:03,910 --> 01:22:02,480

but but i mean we're in a position at

2316

01:22:06,149 --> 01:22:03,920

least that's what i hear you saying

2317

01:22:07,830 --> 01:22:06,159

different from descartes right person

2318

01:22:09,910 --> 01:22:07,840

being uh

2319

01:22:12,629 --> 01:22:09,920

you know beset by the dick the cartesian

2320

01:22:14,149 --> 01:22:12,639

demon because

2321

01:22:16,310 --> 01:22:14,159

i hear you saying

2322

01:22:19,110 --> 01:22:16,320

i know that i'm in a simulation

2323

01:22:22,149 --> 01:22:19,120

which is precisely what can't happen so

2324

01:22:24,149 --> 01:22:22,159

i i i i agree i'm excluding

2325

01:22:25,590 --> 01:22:24,159

the the cartesian demon for because as

2326

01:22:29,189 --> 01:22:25,600

you say there's no way out of that that

2327

01:22:30,629 --> 01:22:29,199

well right if i doubt my compa i'm

2328

01:22:32,390 --> 01:22:30,639

doubting whether or not my doubt is like

2329

01:22:34,390 --> 01:22:32,400

you can just fall forever and ever i get

2330

01:22:36,070 --> 01:22:34,400

that i i'm not saying that

2331

01:22:38,390 --> 01:22:36,080

what i'm saying is though but you you

2332

01:22:39,189 --> 01:22:38,400

we're we're not in that

2333

01:23:05,030 --> 01:22:39,199

i

2334

01:23:08,390 --> 01:23:05,040

what's real because that would be the

2335

01:23:11,510 --> 01:23:08,400

only thing i could use to contrast uh

2336

01:23:13,510 --> 01:23:11,520

with like my subjective experience right

2337

01:23:15,030 --> 01:23:13,520

in order to say i know that i'm inside

2338

01:23:16,149 --> 01:23:15,040

something i have to be able to give you

2339

01:23:17,830 --> 01:23:16,159

good reason for believing there's

2340

01:23:20,629 --> 01:23:17,840

something outside of me

2341

01:23:22,709 --> 01:23:20,639

right and that that that outside of me

2342

01:23:24,790 --> 01:23:22,719

also has to have access

2343

01:23:27,430 --> 01:23:24,800

um i'm not saying direct access i'm not

2344

01:23:29,350 --> 01:23:27,440

a naive empiricist it has to have access

2345

01:23:31,910 --> 01:23:29,360

to my consciousness and my reason or my

2346

01:23:34,149 --> 01:23:31,920

intelligence or again i can't actually

2347

01:23:39,189 --> 01:23:34,159

posit the very model that i'm using to

2348

01:23:44,870 --> 01:23:41,750

yeah so if we try to understand this

2349

01:23:47,990 --> 01:23:44,880

situation to me it's very uh

2350

01:23:51,270 --> 01:23:48,000

it's almost capable to be in a similar

2351

01:23:55,350 --> 01:23:51,280

situation as a robot living inside of

2352

01:23:58,070 --> 01:23:55,360

some kind of computer and this

2353

01:24:00,229 --> 01:23:58,080

computer is set up in such a way that it

2354

01:24:02,870 --> 01:24:00,239

provides affordances to an external

2355

01:24:04,629 --> 01:24:02,880

environment and now uh the uh

2356

01:24:07,189 --> 01:24:04,639

computational system that lives inside

2357

01:24:09,830 --> 01:24:07,199

of that computer uh this set of

2358

01:24:11,669 --> 01:24:09,840

organized patterns that we call software

2359

01:24:13,750 --> 01:24:11,679

is set up in such a way that it can

2360

01:24:16,149 --> 01:24:13,760

discover regularities and the patterns

2361

01:24:18,310 --> 01:24:16,159

and extend its affordances into this

2362

01:24:20,470 --> 01:24:18,320

environment and and thereby make sense

2363

01:24:22,070 --> 01:24:20,480

of the environment and it seems to me

2364

01:24:24,229 --> 01:24:22,080

that i am uh

2365

01:24:25,990 --> 01:24:24,239

i find myself in arrangement that is

2366

01:24:28,470 --> 01:24:26,000

indistinguishable from this description

2367

01:24:31,030 --> 01:24:28,480

that is intimately familiar to me if i'm

2368

01:24:33,030 --> 01:24:31,040

an ai researcher

2369

01:24:35,430 --> 01:24:33,040

right i guess the question i'm asking

2370

01:24:37,669 --> 01:24:35,440

you in your example is it possible for

2371

01:24:42,550 --> 01:24:37,679

the robot to discover that it is inside

2372

01:24:47,669 --> 01:24:45,510

um yes i think it is but uh there are

2373

01:24:49,750 --> 01:24:47,679

certain limitations to this and i think

2374

01:24:51,350 --> 01:24:49,760

that you can discover this from in a

2375

01:24:53,910 --> 01:24:51,360

sense from first principles because

2376

01:24:55,510 --> 01:24:53,920

there are no alternatives there are many

2377

01:24:57,430 --> 01:24:55,520

uh ways in which you can map this

2378

01:24:59,510 --> 01:24:57,440

conceptually so the ways in which you

2379

01:25:01,590 --> 01:24:59,520

depict these entities because they are

2380

01:25:03,189 --> 01:25:01,600

not entities that are defined by

2381

01:25:05,750 --> 01:25:03,199

physical appearances they are not

2382

01:25:08,310 --> 01:25:05,760

defined by res extensor they are defined

2383

01:25:10,390 --> 01:25:08,320

by certain conceptual relationships

2384

01:25:12,470 --> 01:25:10,400

and it turns out that all the ways i

2385

01:25:15,110 --> 01:25:12,480

think in which a mind can exist as an

2386

01:25:15,910 --> 01:25:15,120

apparent pattern and control structure

2387

01:25:17,669 --> 01:25:15,920

are

2388

01:25:19,430 --> 01:25:17,679

can be mapped

2389

01:25:21,270 --> 01:25:19,440

structurally

2390

01:25:24,070 --> 01:25:21,280

in first principles on conceptual

2391

01:25:27,030 --> 01:25:24,080

structures that are equivalent so we

2392

01:25:29,350 --> 01:25:27,040

this might disagree about

2393

01:25:30,950 --> 01:25:29,360

how this computer is set up this is the

2394

01:25:32,709 --> 01:25:30,960

von neumann architecture or anything

2395

01:25:34,470 --> 01:25:32,719

else and there is no possible way to

2396

01:25:36,950 --> 01:25:34,480

distinguish them and there is no claim

2397

01:25:39,189 --> 01:25:36,960

to this uh how this actually works we

2398

01:25:41,590 --> 01:25:39,199

know that the biological systems that

2399

01:25:42,310 --> 01:25:41,600

are able to process information work in

2400

01:25:43,750 --> 01:25:42,320

uh

2401

01:25:45,669 --> 01:25:43,760

dramatically different ways from the

2402

01:25:47,590 --> 01:25:45,679

technological systems that we have built

2403

01:25:49,590 --> 01:25:47,600

to process information and so on and we

2404

01:25:52,229 --> 01:25:49,600

don't have disagreement about this but

2405

01:25:54,470 --> 01:25:52,239

we also know that uh there is a certain

2406

01:25:56,870 --> 01:25:54,480

deep conceptual level and equivalence of

2407

01:25:59,590 --> 01:25:56,880

what they can do

2408

01:26:02,070 --> 01:25:59,600

i agree with that and so now it's

2409

01:26:03,350 --> 01:26:02,080

what it sounds like you're saying is

2410

01:26:04,229 --> 01:26:03,360

um

2411

01:26:09,350 --> 01:26:04,239

the

2412

01:26:11,189 --> 01:26:09,360

that are sort of accessible to my priori

2413

01:26:12,629 --> 01:26:11,199

reason and that that's what i use in

2414

01:26:15,350 --> 01:26:12,639

order to determine

2415

01:26:18,310 --> 01:26:15,360

i'm within the welter of experience and

2416

01:26:20,629 --> 01:26:18,320

i use my priori ability to make sense of

2417

01:26:23,189 --> 01:26:20,639

things and that helps me sort through

2418

01:26:24,070 --> 01:26:23,199

and sift through um those that are going

2419

01:26:27,430 --> 01:26:24,080

to

2420

01:26:30,629 --> 01:26:27,440

let me know that i'm inside a simulation

2421

01:26:31,430 --> 01:26:30,639

um and then that that says to me

2422

01:26:33,590 --> 01:26:31,440

that

2423

01:26:35,030 --> 01:26:33,600

what's ultimately real for you and you

2424

01:26:36,629 --> 01:26:35,040

invoke the archetypes at one point when

2425

01:26:38,070 --> 01:26:36,639

you talk about the cop you said you're

2426

01:26:39,669 --> 01:26:38,080

you're you're sounding to me like a

2427

01:26:41,750 --> 01:26:39,679

platonus you're sounding me like you're

2428

01:26:44,310 --> 01:26:41,760

saying what's ultimately real

2429

01:26:46,709 --> 01:26:44,320

are sort of the mathematical objects

2430

01:26:49,270 --> 01:26:46,719

accessible throughout prior reality and

2431

01:26:51,270 --> 01:26:49,280

everything else is less real than them

2432

01:26:53,189 --> 01:26:51,280

and it's like i mean plato has the first

2433

01:26:54,629 --> 01:26:53,199

simulation theory around you're inside

2434

01:26:56,790 --> 01:26:54,639

the cave and you're only looking at the

2435

01:26:58,310 --> 01:26:56,800

shadows and the echoes and you have to

2436

01:27:00,709 --> 01:26:58,320

make your way out

2437

01:27:02,790 --> 01:27:00,719

is that a fair reading

2438

01:27:05,510 --> 01:27:02,800

almost i think that an archetype is an

2439

01:27:07,189 --> 01:27:05,520

optimum and a description function

2440

01:27:09,030 --> 01:27:07,199

it's in some sense a mathematical

2441

01:27:11,030 --> 01:27:09,040

regularity in the same sense as the

2442

01:27:13,830 --> 01:27:11,040

greek gods are archetypes personality

2443

01:27:15,830 --> 01:27:13,840

archetypes that basically if you take a

2444

01:27:17,830 --> 01:27:15,840

space of personality properties and

2445

01:27:18,870 --> 01:27:17,840

their interaction

2446

01:27:20,310 --> 01:27:18,880

right they

2447

01:27:21,270 --> 01:27:20,320

interact with each other and you

2448

01:27:23,669 --> 01:27:21,280

basically

2449

01:27:26,470 --> 01:27:23,679

find uh settings of the dials that give

2450

01:27:28,870 --> 01:27:26,480

you one personality that is as clear as

2451

01:27:30,470 --> 01:27:28,880

possible sure given these assumptions

2452

01:27:32,709 --> 01:27:30,480

you end up with one of these archetypes

2453

01:27:35,510 --> 01:27:32,719

and it's how the greek gods are stable

2454

01:27:37,590 --> 01:27:35,520

in in this way or the christian god is

2455

01:27:39,189 --> 01:27:37,600

the archetype of the total god

2456

01:27:40,709 --> 01:27:39,199

yeah and it's a particular one because

2457

01:27:43,110 --> 01:27:40,719

this thing needed to be loaded to be

2458

01:27:44,950 --> 01:27:43,120

also a civilizational spirit for an

2459

01:27:46,709 --> 01:27:44,960

agricultural society

2460

01:27:48,149 --> 01:27:46,719

so it's not actually the total god and

2461

01:27:50,790 --> 01:27:48,159

that's the slate of hand that is going

2462

01:27:52,790 --> 01:27:50,800

on by identifying the creator god uh

2463

01:27:55,830 --> 01:27:52,800

with the god of meaning and with the god

2464

01:27:57,910 --> 01:27:55,840

of the uh late roman empire right so

2465

01:28:00,790 --> 01:27:57,920

these are different gods in a certain

2466

01:28:03,270 --> 01:28:00,800

way that have been put into one uh for

2467

01:28:06,149 --> 01:28:03,280

practical reasons and uh the reason why

2468

01:28:08,870 --> 01:28:06,159

we have so many claims to total gods uh

2469

01:28:11,350 --> 01:28:08,880

is because of this payload that the myth

2470

01:28:13,189 --> 01:28:11,360

of the total god has to carry but uh

2471

01:28:15,270 --> 01:28:13,199

this doesn't mean that the archetype

2472

01:28:17,430 --> 01:28:15,280

actually exists out in the physical

2473

01:28:19,350 --> 01:28:17,440

world there is no reason why when you

2474

01:28:21,910 --> 01:28:19,360

have a description function and you

2475

01:28:24,310 --> 01:28:21,920

discover an optimum on it why this

2476

01:28:26,950 --> 01:28:24,320

thing needs to exist but it will exist

2477

01:28:28,709 --> 01:28:26,960

in any systems that build these types of

2478

01:28:30,629 --> 01:28:28,719

models which means they exist as a point

2479

01:28:32,390 --> 01:28:30,639

of reference there's certain optima in

2480

01:28:34,070 --> 01:28:32,400

which you describe things and it's also

2481

01:28:36,790 --> 01:28:34,080

true for our own perception when we

2482

01:28:38,629 --> 01:28:36,800

perceive things what we perceive is not

2483

01:28:41,830 --> 01:28:38,639

the features in which they are arranged

2484

01:28:44,470 --> 01:28:41,840

what we perceive as a certain ideal that

2485

01:28:46,470 --> 01:28:44,480

is being projected by the features

2486

01:28:49,030 --> 01:28:46,480

right yeah and this is uh this is what

2487

01:28:51,350 --> 01:28:49,040

platonism means it doesn't mean a claim

2488

01:28:53,110 --> 01:28:51,360

to the actual existence of physical

2489

01:28:55,430 --> 01:28:53,120

things of or

2490

01:28:57,669 --> 01:28:55,440

affairs in in the world with which we

2491

01:28:59,669 --> 01:28:57,679

causally interact uh it's uh the

2492

01:29:01,590 --> 01:28:59,679

observation that when we are building

2493

01:29:03,590 --> 01:29:01,600

models of the world there are certain

2494

01:29:06,149 --> 01:29:03,600

models that are more pure and more

2495

01:29:08,629 --> 01:29:06,159

elegant than others right and this uh

2496

01:29:11,270 --> 01:29:08,639

this is in some sense the platonic idea

2497

01:29:15,270 --> 01:29:11,280

yeah and so that's where you and i have

2498

01:29:17,189 --> 01:29:15,280

a very deep kind of agreement um

2499

01:29:18,629 --> 01:29:17,199

because i i consider myself a

2500

01:29:20,790 --> 01:29:18,639

neoplatonist

2501

01:29:23,030 --> 01:29:20,800

in my sort of ultimate orientation

2502

01:29:24,709 --> 01:29:23,040

i guess what i would say

2503

01:29:26,550 --> 01:29:24,719

and plato i think might agree with me is

2504

01:29:28,629 --> 01:29:26,560

he would say well saying it doesn't

2505

01:29:30,629 --> 01:29:28,639

exist physically it doesn't say much

2506

01:29:31,510 --> 01:29:30,639

because the physics is ultimately less

2507

01:29:35,030 --> 01:29:31,520

real

2508

01:29:37,430 --> 01:29:35,040

than uh the platonic objects of which uh

2509

01:29:40,310 --> 01:29:37,440

right because the physical things the

2510

01:29:42,629 --> 01:29:40,320

instantiated things are only as you said

2511

01:29:44,870 --> 01:29:42,639

only temporary instances right they're

2512

01:29:47,189 --> 01:29:44,880

less stable they're less real and so the

2513

01:29:49,110 --> 01:29:47,199

fact that it doesn't exist physically

2514

01:29:51,270 --> 01:29:49,120

doesn't sound

2515

01:29:53,510 --> 01:29:51,280

like to plato's ears they would go yeah

2516

01:29:54,950 --> 01:29:53,520

and that's that's to say that they're

2517

01:29:57,110 --> 01:29:54,960

more real

2518

01:29:58,310 --> 01:29:57,120

than a physical reality in an important

2519

01:30:01,910 --> 01:29:58,320

way

2520

01:30:03,910 --> 01:30:01,920

and that seems to me

2521

01:30:05,110 --> 01:30:03,920

kind of what you need in order to do

2522

01:30:06,629 --> 01:30:05,120

science

2523

01:30:07,830 --> 01:30:06,639

you need to be able to posit these kinds

2524

01:30:09,350 --> 01:30:07,840

of entities in order to do

2525

01:30:10,149 --> 01:30:09,360

generalizations

2526

01:30:15,270 --> 01:30:10,159

in

2527

01:30:16,550 --> 01:30:15,280

empiricists wouldn't like the fact that

2528

01:30:19,350 --> 01:30:16,560

i could run some math and make

2529

01:30:20,550 --> 01:30:19,360

conclusions about reality i mean you you

2530

01:30:22,790 --> 01:30:20,560

have to believe

2531

01:30:27,110 --> 01:30:22,800

uh uh uh like stronger you have to

2532

01:30:28,870 --> 01:30:27,120

assert this kind of thing um and now i

2533

01:30:30,790 --> 01:30:28,880

um you seem to be nodding so i don't

2534

01:30:32,709 --> 01:30:30,800

think i'm being too imposing on you and

2535

01:30:34,950 --> 01:30:32,719

i'm finding that we got to this place

2536

01:30:36,950 --> 01:30:34,960

very very interesting because and i want

2537

01:30:39,030 --> 01:30:36,960

and i don't mean this as any kind of

2538

01:30:40,629 --> 01:30:39,040

critique of your presentation

2539

01:30:43,189 --> 01:30:40,639

i didn't get that when i was watching

2540

01:30:45,750 --> 01:30:43,199

your videos right it took it took it

2541

01:30:48,310 --> 01:30:45,760

took a lot of this no and again i'm not

2542

01:30:50,550 --> 01:30:48,320

critiquing you but i i found that i've

2543

01:30:54,390 --> 01:30:50,560

now gotten to a very very interesting

2544

01:30:55,510 --> 01:30:54,400

place with you um i i don't know what uh

2545

01:30:57,189 --> 01:30:55,520

we haven't said too much about

2546

01:31:00,229 --> 01:30:57,199

consciousness and meaning like we

2547

01:31:02,070 --> 01:31:00,239

promised we would but i found this uh

2548

01:31:04,070 --> 01:31:02,080

this progression really really powerful

2549

01:31:06,550 --> 01:31:04,080

and interesting um

2550

01:31:07,750 --> 01:31:06,560

because i'm also interested

2551

01:31:08,950 --> 01:31:07,760

um

2552

01:31:10,310 --> 01:31:08,960

you have a knack for saying very

2553

01:31:12,790 --> 01:31:10,320

intriguing things about religion and

2554

01:31:15,350 --> 01:31:12,800

history um i'm very interested

2555

01:31:18,070 --> 01:31:15,360

in the fact that platonism neoplatonism

2556

01:31:21,110 --> 01:31:18,080

because they were a continuity uh formed

2557

01:31:23,110 --> 01:31:21,120

an interesting kind of lingua

2558

01:31:25,430 --> 01:31:23,120

intellectual lingua franca along the

2559

01:31:28,229 --> 01:31:25,440

silk road uh you can even see this

2560

01:31:29,510 --> 01:31:28,239

historically uh neoplatonism was able to

2561

01:31:31,030 --> 01:31:29,520

reciprocally reconstruct with

2562

01:31:32,629 --> 01:31:31,040

christianity

2563

01:31:34,870 --> 01:31:32,639

with islam

2564

01:31:36,790 --> 01:31:34,880

with judaism and there's there's now

2565

01:31:38,950 --> 01:31:36,800

some evidence even with buddhism it

2566

01:31:40,390 --> 01:31:38,960

seems to have this interesting capacity

2567

01:31:43,030 --> 01:31:40,400

to be

2568

01:31:44,870 --> 01:31:43,040

more of a er or primordial

2569

01:31:47,510 --> 01:31:44,880

representation of our shared

2570

01:31:49,750 --> 01:31:47,520

intelligibility making processes i find

2571

01:31:51,189 --> 01:31:49,760

that a very interesting proposal

2572

01:31:52,470 --> 01:31:51,199

right now

2573

01:31:53,750 --> 01:31:52,480

because if we could get the

2574

01:31:55,270 --> 01:31:53,760

philosophical argument we've been

2575

01:31:56,310 --> 01:31:55,280

exploring and the historical argument

2576

01:31:57,510 --> 01:31:56,320

together

2577

01:32:00,470 --> 01:31:57,520

that means

2578

01:32:01,830 --> 01:32:00,480

we could make a plausible argument for a

2579

01:32:05,030 --> 01:32:01,840

shareable

2580

01:32:06,709 --> 01:32:05,040

framework for interpreting uh reality

2581

01:32:08,709 --> 01:32:06,719

and making and making claims about

2582

01:32:11,669 --> 01:32:08,719

reality and normative judgments and i

2583

01:32:13,830 --> 01:32:11,679

think this is very centrally needed

2584

01:32:16,310 --> 01:32:13,840

for a problem i talk about extensively

2585

01:32:19,750 --> 01:32:16,320

which is the meaning crisis uh that the

2586

01:32:21,669 --> 01:32:19,760

west is facing so i just wanted to say

2587

01:32:23,350 --> 01:32:21,679

i mean i've been sort of like

2588

01:32:26,149 --> 01:32:23,360

very critical but i want to now stand

2589

01:32:27,669 --> 01:32:26,159

back and express appreciation uh for

2590

01:32:29,830 --> 01:32:27,679

sort of where we got to and some of the

2591

01:32:32,149 --> 01:32:29,840

possibilities i see in it now i hope

2592

01:32:33,590 --> 01:32:32,159

that also wasn't uh imposing on you but

2593

01:32:35,910 --> 01:32:33,600

you were nodding as i was saying it so

2594

01:32:37,830 --> 01:32:35,920

it seemed like it was uh but you don't

2595

01:32:39,830 --> 01:32:37,840

need to apologize in this way in any way

2596

01:32:43,030 --> 01:32:39,840

i don't identify with me having these

2597

01:32:44,790 --> 01:32:43,040

ideas i can observe myself having ideas

2598

01:32:47,189 --> 01:32:44,800

but the relationship that the ideas have

2599

01:32:49,030 --> 01:32:47,199

to me is not very interesting i just try

2600

01:32:51,990 --> 01:32:49,040

to play the glass punch wheel as well as

2601
01:32:54,149 --> 01:32:52,000
i can as you do as do you right so you

2602
01:32:56,470 --> 01:32:54,159
never need to apologize for criticizing

2603
01:32:58,709 --> 01:32:56,480
an idea or having a different one or uh

2604
01:33:01,270 --> 01:32:58,719
pointing out where my thinking falls

2605
01:33:03,910 --> 01:33:01,280
short i'm i'm grateful if you point out

2606
01:33:06,070 --> 01:33:03,920
things that appear to be inconsistent so

2607
01:33:07,350 --> 01:33:06,080
don't worry about this at all

2608
01:33:09,030 --> 01:33:07,360
fair enough you're playing you're

2609
01:33:11,110 --> 01:33:09,040
playing you're playing the music with me

2610
01:33:12,709 --> 01:33:11,120
very well and i appreciate that my point

2611
01:33:14,550 --> 01:33:12,719
for making the apology first of all i'm

2612
01:33:16,629 --> 01:33:14,560
a canadian we apologize for everything

2613
01:33:18,550 --> 01:33:16,639

secondly uh the point for me was to

2614

01:33:21,189 --> 01:33:18,560

trying to show you from where i was

2615

01:33:24,229 --> 01:33:21,199

coming that i wasn't that was the point

2616

01:33:26,950 --> 01:33:24,239

i was trying i was trying to make um

2617

01:33:28,550 --> 01:33:26,960

so i'm i'm interested

2618

01:33:31,510 --> 01:33:28,560

can i ask you a question

2619

01:33:33,510 --> 01:33:31,520

it's slightly more personal um

2620

01:33:35,430 --> 01:33:33,520

i think it's fair to say that the

2621

01:33:37,430 --> 01:33:35,440

position you've taken

2622

01:33:39,510 --> 01:33:37,440

because i've i've interacted with a lot

2623

01:33:41,110 --> 01:33:39,520

of cognitive scientists who are computer

2624

01:33:42,070 --> 01:33:41,120

scientists the position you've taken

2625

01:33:43,750 --> 01:33:42,080

isn't

2626

01:33:45,510 --> 01:33:43,760

like

2627

01:33:47,030 --> 01:33:45,520

isn't the consensus position or even the

2628

01:33:50,390 --> 01:33:47,040

majority position

2629

01:33:52,709 --> 01:33:50,400

is that fair to say uh

2630

01:33:54,629 --> 01:33:52,719

yes and no i find that

2631

01:33:57,990 --> 01:33:54,639

a lot of people who deeply think about

2632

01:34:00,229 --> 01:33:58,000

these topics seem to be converging so if

2633

01:34:01,669 --> 01:34:00,239

i would be discussing with say people

2634

01:34:05,510 --> 01:34:01,679

like uh

2635

01:34:08,470 --> 01:34:05,520

minsky dasher

2636

01:34:10,550 --> 01:34:08,480

many many other people next uh thursday

2637

01:34:13,750 --> 01:34:10,560

will have a discussion about attention

2638

01:34:16,229 --> 01:34:13,760

with michael graciano and

2639

01:34:18,950 --> 01:34:16,239

vasudev and jonathan cohen who come from

2640

01:34:21,350 --> 01:34:18,960

ai and neuroscience and

2641

01:34:23,030 --> 01:34:21,360

cognitive science or philosophy uh and

2642

01:34:25,189 --> 01:34:23,040

we've been discussing attention and its

2643

01:34:27,030 --> 01:34:25,199

relationship to consciousness ultimately

2644

01:34:29,750 --> 01:34:27,040

yeah and i find that there is a large

2645

01:34:32,390 --> 01:34:29,760

convergence in these ideas i also don't

2646

01:34:35,030 --> 01:34:32,400

find that my ideas are in deep sense

2647

01:34:37,350 --> 01:34:35,040

original it's just that

2648

01:34:39,990 --> 01:34:37,360

the more ideas i discover the smaller

2649

01:34:43,350 --> 01:34:40,000

the parties become that i am late to

2650

01:34:47,270 --> 01:34:45,750

you know what i mean right so i i don't

2651

01:34:48,870 --> 01:34:47,280

think that's possible to have

2652

01:34:50,709 --> 01:34:48,880

philosophical ideas about the

2653

01:34:52,310 --> 01:34:50,719

relationship between mind and physical

2654

01:34:54,550 --> 01:34:52,320

universe that have not been had by

2655

01:34:56,229 --> 01:34:54,560

somebody a few thousand years ago and if

2656

01:34:58,229 --> 01:34:56,239

somebody has a fundamentally new idea

2657

01:35:00,550 --> 01:34:58,239

that's probably bad news

2658

01:35:03,669 --> 01:35:00,560

unless it relates to some kind of super

2659

01:35:06,070 --> 01:35:03,679

modern physics in a highly original way

2660

01:35:08,070 --> 01:35:06,080

and uh it's possible that we find

2661

01:35:11,270 --> 01:35:08,080

discover something on this level but by

2662

01:35:13,430 --> 01:35:11,280

and large um the big foundational

2663

01:35:15,669 --> 01:35:13,440

questions about epistemology and so on

2664

01:35:19,189 --> 01:35:15,679

our parent for so long that i don't have

2665

01:35:20,229 --> 01:35:19,199

any claims to originality in there and

2666

01:35:21,750 --> 01:35:20,239

so

2667

01:35:23,430 --> 01:35:21,760

i would say that my ideas are not

2668

01:35:24,709 --> 01:35:23,440

original and they're also relatively

2669

01:35:26,950 --> 01:35:24,719

widespread

2670

01:35:30,629 --> 01:35:26,960

and the disagreements are largely uh

2671

01:35:33,590 --> 01:35:30,639

happening i think at the uh

2672

01:35:35,510 --> 01:35:33,600

when people have different epistemology

2673

01:35:37,510 --> 01:35:35,520

when they think that there are ways to

2674

01:35:38,870 --> 01:35:37,520

establishing truths that are different

2675

01:35:41,590 --> 01:35:38,880

from the ways in which i think that

2676

01:35:43,350 --> 01:35:41,600

truth can be established sure sure i i

2677

01:35:45,189 --> 01:35:43,360

think that's why i wanted to play at the

2678

01:35:47,590 --> 01:35:45,199

epistemological ontological level with

2679

01:35:49,270 --> 01:35:47,600

you i'm interested though that because i

2680

01:35:50,229 --> 01:35:49,280

also have a sense

2681

01:35:53,990 --> 01:35:50,239

of

2682

01:35:56,550 --> 01:35:54,000

and

2683

01:35:58,149 --> 01:35:56,560

that's why i liked the fact that you do

2684

01:35:59,590 --> 01:35:58,159

a big picture cog in science because i

2685

01:36:02,629 --> 01:35:59,600

think you have to do big picture

2686

01:36:05,350 --> 01:36:02,639

cognitive science to get that sense to

2687

01:36:08,709 --> 01:36:05,360

to really get it um

2688

01:36:14,070 --> 01:36:12,629

i i'm wondering um

2689

01:36:15,270 --> 01:36:14,080

in your practice of doing cognitive

2690

01:36:17,270 --> 01:36:15,280

science

2691

01:36:18,229 --> 01:36:17,280

how do you deal

2692

01:36:20,470 --> 01:36:18,239

because i agree with you about that

2693

01:36:22,470 --> 01:36:20,480

convergence and i agree with you

2694

01:36:25,830 --> 01:36:22,480

how do you deal with

2695

01:36:27,990 --> 01:36:25,840

the um the different ontologies right so

2696

01:36:29,910 --> 01:36:28,000

the neuroscientist talks about neurons

2697

01:36:30,629 --> 01:36:29,920

and does fmri

2698

01:36:32,390 --> 01:36:30,639

and

2699

01:36:35,110 --> 01:36:32,400

the artificial intelligence person talks

2700

01:36:37,430 --> 01:36:35,120

about programs and runs simulations and

2701

01:36:39,590 --> 01:36:37,440

hoping that they become instantiations

2702

01:36:42,790 --> 01:36:39,600

the psychologist talks about working

2703

01:36:45,189 --> 01:36:42,800

memory and does you know experiments on

2704

01:36:46,470 --> 01:36:45,199

behavior the linguist talks about deep

2705

01:36:48,870 --> 01:36:46,480

structures

2706

01:36:50,950 --> 01:36:48,880

and right collects data about judgments

2707

01:36:55,830 --> 01:36:50,960

of grammaticality

2708

01:37:01,109 --> 01:36:57,350

this question really concerns me because

2709

01:37:02,149 --> 01:37:01,119

i think it it's part of

2710

01:37:05,270 --> 01:37:02,159

again

2711

01:37:07,750 --> 01:37:05,280

trying to turn cognitive science back

2712

01:37:09,510 --> 01:37:07,760

towards the existential issue that's

2713

01:37:11,350 --> 01:37:09,520

facing us i don't mean existential a

2714

01:37:12,390 --> 01:37:11,360

sense of threat i mean like how

2715

01:37:14,709 --> 01:37:12,400

kirkegaard would use the word

2716

01:37:16,229 --> 01:37:14,719

existential the meaning making i go back

2717

01:37:17,669 --> 01:37:16,239

to the point i made

2718

01:37:18,709 --> 01:37:17,679

at the very beginning

2719

01:37:21,910 --> 01:37:18,719

right

2720

01:37:24,470 --> 01:37:21,920

that for a long time

2721

01:37:26,229 --> 01:37:24,480

the cognitive sciences and i'll use that

2722

01:37:28,629 --> 01:37:26,239

plural as opposed to cognitive science

2723

01:37:30,709 --> 01:37:28,639

that tries to do a synoptic integration

2724

01:37:33,510 --> 01:37:30,719

the cognitive scientists the cognitive

2725

01:37:36,950 --> 01:37:33,520

sciences have promoted a fragmentation

2726

01:37:39,109 --> 01:37:36,960

of what mind means in a profound way

2727

01:37:40,070 --> 01:37:39,119

and that fragmentation

2728

01:37:42,149 --> 01:37:40,080

has

2729

01:37:44,390 --> 01:37:42,159

right really when people start to

2730

01:37:46,950 --> 01:37:44,400

reflect and

2731

01:37:49,590 --> 01:37:46,960

they can offer i see this in my students

2732

01:37:51,109 --> 01:37:49,600

right they'll get caught up on i don't

2733

01:37:52,790 --> 01:37:51,119

know what this i don't know what a mind

2734

01:37:56,229 --> 01:37:52,800

is because there's this there's this

2735

01:37:57,669 --> 01:37:56,239

cacophony of all and and then of course

2736

01:37:59,109 --> 01:37:57,679

if i don't know what a mind is i don't

2737

01:38:00,470 --> 01:37:59,119

know what i am and i don't know how i

2738

01:38:02,709 --> 01:38:00,480

relate to the world you can see where

2739

01:38:05,990 --> 01:38:02,719

this goes the fragmentation of the

2740

01:38:09,350 --> 01:38:06,000

ontology by the cognitive scientists um

2741

01:38:12,629 --> 01:38:09,360

is not separate from a lot of

2742

01:38:16,709 --> 01:38:12,639

the the the the suffering that people

2743

01:38:18,950 --> 01:38:16,719

have because they don't find a stable

2744

01:38:21,669 --> 01:38:18,960

framework in which to locate the

2745

01:38:24,149 --> 01:38:21,679

phenomena of mind so

2746

01:38:26,070 --> 01:38:24,159

i'm asking this because as i said i

2747

01:38:29,109 --> 01:38:26,080

and you invoked wisdom a while back and

2748

01:38:31,030 --> 01:38:29,119

so i wanted to circle back to that

2749

01:38:33,270 --> 01:38:31,040

what wisdom have you

2750

01:38:35,990 --> 01:38:33,280

acquired cultivated realized i don't

2751
01:38:37,830 --> 01:38:36,000
want to know what verb you want um

2752
01:38:39,430 --> 01:38:37,840
for helping

2753
01:38:40,550 --> 01:38:39,440
do this

2754
01:38:44,709 --> 01:38:40,560
get

2755
01:38:45,990 --> 01:38:44,719
disciplines to start to pursue

2756
01:38:47,910 --> 01:38:46,000
integration

2757
01:38:51,189 --> 01:38:47,920
rather than fragmentation

2758
01:38:53,669 --> 01:38:51,199
and connecting that to

2759
01:38:57,590 --> 01:38:53,679
sort of the general issue of

2760
01:38:59,590 --> 01:38:57,600
how we as embodied minded beings fit

2761
01:39:01,430 --> 01:38:59,600
into a scientific worldview i know

2762
01:39:04,310 --> 01:39:01,440
that's a big question but i i'm really

2763
01:39:07,990 --> 01:39:05,830

i think that the disciplines by and

2764

01:39:11,830 --> 01:39:08,000

large are not very well incentivized to

2765

01:39:12,950 --> 01:39:11,840

do uh science and philosophy yeah so uh

2766

01:39:14,709 --> 01:39:12,960

that's something that we need to

2767

01:39:16,790 --> 01:39:14,719

understand that there are institutions

2768

01:39:17,830 --> 01:39:16,800

in which people go to work to feed their

2769

01:39:19,030 --> 01:39:17,840

children

2770

01:39:21,189 --> 01:39:19,040

and

2771

01:39:22,550 --> 01:39:21,199

a scientist is in some sense to me

2772

01:39:24,629 --> 01:39:22,560

someone who

2773

01:39:27,669 --> 01:39:24,639

has a particular kind of personality

2774

01:39:29,910 --> 01:39:27,679

it's someone who very early on in their

2775

01:39:33,030 --> 01:39:29,920

psychological development has decided to

2776

01:39:35,669 --> 01:39:33,040

trust their analytical thinking more

2777

01:39:38,149 --> 01:39:35,679

than their intuitions than their

2778

01:39:40,310 --> 01:39:38,159

feelings and their emotions and so on

2779

01:39:42,550 --> 01:39:40,320

and typically this happens because they

2780

01:39:44,950 --> 01:39:42,560

had asperger's and uh the prayers that

2781

01:39:47,430 --> 01:39:44,960

they had when they interacted uh with

2782

01:39:48,870 --> 01:39:47,440

other people socially failed in school

2783

01:39:51,030 --> 01:39:48,880

and so at some point they realized i

2784

01:39:52,790 --> 01:39:51,040

cannot trust my feelings because if i go

2785

01:39:54,470 --> 01:39:52,800

by my intuitions my interactions with

2786

01:39:56,310 --> 01:39:54,480

the world are going to fail and i have

2787

01:39:58,229 --> 01:39:56,320

to move to the analytical mode to make

2788

01:39:59,830 --> 01:39:58,239

sense of the world and if you are

2789

01:40:02,149 --> 01:39:59,840

permanently in the analytical mode

2790

01:40:03,750 --> 01:40:02,159

that's a trauma mode right

2791

01:40:05,350 --> 01:40:03,760

and healthy human being should

2792

01:40:06,870 --> 01:40:05,360

understand that the purpose of

2793

01:40:09,750 --> 01:40:06,880

analytical reasoning which by itself is

2794

01:40:11,830 --> 01:40:09,760

very brittle is to go to deal with your

2795

01:40:14,310 --> 01:40:11,840

darkest emotions those where you don't

2796

01:40:16,629 --> 01:40:14,320

see clearly what's what and in which way

2797

01:40:20,070 --> 01:40:16,639

to go so analytical reasoning is a very

2798

01:40:21,510 --> 01:40:20,080

powerful tool for very narrow areas of

2799

01:40:22,950 --> 01:40:21,520

understanding the world and wealth

2800

01:40:25,189 --> 01:40:22,960

happen to be the ones that should be

2801
01:40:27,270 --> 01:40:25,199
studied in the sciences but it's wrong

2802
01:40:30,149 --> 01:40:27,280
to present scientists as a lifestyle

2803
01:40:31,669 --> 01:40:30,159
archetype and as the goal of education

2804
01:40:33,109 --> 01:40:31,679
only a very small subset of people

2805
01:40:34,790 --> 01:40:33,119
should be scientists and the existence

2806
01:40:36,390 --> 01:40:34,800
of scientists is very useful to the

2807
01:40:37,990 --> 01:40:36,400
world but being a scientist is largely

2808
01:40:39,750 --> 01:40:38,000
not fun

2809
01:40:41,990 --> 01:40:39,760
and so we

2810
01:40:43,669 --> 01:40:42,000
have see science currently as more like

2811
01:40:45,510 --> 01:40:43,679
an employment program where we put

2812
01:40:46,870 --> 01:40:45,520
people that are difficult to employ in

2813
01:40:48,550 --> 01:40:46,880

the industry because we don't need that

2814

01:40:50,390 --> 01:40:48,560

many people in the industry and teach

2815

01:40:51,830 --> 01:40:50,400

them methods and then they apply these

2816

01:40:54,070 --> 01:40:51,840

methods and we hope that the results

2817

01:40:55,750 --> 01:40:54,080

accumulate and the outcome is largely

2818

01:40:57,910 --> 01:40:55,760

not that interesting because you're not

2819

01:40:59,830 --> 01:40:57,920

being hired into a science to answer

2820

01:41:01,189 --> 01:40:59,840

foundational questions there are very

2821

01:41:02,790 --> 01:41:01,199

few

2822

01:41:04,550 --> 01:41:02,800

ways to answer foundation questions

2823

01:41:05,910 --> 01:41:04,560

because the low hanging fruits fruits

2824

01:41:07,350 --> 01:41:05,920

have been

2825

01:41:08,310 --> 01:41:07,360

wrapped long ago

2826

01:41:09,750 --> 01:41:08,320

and

2827

01:41:11,030 --> 01:41:09,760

so you don't actually need that many

2828

01:41:12,550 --> 01:41:11,040

people working in the foundational

2829

01:41:15,109 --> 01:41:12,560

disciplines and making foundational

2830

01:41:17,430 --> 01:41:15,119

progress and you're not incentivized to

2831

01:41:19,350 --> 01:41:17,440

have ideas about foundational things so

2832

01:41:21,189 --> 01:41:19,360

among the very few people that are

2833

01:41:22,950 --> 01:41:21,199

willing to offer answer to foundational

2834

01:41:25,109 --> 01:41:22,960

questions and are so

2835

01:41:27,109 --> 01:41:25,119

bold and crazy to do this

2836

01:41:28,550 --> 01:41:27,119

there seem to be in some sense three

2837

01:41:32,070 --> 01:41:28,560

groups

2838

01:41:33,510 --> 01:41:32,080

fully understand the depths of these

2839

01:41:35,510 --> 01:41:33,520

questions and think that they found a

2840

01:41:37,669 --> 01:41:35,520

very simple answer that solves the

2841

01:41:39,270 --> 01:41:37,679

problem without actually doing so

2842

01:41:41,430 --> 01:41:39,280

these people tend not to be very

2843

01:41:43,109 --> 01:41:41,440

interesting and so there are simplified

2844

01:41:45,030 --> 01:41:43,119

notions of consciousness that do not

2845

01:41:47,030 --> 01:41:45,040

explain the necessary insufficient

2846

01:41:48,550 --> 01:41:47,040

conditions for a system being conscious

2847

01:41:51,030 --> 01:41:48,560

and they might lead to models in

2848

01:41:52,709 --> 01:41:51,040

neuroscience or in ai or in robotics

2849

01:41:54,229 --> 01:41:52,719

that claim to do a certain thing but

2850

01:41:55,910 --> 01:41:54,239

they don't

2851
01:41:58,470 --> 01:41:55,920
and it's not that interesting that these

2852
01:42:02,070 --> 01:41:58,480
exist then there is another type of mind

2853
01:42:04,229 --> 01:42:02,080
that is very humble and these people say

2854
01:42:06,310 --> 01:42:04,239
i don't actually know what the answer is

2855
01:42:08,790 --> 01:42:06,320
and i have the following questions and

2856
01:42:10,790 --> 01:42:08,800
i'm aware of the following space of

2857
01:42:12,709 --> 01:42:10,800
attempts to answer this and i am

2858
01:42:14,870 --> 01:42:12,719
currently moving in this area of the

2859
01:42:16,629 --> 01:42:14,880
space and this is what i'm seeing from

2860
01:42:18,229 --> 01:42:16,639
where i'm currently standing and this is

2861
01:42:20,390 --> 01:42:18,239
how i'm able to interact with others

2862
01:42:22,950 --> 01:42:20,400
from this vantage point and

2863
01:42:24,149 --> 01:42:22,960

i'm still in this exploration

2864

01:42:29,910 --> 01:42:24,159

and

2865

01:42:32,629 --> 01:42:29,920

openly discussed very much because a

2866

01:42:34,390 --> 01:42:32,639

scientist has to publish the things that

2867

01:42:35,830 --> 01:42:34,400

they can hope to prove and not the

2868

01:42:37,109 --> 01:42:35,840

things that they are seeing and most of

2869

01:42:39,109 --> 01:42:37,119

the things that we are seeing as a

2870

01:42:41,030 --> 01:42:39,119

possibility and most of the interesting

2871

01:42:42,870 --> 01:42:41,040

answers on the realm of the possible

2872

01:42:45,109 --> 01:42:42,880

cannot be established by an experiment

2873

01:42:46,470 --> 01:42:45,119

because it's a possibility right so the

2874

01:42:48,070 --> 01:42:46,480

possibility is often the most

2875

01:42:50,149 --> 01:42:48,080

interesting things and possibilities are

2876

01:42:51,910 --> 01:42:50,159

difficult to publish and discuss about

2877

01:42:54,870 --> 01:42:51,920

exactly well said

2878

01:42:56,709 --> 01:42:54,880

and the third group are the crazies

2879

01:42:58,709 --> 01:42:56,719

these are people that think that they

2880

01:43:00,390 --> 01:42:58,719

have certainty and they're super smart

2881

01:43:02,550 --> 01:43:00,400

and they go very deep

2882

01:43:04,149 --> 01:43:02,560

and uh often the crazies are also among

2883

01:43:05,510 --> 01:43:04,159

the most interesting ones but it also

2884

01:43:07,910 --> 01:43:05,520

means that you have to parse them in the

2885

01:43:10,149 --> 01:43:07,920

right way yeah so the crazies are in for

2886

01:43:11,830 --> 01:43:10,159

instance jurgen schmidt hoover or

2887

01:43:14,709 --> 01:43:11,840

stephen wolfram and so on these are

2888

01:43:16,870 --> 01:43:14,719

people that uh for some reason aspire to

2889

01:43:19,510 --> 01:43:16,880

greatness and force themselves to be

2890

01:43:21,350 --> 01:43:19,520

great no matter the personal cause to

2891

01:43:23,189 --> 01:43:21,360

them so they're not humble

2892

01:43:25,990 --> 01:43:23,199

and they do have theories of everything

2893

01:43:28,550 --> 01:43:26,000

that they are not shy to denote as such

2894

01:43:31,189 --> 01:43:28,560

and put out there and these ideas are

2895

01:43:33,189 --> 01:43:31,199

often extremely interesting to bounce up

2896

01:43:34,629 --> 01:43:33,199

against and try to understand them

2897

01:43:36,709 --> 01:43:34,639

deeply

2898

01:43:39,030 --> 01:43:36,719

that's very interesting

2899

01:43:41,270 --> 01:43:39,040

much in that was well said

2900

01:43:43,669 --> 01:43:41,280

um i've been trying to talk about and

2901

01:43:45,990 --> 01:43:43,679

model a form of interaction um called

2902

01:43:48,470 --> 01:43:46,000

dialogos in which people are in the

2903

01:43:50,229 --> 01:43:48,480

second group but are willing to talk

2904

01:43:52,629 --> 01:43:50,239

about sort of ideas and proposals that

2905

01:43:56,070 --> 01:43:52,639

come from the third group that where

2906

01:43:58,870 --> 01:43:56,080

people are very open uh to

2907

01:44:02,390 --> 01:43:58,880

as you said a kind of humble exploration

2908

01:44:03,430 --> 01:44:02,400

uh uh a an idea that you can help me

2909

01:44:07,270 --> 01:44:03,440

correct

2910

01:44:10,310 --> 01:44:07,280

can work together and we can get we can

2911

01:44:11,910 --> 01:44:10,320

get to ideas that uh emerge between us

2912

01:44:15,430 --> 01:44:11,920

that i can't get to on my own you can't

2913

01:44:18,310 --> 01:44:15,440

get to on your own um and and that

2914

01:44:19,510 --> 01:44:18,320

openness to the possibility of genuine

2915

01:44:21,109 --> 01:44:19,520

emergence

2916

01:44:22,790 --> 01:44:21,119

bumps us up against

2917

01:44:24,310 --> 01:44:22,800

you called them the crazies

2918

01:44:27,350 --> 01:44:24,320

because you one of the things you want

2919

01:44:30,390 --> 01:44:27,360

to do is let some of those uh crazier

2920

01:44:32,149 --> 01:44:30,400

ideas in because

2921

01:44:35,109 --> 01:44:32,159

they help

2922

01:44:37,750 --> 01:44:35,119

give you it's like uh letting in a

2923

01:44:40,470 --> 01:44:37,760

different sensei into the dojo uh for a

2924

01:44:42,229 --> 01:44:40,480

bit not for not for very long because uh

2925

01:44:44,310 --> 01:44:42,239

the dojo will fall apart but letting

2926

01:44:46,390 --> 01:44:44,320

them in for a bit because you get a new

2927

01:44:48,709 --> 01:44:46,400

you get a new conceptual vocabulary a

2928

01:44:51,430 --> 01:44:48,719

new theoretical grammar and so i've been

2929

01:44:55,830 --> 01:44:51,440

i i've been trying to model

2930

01:44:57,510 --> 01:44:55,840

that uh process even

2931

01:44:58,550 --> 01:44:57,520

in an academic setting i've been trying

2932

01:45:00,870 --> 01:44:58,560

to

2933

01:45:03,910 --> 01:45:00,880

pursue the presentation of ideas about

2934

01:45:06,709 --> 01:45:03,920

consciousness the self etc in a

2935

01:45:09,270 --> 01:45:06,719

dialogical manner rather than in a

2936

01:45:12,790 --> 01:45:09,280

monologue in which there's all kinds of

2937

01:45:13,750 --> 01:45:12,800

uh claims about closure and certainty um

2938

01:45:14,830 --> 01:45:13,760

so

2939

01:45:39,669 --> 01:45:14,840

i

2940

01:45:41,669 --> 01:45:39,679

address a lot of the concerns usage

2941

01:45:45,669 --> 01:45:41,679

brought up so

2942

01:45:49,990 --> 01:45:48,229

spending time

2943

01:45:52,950 --> 01:45:50,000

doing more of this

2944

01:45:54,870 --> 01:45:52,960

is actually not it's not an ornament

2945

01:45:57,350 --> 01:45:54,880

it's not just a ceremony it's not just a

2946

01:45:59,270 --> 01:45:57,360

social gathering for cognitive science

2947

01:46:01,109 --> 01:45:59,280

it's actually essential for cognitive

2948

01:46:02,870 --> 01:46:01,119

science if it's going to progress i

2949

01:46:04,950 --> 01:46:02,880

guess this is me also saying uh thank

2950

01:46:06,950 --> 01:46:04,960

you to kurt for doing this and thank you

2951

01:46:09,189 --> 01:46:06,960

also for you you know you came here in

2952

01:46:10,550 --> 01:46:09,199

good faith and you've been uh that way

2953

01:46:14,470 --> 01:46:10,560

throughout but i'm trying to make an

2954

01:46:15,910 --> 01:46:14,480

argument for this being more central and

2955

01:46:18,870 --> 01:46:15,920

the problem

2956

01:46:21,189 --> 01:46:18,880

is that the institution that is

2957

01:46:23,350 --> 01:46:21,199

where we house the science the

2958

01:46:25,430 --> 01:46:23,360

university doesn't know how to deal with

2959

01:46:27,510 --> 01:46:25,440

this emerging phenomena it doesn't know

2960

01:46:29,430 --> 01:46:27,520

how to deal with because of social media

2961

01:46:30,870 --> 01:46:29,440

because of this technology because a lot

2962

01:46:33,270 --> 01:46:30,880

of this understanding this is all

2963

01:46:35,189 --> 01:46:33,280

happening more and more and more

2964

01:46:37,270 --> 01:46:35,199

but when i for example when i try to

2965

01:46:39,590 --> 01:46:37,280

bring this into the institution the

2966

01:46:41,590 --> 01:46:39,600

institution seems to still be bound in

2967

01:46:43,910 --> 01:46:41,600

sort of a victorian paper and pencil

2968

01:46:45,430 --> 01:46:43,920

mentality about how we evaluate things

2969

01:46:47,669 --> 01:46:45,440

how we evaluate the work people are

2970

01:46:49,910 --> 01:46:47,679

doing like for example none of this even

2971

01:46:52,550 --> 01:46:49,920

though i think it's really important

2972

01:46:55,270 --> 01:46:52,560

to the to the life of cognitive science

2973

01:46:57,109 --> 01:46:55,280

none of this would even show up on my cv

2974

01:47:00,229 --> 01:46:57,119

uh because if i put it on my cv it would

2975

01:47:02,390 --> 01:47:00,239

just be ignored um and it seems to me

2976

01:47:05,350 --> 01:47:02,400

that's a very problematic place that we

2977

01:47:06,870 --> 01:47:05,360

have gotten and we've gotten to

2978

01:47:08,709 --> 01:47:06,880

john what would be an example of you

2979

01:47:10,229 --> 01:47:08,719

bringing this idea of dialogue to the

2980

01:47:12,550 --> 01:47:10,239

university and the university saying no

2981

01:47:14,870 --> 01:47:12,560

like what specifically did you propose

2982

01:47:16,229 --> 01:47:14,880

so for example i i you know

2983

01:47:18,390 --> 01:47:16,239

i i put out

2984

01:47:19,990 --> 01:47:18,400

i put out a series the elusive eye with

2985

01:47:22,149 --> 01:47:20,000

greg Enriquez and christopher master

2986

01:47:24,390 --> 01:47:22,159

pietro on the nature and function of the

2987

01:47:27,189 --> 01:47:24,400

self it did untangling the world not

2988

01:47:29,590 --> 01:47:27,199

with greg Enriquez a psychologist about

2989

01:47:32,390 --> 01:47:29,600

consciousness and it was done like uh

2990

01:47:34,629 --> 01:47:32,400

did one with uh zach stein and greg

2991

01:47:36,390 --> 01:47:34,639

enriquez on towards a metapsychology

2992

01:47:39,189 --> 01:47:36,400

that is true to transformation

2993

01:47:41,990 --> 01:47:39,199

and to my mind the kind of exploration

2994

01:47:44,790 --> 01:47:42,000

of ideas and advancement of insightful

2995

01:47:46,470 --> 01:47:44,800

arguments was better there and i'm not

2996

01:47:48,070 --> 01:47:46,480

trying to be self-congratulatory because

2997

01:47:51,350 --> 01:47:48,080

other people are doing this but it was

2998

01:47:52,550 --> 01:47:51,360

better than a lot of the stuff that is

2999

01:47:56,629 --> 01:47:52,560

typically

3000

01:47:58,149 --> 01:47:56,639

to count as

3001

01:48:00,229 --> 01:47:58,159

right that you're doing work in the

3002

01:48:01,430 --> 01:48:00,239

discipline uh you know

3003

01:48:04,709 --> 01:48:01,440

you know

3004

01:48:07,350 --> 01:48:04,719

that's that's what i'm trying to say

3005

01:48:10,390 --> 01:48:07,360

the discipline is no longer the place

3006

01:48:11,750 --> 01:48:10,400

where the science is getting mo sorry

3007

01:48:13,669 --> 01:48:11,760

that was exactly the wrong word the

3008

01:48:15,189 --> 01:48:13,679

institution the university is no longer

3009

01:48:16,390 --> 01:48:15,199

the and i like working for the

3010

01:48:18,390 --> 01:48:16,400

university of toronto by the way i'm not

3011

01:48:22,310 --> 01:48:18,400

trying to get myself out of a job but

3012

01:48:23,990 --> 01:48:22,320

right the the like the institution is

3013

01:48:25,030 --> 01:48:24,000

not the place

3014

01:48:27,109 --> 01:48:25,040

really

3015

01:48:29,189 --> 01:48:27,119

where the kind of science we need now

3016

01:48:31,030 --> 01:48:29,199

both for itself and

3017

01:48:33,270 --> 01:48:31,040

before the culture is happening that's

3018

01:48:35,750 --> 01:48:33,280

the argument i'm making

3019

01:48:38,070 --> 01:48:35,760

yoshi there is no other place right it's

3020

01:48:40,709 --> 01:48:38,080

not like that there is a new heaven that

3021

01:48:43,830 --> 01:48:40,719

has opened itself up for experiments and

3022

01:48:45,990 --> 01:48:43,840

thoughts like this there is a network of

3023

01:48:47,750 --> 01:48:46,000

basically small events of workshops

3024

01:48:50,149 --> 01:48:47,760

conferences and so on that happens

3025

01:48:52,790 --> 01:48:50,159

between the disciplines but it's mostly

3026

01:48:54,950 --> 01:48:52,800

that we do this on the side yes exactly

3027

01:48:57,350 --> 01:48:54,960

in addition to uh what we do in the

3028

01:49:00,790 --> 01:48:57,360

sciences in the same way as michael uh

3029

01:49:02,470 --> 01:49:00,800

graciano uh or tononi and many others

3030

01:49:03,510 --> 01:49:02,480

basically have a daytime job in the

3031

01:49:05,510 --> 01:49:03,520

sciences

3032

01:49:07,590 --> 01:49:05,520

and the philosophical contributions that

3033

01:49:09,270 --> 01:49:07,600

they do they do on the site it's also in

3034

01:49:12,470 --> 01:49:09,280

many ways too fast

3035

01:49:14,229 --> 01:49:12,480

and it's not uh that we feel that or i

3036

01:49:15,590 --> 01:49:14,239

feel that i mistreated in this way i

3037

01:49:17,350 --> 01:49:15,600

understand why the institutional

3038

01:49:21,430 --> 01:49:17,360

incentives are in the way they are and

3039

01:49:23,750 --> 01:49:21,440

the reasonable and uh good-natured uh

3040

01:49:25,990 --> 01:49:23,760

reasons for this for the most part for

3041

01:49:27,830 --> 01:49:26,000

why this is the way in which it is it

3042

01:49:30,629 --> 01:49:27,840

just means that we need alternate ways

3043

01:49:33,109 --> 01:49:30,639

of funding uh to make this happen and we

3044

01:49:35,030 --> 01:49:33,119

need an alternate ways of organizing it

3045

01:49:36,310 --> 01:49:35,040

to uh keep on

3046

01:49:39,030 --> 01:49:36,320

with going it

3047

01:49:41,990 --> 01:49:39,040

uh going on with it i also want to uh

3048

01:49:43,510 --> 01:49:42,000

just briefly make a case for the crazies

3049

01:49:45,189 --> 01:49:43,520

the reason why i'm not a crazy is

3050

01:49:47,270 --> 01:49:45,199

because i'm not smart enough i'm not

3051

01:49:49,750 --> 01:49:47,280

smart enough to maintain the illusion

3052

01:49:51,990 --> 01:49:49,760

that i see things that others are not

3053

01:49:54,870 --> 01:49:52,000

seeing and often more clearly and better

3054

01:49:57,990 --> 01:49:54,880

and with more focus than i can see them

3055

01:50:00,870 --> 01:49:58,000

so uh i basically i get humbled by my

3056

01:50:03,189 --> 01:50:00,880

own inadequacy and there are some people

3057

01:50:05,590 --> 01:50:03,199

which are basically not that inadequate

3058

01:50:07,510 --> 01:50:05,600

so for them it takes many decades longer

3059

01:50:09,910 --> 01:50:07,520

before they would get to the point where

3060

01:50:10,870 --> 01:50:09,920

they are forced to humble themselves so

3061

01:50:12,629 --> 01:50:10,880

they can

3062

01:50:14,390 --> 01:50:12,639

maintain an illusion of greatness that

3063

01:50:16,629 --> 01:50:14,400

they might have developed in their

3064

01:50:19,030 --> 01:50:16,639

dollar sense as a protective measure for

3065

01:50:22,470 --> 01:50:19,040

their own psychology and keep up with

3066

01:50:24,310 --> 01:50:22,480

being great and if somebody who's really

3067

01:50:26,950 --> 01:50:24,320

really smart is able to keep up the

3068

01:50:28,790 --> 01:50:26,960

crazy greatness this notion of everybody

3069

01:50:31,430 --> 01:50:28,800

else is confused and basically the only

3070

01:50:33,990 --> 01:50:31,440

one who sees the solution and here it is

3071

01:50:35,830 --> 01:50:34,000

basically uh this is an extremely

3072

01:50:36,950 --> 01:50:35,840

valuable person to have around and they

3073

01:50:39,669 --> 01:50:36,960

should be

3074

01:50:40,950 --> 01:50:39,679

cherished and protected and uh doesn't

3075

01:50:43,030 --> 01:50:40,960

mean that you have to believe everything

3076

01:50:44,950 --> 01:50:43,040

that they say but they're very few

3077

01:50:46,870 --> 01:50:44,960

people which are so bold and so daring

3078

01:50:49,669 --> 01:50:46,880

that they sacrifice themselves in such a

3079

01:50:51,189 --> 01:50:49,679

way yoshi do you see that as a negative

3080

01:50:52,310 --> 01:50:51,199

because the way that i hear it it sounds

3081

01:50:53,750 --> 01:50:52,320

like you know when you're at a job

3082

01:50:55,350 --> 01:50:53,760

interview and they say so what are your

3083

01:50:56,470 --> 01:50:55,360

weaknesses you say i work too hard so

3084

01:51:02,310 --> 01:50:56,480

what are your weaknesses well i'm not

3085

01:51:07,270 --> 01:51:04,950

uh i wouldn't it says present this as a

3086

01:51:08,950 --> 01:51:07,280

weakness the typical

3087

01:51:10,709 --> 01:51:08,960

answer in this job interview would be

3088

01:51:14,790 --> 01:51:10,719

i'm too honest

3089

01:51:16,870 --> 01:51:14,800

right and then the other one says

3090

01:51:19,669 --> 01:51:16,880

why is that a problem don't give a

3091

01:51:23,910 --> 01:51:22,070

now the problem is when you are in a job

3092

01:51:25,350 --> 01:51:23,920

interview and you don't fit in the issue

3093

01:51:26,709 --> 01:51:25,360

is um

3094

01:51:28,310 --> 01:51:26,719

what is the thing that you actually want

3095

01:51:29,990 --> 01:51:28,320

to do do you want to be part of that

3096

01:51:32,229 --> 01:51:30,000

particular hierarchy of this particular

3097

01:51:35,189 --> 01:51:32,239

kind of organization of this particular

3098

01:51:36,790 --> 01:51:35,199

kind of normativity and do you think

3099

01:51:38,629 --> 01:51:36,800

that you can actually help it along do

3100

01:51:39,750 --> 01:51:38,639

you share the aesthetics of that place

3101

01:51:41,910 --> 01:51:39,760

of work

3102

01:51:43,990 --> 01:51:41,920

that you will be part of and i found

3103

01:51:45,750 --> 01:51:44,000

when i was in academia i really enjoyed

3104

01:51:48,229 --> 01:51:45,760

it i really enjoyed working with

3105

01:51:50,790 --> 01:51:48,239

students i found that i needed to defend

3106

01:51:52,629 --> 01:51:50,800

a space of inquiry and the space of

3107

01:51:55,430 --> 01:51:52,639

inquiry ex coexisted with the

3108

01:51:57,910 --> 01:51:55,440

application of methods it was this thing

3109

01:51:59,510 --> 01:51:57,920

that enabled me to say to a student that

3110

01:52:01,270 --> 01:51:59,520

was not inspired you shouldn't be here

3111

01:52:02,790 --> 01:52:01,280

in my class if you don't like this if

3112

01:52:04,229 --> 01:52:02,800

you don't intrinsically want to do this

3113

01:52:06,310 --> 01:52:04,239

you're wasting your own time and

3114

01:52:07,750 --> 01:52:06,320

attention and my time and attention and

3115

01:52:09,910 --> 01:52:07,760

the time and attention of everybody

3116

01:52:11,990 --> 01:52:09,920

who's there go have a relationship go

3117

01:52:14,550 --> 01:52:12,000

read a good book go sit down in a cafe

3118

01:52:16,550 --> 01:52:14,560

or watch a movie or go to another class

3119

01:52:18,629 --> 01:52:16,560

don't be here because what we try to do

3120

01:52:20,229 --> 01:52:18,639

is we try to abuse the machine of

3121

01:52:21,750 --> 01:52:20,239

academia to do the things that we

3122

01:52:23,830 --> 01:52:21,760

actually want to do which is try to

3123

01:52:25,830 --> 01:52:23,840

figure out our relationship to the world

3124

01:52:28,550 --> 01:52:25,840

and make actual intellectual

3125

01:52:30,149 --> 01:52:28,560

uh and philosophical and personal

3126

01:52:32,629 --> 01:52:30,159

progress on certain questions that

3127

01:52:35,350 --> 01:52:32,639

actually move us that motivate us to be

3128

01:52:37,350 --> 01:52:35,360

here and spend a portion of our precious

3129

01:52:38,629 --> 01:52:37,360

irretrievable lifetime

3130

01:52:40,390 --> 01:52:38,639

with each other

3131

01:52:41,350 --> 01:52:40,400

on these problems

3132

01:52:44,229 --> 01:52:41,360

and

3133

01:52:46,070 --> 01:52:44,239

so i don't found it difficult to defend

3134

01:52:48,550 --> 01:52:46,080

but i also understand that the machines

3135

01:52:51,910 --> 01:52:48,560

that we are part of that we are serving

3136

01:52:53,990 --> 01:52:51,920

are largely serving other goals

3137

01:52:56,470 --> 01:52:54,000

that was very well said

3138

01:52:59,750 --> 01:52:56,480

i guess for me i want to

3139

01:53:01,669 --> 01:52:59,760

i guess i i see more urgency now than

3140

01:53:03,830 --> 01:53:01,679

there has been in the past i agree with

3141

01:53:06,950 --> 01:53:03,840

you about these institutions are set up

3142

01:53:07,990 --> 01:53:06,960

the way they are for good reasons etc uh

3143

01:53:12,149 --> 01:53:08,000

but

3144

01:53:14,950 --> 01:53:12,159

i i do think we are we're entering into

3145

01:53:16,709 --> 01:53:14,960

very very significant changes um

3146

01:53:18,070 --> 01:53:16,719

you and i both think that

3147

01:53:20,149 --> 01:53:18,080

you know

3148

01:53:22,070 --> 01:53:20,159

strong ai is something that's very

3149

01:53:23,990 --> 01:53:22,080

possible i know you said because you've

3150

01:53:25,189 --> 01:53:24,000

said this and you and i both think this

3151
01:53:27,030 --> 01:53:25,199
has you know just important

3152
01:53:28,629 --> 01:53:27,040
ramifications beyond what a lot of

3153
01:53:30,149 --> 01:53:28,639
people are thinking about

3154
01:53:32,390 --> 01:53:30,159
uh and

3155
01:53:33,270 --> 01:53:32,400
um that's just one example of the way in

3156
01:53:34,709 --> 01:53:33,280
which

3157
01:53:36,629 --> 01:53:34,719
this is

3158
01:53:39,510 --> 01:53:36,639
accelerating and

3159
01:53:44,229 --> 01:53:41,510
and is corrosive to

3160
01:53:46,149 --> 01:53:44,239
people's attempt to sift through

3161
01:53:49,350 --> 01:53:46,159
and make sense sift through the

3162
01:53:51,589 --> 01:53:49,360
and make sense of their world um

3163
01:53:54,790 --> 01:53:51,599

the work i did on the meeting crisis

3164

01:53:56,550 --> 01:53:54,800

the the sense of uh

3165

01:53:58,550 --> 01:53:56,560

it's accelerating it's accelerating

3166

01:53:59,910 --> 01:53:58,560

exponentially people are increasingly

3167

01:54:02,470 --> 01:53:59,920

thinking there's more and more more and

3168

01:54:04,070 --> 01:54:02,480

more and more around

3169

01:54:06,629 --> 01:54:04,080

um and

3170

01:54:10,070 --> 01:54:06,639

i think the kind of stuff we're doing

3171

01:54:13,030 --> 01:54:10,080

here together is the place the arena the

3172

01:54:15,109 --> 01:54:13,040

dojo in which we both train

3173

01:54:21,430 --> 01:54:15,119

how to wrestle with that

3174

01:54:22,709 --> 01:54:21,440

and so i think there's an urgency uh

3175

01:54:25,669 --> 01:54:22,719

now

3176

01:54:28,390 --> 01:54:25,679

to get i think covet accelerated in

3177

01:54:30,070 --> 01:54:28,400

certain ways to give more prominence to

3178

01:54:32,470 --> 01:54:30,080

this dialogue this kind of biological

3179

01:54:33,960 --> 01:54:32,480

space and practice um

3180

01:54:35,589 --> 01:54:33,970

so i guess for me

3181

01:54:36,709 --> 01:54:35,599

[Music]

3182

01:54:40,470 --> 01:54:36,719

i want to push

3183

01:54:43,030 --> 01:54:41,910

uh because

3184

01:54:43,830 --> 01:54:43,040

i uh

3185

01:54:48,629 --> 01:54:43,840

the

3186

01:54:50,390 --> 01:54:48,639

of distress and loss of agency uh seem

3187

01:54:53,270 --> 01:54:50,400

to be going up by several

3188

01:54:54,950 --> 01:54:53,280

sort of objective march of markers and

3189

01:54:56,550 --> 01:54:54,960

so i'm concerned

3190

01:54:57,589 --> 01:54:56,560

that

3191

01:55:00,709 --> 01:54:57,599

i don't think

3192

01:55:02,950 --> 01:55:00,719

academic world is turning to this

3193

01:55:04,790 --> 01:55:02,960

problem and i think this is a better

3194

01:55:07,109 --> 01:55:04,800

forum in which

3195

01:55:07,910 --> 01:55:07,119

we can start to explore what we need to

3196

01:55:10,149 --> 01:55:07,920

do

3197

01:55:12,629 --> 01:55:10,159

in order to address that problem so for

3198

01:55:16,870 --> 01:55:12,639

me that urgency

3199

01:55:19,990 --> 01:55:18,470

part of what i was trying to put my

3200

01:55:21,750 --> 01:55:20,000

finger on when i said

3201
01:55:23,830 --> 01:55:21,760
we need to be doing more of this this is

3202
01:55:26,070 --> 01:55:23,840
valuable this is central this shouldn't

3203
01:55:27,830 --> 01:55:26,080
be on the sidelines it should be in the

3204
01:55:29,430 --> 01:55:27,840
center and

3205
01:55:31,510 --> 01:55:29,440
and there's difficult tasks there's very

3206
01:55:33,750 --> 01:55:31,520
practical tasks of how do we make this

3207
01:55:35,669 --> 01:55:33,760
more attractive to a wider audience of

3208
01:55:37,430 --> 01:55:35,679
people um

3209
01:55:38,629 --> 01:55:37,440
and how do we make it attractive so we

3210
01:55:39,589 --> 01:55:38,639
can draw some of the first kind of

3211
01:55:42,070 --> 01:55:39,599
people

3212
01:55:43,189 --> 01:55:42,080
in and how do we make it attractive so

3213
01:55:45,030 --> 01:55:43,199

that

3214

01:55:47,990 --> 01:55:45,040

we don't automatically exclude the

3215

01:55:49,750 --> 01:55:48,000

crazies um i agree

3216

01:55:51,189 --> 01:55:49,760

with that i mean but you don't want you

3217

01:55:52,390 --> 01:55:51,199

don't want you don't want just sock you

3218

01:55:54,870 --> 01:55:52,400

don't want a room to fill with just

3219

01:55:57,750 --> 01:55:54,880

socrates a bunch of socrates uh he was

3220

01:55:59,430 --> 01:55:57,760

at boss he didn't fit in and they killed

3221

01:56:01,350 --> 01:55:59,440

him um

3222

01:56:04,550 --> 01:56:01,360

and so um

3223

01:56:07,270 --> 01:56:04,560

i think these for me

3224

01:56:10,790 --> 01:56:07,280

these questions are are are becoming

3225

01:56:11,830 --> 01:56:10,800

increasingly central about how do we

3226
01:56:13,830 --> 01:56:11,840
make

3227
01:56:16,550 --> 01:56:13,840
this what we're doing here

3228
01:56:18,870 --> 01:56:16,560
into an attractive way of life

3229
01:56:19,669 --> 01:56:18,880
uh for people what do you mean by way of

3230
01:56:23,589 --> 01:56:19,679
life

3231
01:56:26,470 --> 01:56:23,599
so what i mean by this is that uh

3232
01:56:29,030 --> 01:56:26,480
and i think you said that like

3233
01:56:31,350 --> 01:56:29,040
for me

3234
01:56:34,390 --> 01:56:31,360
exploring these ideas is not something i

3235
01:56:36,070 --> 01:56:34,400
do to get sort of an intellectual orgasm

3236
01:56:37,189 --> 01:56:36,080
and oh that was cool

3237
01:56:39,990 --> 01:56:37,199
right

3238
01:56:42,629 --> 01:56:40,000

ultimately i i want to

3239

01:56:44,070 --> 01:56:42,639

be able to explore these ideas in a way

3240

01:56:46,629 --> 01:56:44,080

that can

3241

01:56:48,390 --> 01:56:46,639

um ameliorate

3242

01:56:50,390 --> 01:56:48,400

people's sense of being disconnected

3243

01:56:52,870 --> 01:56:50,400

from themselves from the world

3244

01:56:53,910 --> 01:56:52,880

from each other

3245

01:56:56,070 --> 01:56:53,920

and so

3246

01:56:57,189 --> 01:56:56,080

if i get a deeper understanding of the

3247

01:56:58,790 --> 01:56:57,199

mind

3248

01:56:59,990 --> 01:56:58,800

and consciousness

3249

01:57:01,910 --> 01:57:00,000

and meaning

3250

01:57:03,990 --> 01:57:01,920

um

3251

01:57:07,030 --> 01:57:04,000

i want to i want that to ultimately be

3252

01:57:08,149 --> 01:57:07,040

in service of helping people

3253

01:57:09,750 --> 01:57:08,159

to whether they

3254

01:57:10,709 --> 01:57:09,760

they feel comfortable with and capable

3255

01:57:13,990 --> 01:57:10,719

of

3256

01:57:22,149 --> 01:57:14,000

in

3257

01:57:26,390 --> 01:57:22,159

collectively to make better sense

3258

01:57:29,270 --> 01:57:26,400

like let's use a let's use a a model

3259

01:57:30,709 --> 01:57:29,280

a historical right christianity and i'm

3260

01:57:33,189 --> 01:57:30,719

not i'm not a christian i'm not

3261

01:57:34,550 --> 01:57:33,199

proselytizing for it was able to create

3262

01:57:37,109 --> 01:57:34,560

this structure that went from like

3263

01:57:39,430 --> 01:57:37,119

aquinas to somebody's grandmother and

3264

01:57:42,149 --> 01:57:39,440

got you get them to interact together

3265

01:57:44,470 --> 01:57:42,159

coordinate together uh work together

3266

01:57:45,510 --> 01:57:44,480

have a shared sense of connectedness

3267

01:57:48,310 --> 01:57:45,520

meaning

3268

01:57:50,629 --> 01:57:48,320

um that's the kind of thing i think we

3269

01:57:52,070 --> 01:57:50,639

need i'm not proposing a religion here i

3270

01:57:53,830 --> 01:57:52,080

sometimes say i'm proposing a religion

3271

01:57:56,070 --> 01:57:53,840

that's not a religion that's what i'm

3272

01:57:57,910 --> 01:57:56,080

talking about kurt i'm talking about the

3273

01:57:59,510 --> 01:57:57,920

the these

3274

01:58:03,350 --> 01:57:59,520

in the end

3275

01:58:05,830 --> 01:58:03,360

don't really care deeply about what you

3276

01:58:07,350 --> 01:58:05,840

believe i care about what you practice

3277

01:58:09,669 --> 01:58:07,360

i care about how are you transforming

3278

01:58:11,750 --> 01:58:09,679

yourself and how are you affording other

3279

01:58:14,229 --> 01:58:11,760

people to transform themselves in a way

3280

01:58:15,990 --> 01:58:14,239

that makes lives less beset by

3281

01:58:17,030 --> 01:58:16,000

foolishness

3282

01:58:18,790 --> 01:58:17,040

more

3283

01:58:20,870 --> 01:58:18,800

enhanced by wisdom

3284

01:58:22,470 --> 01:58:20,880

and and and flourishing for individuals

3285

01:58:24,229 --> 01:58:22,480

that's what i'm that's what i ultimately

3286

01:58:25,830 --> 01:58:24,239

care about

3287

01:58:28,070 --> 01:58:25,840

did that answer your question yeah what

3288

01:58:29,510 --> 01:58:28,080

would happen if that goal of

3289

01:58:32,310 --> 01:58:29,520

helping people

3290

01:58:34,070 --> 01:58:32,320

contradicted the goal of let's say

3291

01:58:35,030 --> 01:58:34,080

investigating reality whatever that

3292

01:58:36,629 --> 01:58:35,040

means

3293

01:58:38,790 --> 01:58:36,639

so for example let's say you found out

3294

01:58:40,950 --> 01:58:38,800

some truth via some scientific

3295

01:58:43,350 --> 01:58:40,960

investigation that would destabilize

3296

01:58:46,070 --> 01:58:43,360

people that would make them feel worse

3297

01:58:47,669 --> 01:58:46,080

that would disconnect us so then

3298

01:58:49,510 --> 01:58:47,679

what do you do you make the decision to

3299

01:58:51,750 --> 01:58:49,520

not publish that to not investigate that

3300

01:58:54,390 --> 01:58:51,760

further

3301
01:58:56,629 --> 01:58:54,400
um i i

3302
01:59:00,070 --> 01:58:56,639
i guess my response to that is

3303
01:59:01,270 --> 01:59:00,080
um i ha i have a certain kind of

3304
01:59:04,070 --> 01:59:01,280
confidence

3305
01:59:05,589 --> 01:59:04,080
in the true the interconnection between

3306
01:59:08,229 --> 01:59:05,599
things being true

3307
01:59:09,270 --> 01:59:08,239
and then ultimately being good

3308
01:59:11,990 --> 01:59:09,280
in fact

3309
01:59:14,310 --> 01:59:12,000
we have to view truth as a kind of good

3310
01:59:17,430 --> 01:59:14,320
in order to explain what we're doing as

3311
01:59:19,189 --> 01:59:17,440
scientists um there's something about

3312
01:59:21,270 --> 01:59:19,199
you know nasdaq's experience machine

3313
01:59:23,510 --> 01:59:21,280

right here let me give you an example

3314

01:59:26,070 --> 01:59:23,520

from i do this in my classroom

3315

01:59:27,669 --> 01:59:26,080

i ask people how many of you are in

3316

01:59:29,189 --> 01:59:27,679

satisfying romantic relationships

3317

01:59:30,629 --> 01:59:29,199

romantic relations are really important

3318

01:59:32,629 --> 01:59:30,639

in our culture because they sort of take

3319

01:59:33,910 --> 01:59:32,639

the role of religion

3320

01:59:35,589 --> 01:59:33,920

right

3321

01:59:37,510 --> 01:59:35,599

and because you ask people what do you

3322

01:59:38,870 --> 01:59:37,520

need to be happy romantic relationship

3323

01:59:41,669 --> 01:59:38,880

and what causes you the most suffering

3324

01:59:42,790 --> 01:59:41,679

romantic relationships so right

3325

01:59:46,149 --> 01:59:42,800

and i ask how many of you are in

3326

01:59:47,270 --> 01:59:46,159

satisfying romantic relationships

3327

01:59:49,270 --> 01:59:47,280

i think you know i get a certain

3328

01:59:51,109 --> 01:59:49,280

percentage i said of these people

3329

01:59:53,189 --> 01:59:51,119

how many of you would want to know that

3330

01:59:54,310 --> 01:59:53,199

your partner was cheating on you even if

3331

01:59:56,709 --> 01:59:54,320

that meant the destruction of the

3332

01:59:59,510 --> 01:59:56,719

relationship 95 of the people keep their

3333

02:00:02,470 --> 01:59:59,520

hand up

3334

02:00:06,070 --> 02:00:02,480

there's there's there's a there's a

3335

02:00:08,070 --> 02:00:06,080

there's a valuing a meaning of being

3336

02:00:09,910 --> 02:00:08,080

connected to what's real

3337

02:00:11,350 --> 02:00:09,920

that seems to be this is one of plato's

3338

02:00:13,430 --> 02:00:11,360

arguments that seems to be kind of a

3339

02:00:15,350 --> 02:00:13,440

meta desire

3340

02:00:17,270 --> 02:00:15,360

in addition to whatever we desire we

3341

02:00:19,109 --> 02:00:17,280

have a meta desire that what satisfies

3342

02:00:20,709 --> 02:00:19,119

that desire is real

3343

02:00:24,830 --> 02:00:20,719

in some fashion which is why i was

3344

02:00:28,870 --> 02:00:24,840

pressing on realness so much with yosha

3345

02:00:30,950 --> 02:00:28,880

so well what i want to say is um there's

3346

02:00:31,750 --> 02:00:30,960

a presumption in your question

3347

02:00:32,870 --> 02:00:31,760

that

3348

02:00:35,030 --> 02:00:32,880

right

3349

02:00:36,629 --> 02:00:35,040

there isn't an intrinsic value or

3350

02:00:38,709 --> 02:00:36,639

goodness to

3351

02:00:41,189 --> 02:00:38,719

uh discovering what's real and i think

3352

02:00:44,390 --> 02:00:41,199

there is um and then what

3353

02:00:47,990 --> 02:00:45,750

transform themselves because so they

3354

02:00:49,589 --> 02:00:48,000

come into greater conformity to that

3355

02:00:51,030 --> 02:00:49,599

yeah that's what i think it means to

3356

02:00:53,189 --> 02:00:51,040

cultivate wisdom

3357

02:00:56,070 --> 02:00:53,199

and so i put i sort of put my

3358

02:00:57,510 --> 02:00:56,080

trust not in the particular metaphysics

3359

02:00:59,589 --> 02:00:57,520

of the wisdom traditions but the fact

3360

02:01:01,109 --> 02:00:59,599

that we've had wisdom traditions

3361

02:01:04,629 --> 02:01:01,119

and we have

3362

02:01:06,709 --> 02:01:04,639

reliably found people to become

3363

02:01:08,390 --> 02:01:06,719

people to be capable of becoming wiser

3364

02:01:10,550 --> 02:01:08,400

and certain individuals to be wiser than

3365

02:01:12,870 --> 02:01:10,560

others

3366

02:01:15,030 --> 02:01:12,880

so what i'm saying it i have i put faith

3367

02:01:16,149 --> 02:01:15,040

in those two things together that's what

3368

02:01:17,669 --> 02:01:16,159

i'm saying

3369

02:01:19,430 --> 02:01:17,679

yoshi i was going to ask if you have any

3370

02:01:22,390 --> 02:01:19,440

comments on that

3371

02:01:24,870 --> 02:01:22,400

yeah we found that we joined and we

3372

02:01:25,669 --> 02:01:24,880

don't have differences at least not in

3373

02:01:30,470 --> 02:01:25,679

the

3374

02:01:33,350 --> 02:01:30,480

couple hours we mostly had very similar

3375

02:01:36,390 --> 02:01:33,360

approaches and ideas and we developed

3376

02:01:37,990 --> 02:01:36,400

our terms together in ways that was very

3377

02:01:40,470 --> 02:01:38,000

harmonic

3378

02:01:43,109 --> 02:01:40,480

we might have a difference in the reason

3379

02:01:44,629 --> 02:01:43,119

why we do things it seems to me that

3380

02:01:47,350 --> 02:01:44,639

john has a different relationship to

3381

02:01:49,030 --> 02:01:47,360

normativity than me and maybe we can go

3382

02:01:51,350 --> 02:01:49,040

into this question later but basically

3383

02:01:53,589 --> 02:01:51,360

from my perspective looks like john sees

3384

02:01:57,750 --> 02:01:53,599

himself as a spiritual teacher

3385

02:02:02,390 --> 02:02:00,550

maturity to see myself as a spiritual

3386

02:02:05,030 --> 02:02:02,400

teacher with integrity i also don't know

3387

02:02:07,189 --> 02:02:05,040

what i would get out of this my

3388

02:02:09,510 --> 02:02:07,199

own observation of the meaning crisis is

3389

02:02:11,669 --> 02:02:09,520

that it's inevitable because the

3390

02:02:13,669 --> 02:02:11,679

civilization that we are part of doesn't

3391

02:02:15,510 --> 02:02:13,679

have much of a future

3392

02:02:17,189 --> 02:02:15,520

and

3393

02:02:19,270 --> 02:02:17,199

there is no way in which the

3394

02:02:21,910 --> 02:02:19,280

civilization can be fixed without

3395

02:02:23,030 --> 02:02:21,920

changing some of its core assumptions

3396

02:02:27,430 --> 02:02:23,040

and

3397

02:02:29,189 --> 02:02:27,440

reflected in the fact that our

3398

02:02:31,189 --> 02:02:29,199

civilization is not projecting itself

3399

02:02:33,510 --> 02:02:31,199

into the future we have no models that

3400

02:02:36,070 --> 02:02:33,520

we discuss with our children in school

3401

02:02:38,950 --> 02:02:36,080

or in our institutions we have no plans

3402

02:02:40,950 --> 02:02:38,960

that go beyond the next few decades it's

3403

02:02:42,790 --> 02:02:40,960

not that we actually think about what

3404

02:02:45,750 --> 02:02:42,800

will life on earth look like for our

3405

02:02:47,030 --> 02:02:45,760

civilization in 500 years from now

3406

02:02:49,589 --> 02:02:47,040

and that's new

3407

02:02:51,430 --> 02:02:49,599

this was not true in in the christian

3408

02:02:52,790 --> 02:02:51,440

society for instance they had an idea of

3409

02:02:54,550 --> 02:02:52,800

what was going to happen in a few

3410

02:02:55,830 --> 02:02:54,560

hundred years from then and this idea

3411

02:02:57,430 --> 02:02:55,840

might have been wrong but they made

3412

02:02:59,350 --> 02:02:57,440

plans for it and some of these plans

3413

02:03:01,589 --> 02:02:59,360

came to pass and we don't have that kind

3414

02:03:04,709 --> 02:03:01,599

of planning horizon anymore so we

3415

02:03:07,990 --> 02:03:04,719

basically are now in an organism as a

3416

02:03:09,990 --> 02:03:08,000

hyper organism uh that is past its prime

3417

02:03:11,510 --> 02:03:10,000

that is in some sense visibly in its

3418

02:03:13,830 --> 02:03:11,520

autumn and that is

3419

02:03:16,390 --> 02:03:13,840

uh facing off against all sorts of

3420

02:03:18,629 --> 02:03:16,400

existential risks and we feel helpless

3421

02:03:21,189 --> 02:03:18,639

at dealing with these risks and as a

3422

02:03:22,870 --> 02:03:21,199

result we don't have a shared purpose we

3423

02:03:25,350 --> 02:03:22,880

might have a shared purpose as an

3424

02:03:27,510 --> 02:03:25,360

individual with a family with children

3425

02:03:30,149 --> 02:03:27,520

with friends but we don't seem to

3426

02:03:31,990 --> 02:03:30,159

project this shared purpose anymore at a

3427

02:03:34,070 --> 02:03:32,000

societal level and there are only small

3428

02:03:36,470 --> 02:03:34,080

groups within the societies some

3429

02:03:39,189 --> 02:03:36,480

evangelical cults and transhumanist

3430

02:03:41,830 --> 02:03:39,199

skulls and so on that try to maintain

3431

02:03:43,830 --> 02:03:41,840

the fiction of a future that they're

3432

02:03:46,070 --> 02:03:43,840

acting with but not at the level of the

3433

02:03:47,750 --> 02:03:46,080

entire civilization it is the level of

3434

02:03:49,990 --> 02:03:47,760

this individual group

3435

02:03:53,350 --> 02:03:50,000

and our mainstream

3436

02:03:56,390 --> 02:03:53,360

bad guys deals with this mostly by uh

3437

02:03:57,270 --> 02:03:56,400

despair or denial yes

3438

02:04:00,470 --> 02:03:57,280

and

3439

02:04:03,189 --> 02:04:00,480

or even an outright nihilism

3440

02:04:05,270 --> 02:04:03,199

and i don't have an argument against

3441

02:04:07,669 --> 02:04:05,280

that nihilism because i think that from

3442

02:04:09,510 --> 02:04:07,679

the perspective of the

3443

02:04:10,950 --> 02:04:09,520

civilizational hive mind this is

3444

02:04:12,709 --> 02:04:10,960

justified

3445

02:04:14,390 --> 02:04:12,719

and if we want to build something new we

3446

02:04:15,910 --> 02:04:14,400

have to do this from the vantage point

3447

02:04:18,390 --> 02:04:15,920

of the next civilization and that's

3448

02:04:19,510 --> 02:04:18,400

almost impossible to maintain the space

3449

02:04:21,350 --> 02:04:19,520

in your own mind what the next

3450

02:04:22,870 --> 02:04:21,360

civilization would be looking like and

3451

02:04:24,870 --> 02:04:22,880

how to build it

3452

02:04:27,109 --> 02:04:24,880

so the only thing that i have to offer

3453

02:04:28,470 --> 02:04:27,119

in terms of spiritual guidance is that i

3454

02:04:31,910 --> 02:04:28,480

hug my friends

3455

02:04:33,589 --> 02:04:31,920

and uh there's not that much more and uh

3456

02:04:35,750 --> 02:04:33,599

and so it's more

3457

02:04:37,589 --> 02:04:35,760

when we know the possibility that i

3458

02:04:39,109 --> 02:04:37,599

could offer somebody that i say this is

3459

02:04:40,870 --> 02:04:39,119

how you fix your life this is how you

3460

02:04:43,030 --> 02:04:40,880

fix your relationship to the world this

3461

02:04:44,870 --> 02:04:43,040

is how you fix your relationship to

3462

02:04:46,550 --> 02:04:44,880

society and this is how you fix your

3463

02:04:48,470 --> 02:04:46,560

society itself because they don't have

3464

02:04:50,149 --> 02:04:48,480

these kinds of answers i don't know what

3465

02:04:52,070 --> 02:04:50,159

these answers would look like i'm

3466

02:04:54,709 --> 02:04:52,080

willing to look for them i'm willing to

3467

02:04:57,109 --> 02:04:54,719

look for them with others but i'm not uh

3468

02:05:00,070 --> 02:04:57,119

convinced that there is an answer

3469

02:05:02,790 --> 02:05:00,080

and instead there is more place that we

3470

02:05:05,430 --> 02:05:02,800

can get to and this place comes from

3471

02:05:06,390 --> 02:05:05,440

attempt to develop integrity and to be

3472

02:05:08,629 --> 02:05:06,400

truthful

3473

02:05:10,629 --> 02:05:08,639

and i agree with john that

3474

02:05:12,470 --> 02:05:10,639

truth is crucial because truth is

3475

02:05:14,550 --> 02:05:12,480

instrumental to good regulation it's

3476

02:05:17,109 --> 02:05:14,560

even reflected in cybernetics in the

3477

02:05:19,430 --> 02:05:17,119

good regulator theorem you cannot

3478

02:05:23,109 --> 02:05:19,440

uh regulate reality when you're not

3479

02:05:25,270 --> 02:05:23,119

truthful about it so the attempt to bend

3480

02:05:27,589 --> 02:05:25,280

your worldview to make it more desirable

3481

02:05:29,350 --> 02:05:27,599

to deny the things that don't fit into

3482

02:05:31,270 --> 02:05:29,360

the world that you prefer as the just

3483

02:05:32,950 --> 02:05:31,280

one and so on is not going to lead to a

3484

02:05:35,189 --> 02:05:32,960

better world it's going to lead to a

3485

02:05:38,149 --> 02:05:35,199

world that is worse

3486

02:05:40,870 --> 02:05:38,159

and so you need when you want to model

3487

02:05:43,750 --> 02:05:40,880

the world do this in a space that is

3488

02:05:45,750 --> 02:05:43,760

independent of what you want to be true

3489

02:05:47,430 --> 02:05:45,760

so there need to be two parts of us one

3490

02:05:49,750 --> 02:05:47,440

that is modeling the world this

3491

02:05:51,430 --> 02:05:49,760

detachment

3492

02:05:52,870 --> 02:05:51,440

it's not important who is looking at the

3493

02:05:54,229 --> 02:05:52,880

world and why

3494

02:05:55,990 --> 02:05:54,239

and another one where you make your

3495

02:05:58,310 --> 02:05:56,000

personal bets and where you construct

3496

02:05:59,589 --> 02:05:58,320

your aesthetics based on what you think

3497

02:06:00,870 --> 02:05:59,599

is true

3498

02:06:02,709 --> 02:06:00,880

and

3499

02:06:05,589 --> 02:06:02,719

this separation is something that is not

3500

02:06:06,870 --> 02:06:05,599

a consensus in the uh disciplines that

3501

02:06:08,629 --> 02:06:06,880

think about what the world should be

3502

02:06:10,550 --> 02:06:08,639

looking like so for instance there are

3503

02:06:12,550 --> 02:06:10,560

very few sociologists that look at the

3504

02:06:14,950 --> 02:06:12,560

world with detachment they largely do

3505

02:06:16,310 --> 02:06:14,960

this from a very local perspective that

3506

02:06:17,510 --> 02:06:16,320

is congruent with what their friends

3507

02:06:20,229 --> 02:06:17,520

think and that is basically

3508

02:06:22,229 --> 02:06:20,239

characterized by the present ideology

3509

02:06:24,470 --> 02:06:22,239

and i don't think that you can be

3510

02:06:26,550 --> 02:06:24,480

ideological and truthful at the same

3511

02:06:30,229 --> 02:06:26,560

time where the allergy

3512

02:06:31,270 --> 02:06:30,239

commits you to seeing the certain way of

3513

02:06:33,830 --> 02:06:31,280

the things that are happening in the

3514

02:06:36,310 --> 02:06:33,840

world regardless of the facts

3515

02:06:37,910 --> 02:06:36,320

that you are observing and it makes you

3516

02:06:39,830 --> 02:06:37,920

inclined to pick certain facts over

3517

02:06:40,950 --> 02:06:39,840

others to support this particular kind

3518

02:06:42,470 --> 02:06:40,960

of aesthetic

3519

02:06:45,350 --> 02:06:42,480

and for me the aesthetic is something

3520

02:06:49,189 --> 02:06:45,360

that needs to be developed independently

3521

02:06:51,990 --> 02:06:49,199

of the reasoning about what is the case

3522

02:06:54,629 --> 02:06:52,000

and since the most people that think

3523

02:06:56,950 --> 02:06:54,639

normatively prefer to be part of the

3524

02:06:59,430 --> 02:06:56,960

hivemind before they are truthful

3525

02:07:02,069 --> 02:06:59,440

autonomously i have difficulty with the

3526

02:07:04,229 --> 02:07:02,079

general notion of normativity my own

3527

02:07:06,550 --> 02:07:04,239

thinking is when i do philosophy

3528

02:07:08,950 --> 02:07:06,560

primarily not normative

3529

02:07:10,470 --> 02:07:08,960

i'm thinking about everything that could

3530

02:07:12,390 --> 02:07:10,480

be the case i'm not thinking about what

3531

02:07:15,109 --> 02:07:12,400

should be the case every should is an if

3532

02:07:17,830 --> 02:07:15,910

um

3533

02:07:20,229 --> 02:07:17,840

there's a lot i i have an agreement with

3534

02:07:22,069 --> 02:07:20,239

about uh what you said there uh about

3535

02:07:24,830 --> 02:07:22,079

the the meaning crisis

3536

02:07:26,550 --> 02:07:24,840

um i guess part

3537

02:07:27,910 --> 02:07:26,560

of uh

3538

02:07:28,550 --> 02:07:27,920

what

3539

02:07:52,149 --> 02:07:28,560

i

3540

02:07:54,790 --> 02:07:52,159

etc

3541

02:07:56,310 --> 02:07:54,800

and i think it's one of the things we

3542

02:07:57,030 --> 02:07:56,320

should do is consider

3543

02:07:59,270 --> 02:07:57,040

uh

3544

02:08:01,830 --> 02:07:59,280

increasing the wisdom of people

3545

02:08:04,550 --> 02:08:01,840

um i think that's a viable project

3546

02:08:06,629 --> 02:08:04,560

um and in conjunction with that

3547

02:08:09,510 --> 02:08:06,639

um

3548

02:08:18,629 --> 02:08:09,520

i

3549

02:08:20,950 --> 02:08:18,639

bronze age collapse or perhaps the

3550

02:08:24,470 --> 02:08:20,960

collapse of the western roman empire

3551
02:08:28,629 --> 02:08:25,589
you had

3552
02:08:30,790 --> 02:08:28,639
the building of new communities

3553
02:08:34,149 --> 02:08:30,800
and communities of communities that made

3554
02:08:36,709 --> 02:08:34,159
possible new ways of life for people

3555
02:08:38,149 --> 02:08:36,719
and were able to

3556
02:08:39,750 --> 02:08:38,159
take

3557
02:08:42,229 --> 02:08:39,760
uh salvage

3558
02:08:44,069 --> 02:08:42,239
what the the

3559
02:08:46,310 --> 02:08:44,079
previous civil legislation had done and

3560
02:08:47,990 --> 02:08:46,320
exact it into the next civilization a

3561
02:08:49,750 --> 02:08:48,000
prototypical example of this is be

3562
02:08:52,069 --> 02:08:49,760
somebody like augustine you know the

3563
02:08:53,750 --> 02:08:52,079

barbarians are literally at the gate and

3564

02:08:55,750 --> 02:08:53,760

he is shepherding

3565

02:08:58,310 --> 02:08:55,760

sort of the greco-roman heritage into

3566

02:09:01,109 --> 02:08:58,320

christianity and he's modifying it he's

3567

02:09:02,950 --> 02:09:01,119

coming up with a new way of being he's

3568

02:09:04,629 --> 02:09:02,960

the autobiographical self comes into

3569

02:09:06,390 --> 02:09:04,639

kind of awareness

3570

02:09:07,990 --> 02:09:06,400

you know there's a new way of being a

3571

02:09:09,830 --> 02:09:08,000

person new way of being a community new

3572

02:09:11,430 --> 02:09:09,840

way of being in relationship to the

3573

02:09:13,030 --> 02:09:11,440

world i'm not saying he did this

3574

02:09:15,669 --> 02:09:13,040

single-handedly i'm just using it as a

3575

02:09:18,069 --> 02:09:15,679

case and helps to build uh the

3576

02:09:20,310 --> 02:09:18,079

possibilities of the next civilization

3577

02:09:21,589 --> 02:09:20,320

now i'm not arrogant i hope i'm not so

3578

02:09:23,189 --> 02:09:21,599

arrogant to think and i know i'm

3579

02:09:24,550 --> 02:09:23,199

augustine and i know what it is it's

3580

02:09:27,189 --> 02:09:24,560

going to be turn up i think we should be

3581

02:09:30,830 --> 02:09:27,199

getting a lot of people trying to build

3582

02:09:34,310 --> 02:09:30,840

right these models these ways

3583

02:09:36,790 --> 02:09:34,320

um because

3584

02:09:38,790 --> 02:09:36,800

typically if you have that kind of a

3585

02:09:41,669 --> 02:09:38,800

translation

3586

02:09:43,750 --> 02:09:41,679

process already in place you get to the

3587

02:09:45,030 --> 02:09:43,760

next civilization with much less

3588

02:09:47,109 --> 02:09:45,040

suffering

3589

02:09:49,910 --> 02:09:47,119

i'm not convinced that

3590

02:09:51,189 --> 02:09:49,920

we can like you that we can save this

3591

02:09:54,950 --> 02:09:51,199

but we have

3592

02:09:56,470 --> 02:09:54,960

um but i guess i want to find out what

3593

02:09:57,750 --> 02:09:56,480

is the best way individually and

3594

02:09:59,830 --> 02:09:57,760

collectively

3595

02:10:00,870 --> 02:09:59,840

of collecting the candles from what we

3596

02:10:03,270 --> 02:10:00,880

have made

3597

02:10:06,390 --> 02:10:03,280

so that we can carry them into and make

3598

02:10:08,470 --> 02:10:06,400

it possible for our children um

3599

02:10:09,750 --> 02:10:08,480

and so this is for me a way of trying to

3600

02:10:10,629 --> 02:10:09,760

get back

3601
02:10:13,430 --> 02:10:10,639
to

3602
02:10:15,109 --> 02:10:13,440
the a generational relationship like you

3603
02:10:17,990 --> 02:10:15,119
were talking about where it's not just

3604
02:10:19,830 --> 02:10:18,000
me here now in distraction or despair

3605
02:10:21,109 --> 02:10:19,840
but trying to ask

3606
02:10:23,109 --> 02:10:21,119
like and i don't mean this

3607
02:10:24,709 --> 02:10:23,119
technologically or sociologically or

3608
02:10:26,310 --> 02:10:24,719
politically

3609
02:10:27,350 --> 02:10:26,320
trying to ask

3610
02:10:29,830 --> 02:10:27,360
look for

3611
02:10:33,189 --> 02:10:29,840
where are people trying to build what

3612
02:10:36,069 --> 02:10:33,199
looked like viable possible new ways uh

3613
02:10:37,350 --> 02:10:36,079

for being in a civilization

3614

02:10:38,470 --> 02:10:37,360

and we know that this has been done in

3615

02:10:39,510 --> 02:10:38,480

the past

3616

02:10:41,830 --> 02:10:39,520

and

3617

02:10:43,589 --> 02:10:41,840

this isn't an algorithm it can't be but

3618

02:10:45,030 --> 02:10:43,599

we can look at those historical figures

3619

02:10:47,030 --> 02:10:45,040

we can look at many of those historical

3620

02:10:49,350 --> 02:10:47,040

examples and try and glean sort of the

3621

02:10:51,669 --> 02:10:49,360

best lessons possible that's what i'm

3622

02:10:53,990 --> 02:10:51,679

proposing i i i'm definitely not

3623

02:10:56,629 --> 02:10:54,000

founding a religion or anything like

3624

02:11:00,629 --> 02:10:56,639

that i i i'm not the right person for

3625

02:11:01,669 --> 02:11:00,639

the job i don't want the job and um so

3626

02:11:03,270 --> 02:11:01,679

if that's

3627

02:11:06,390 --> 02:11:03,280

if that means i see myself as a

3628

02:11:07,589 --> 02:11:06,400

spiritual practitioner um so be it i'm

3629

02:11:08,950 --> 02:11:07,599

fine with that but i just wanted to

3630

02:11:11,270 --> 02:11:08,960

clarify

3631

02:11:13,830 --> 02:11:11,280

what i'm proposing i'm i'm proposing

3632

02:11:15,189 --> 02:11:13,840

something that is possible at least we

3633

02:11:17,270 --> 02:11:15,199

have

3634

02:11:20,470 --> 02:11:17,280

i think relevantly similar cases from

3635

02:11:21,910 --> 02:11:20,480

history of where this has worked

3636

02:11:23,270 --> 02:11:21,920

you can see it like i say two i've

3637

02:11:24,390 --> 02:11:23,280

looked at carefully of the axial

3638

02:11:27,830 --> 02:11:24,400

revolution

3639

02:11:33,589 --> 02:11:31,910

the end of the western roman empire

3640

02:11:35,189 --> 02:11:33,599

that's what i'm proposing that's what

3641

02:11:36,709 --> 02:11:35,199

i'm proposing

3642

02:11:38,709 --> 02:11:36,719

i have a question for both of you we'll

3643

02:11:40,470 --> 02:11:38,719

start with yosha you mentioned that you

3644

02:11:41,990 --> 02:11:40,480

have this relationship with your ideas

3645

02:11:44,310 --> 02:11:42,000

which is that you don't devote yourself

3646

02:11:46,390 --> 02:11:44,320

to them they're not they're tentative

3647

02:11:48,550 --> 02:11:46,400

and i'm curious in the past two years

3648

02:11:50,390 --> 02:11:48,560

what's an idea that you used to believe

3649

02:11:52,390 --> 02:11:50,400

most that you no longer believe and then

3650

02:11:55,109 --> 02:11:52,400

what led you to that decision that's for

3651

02:12:00,390 --> 02:11:55,119

both of you but we'll start with yosha

3652

02:12:05,030 --> 02:12:02,550

so let's say in the most recent past two

3653

02:12:09,030 --> 02:12:07,189

um but

3654

02:12:10,629 --> 02:12:09,040

it usually doesn't feel like a big

3655

02:12:13,510 --> 02:12:10,639

revolution it's more a gradual

3656

02:12:14,790 --> 02:12:13,520

progression or sometimes uh a new vista

3657

02:12:17,589 --> 02:12:14,800

opens up

3658

02:12:19,430 --> 02:12:17,599

and there are a few thoughts that

3659

02:12:21,750 --> 02:12:19,440

now are interesting to me that is for

3660

02:12:24,069 --> 02:12:21,760

instance how can a system discover

3661

02:12:25,990 --> 02:12:24,079

itself in the world that i see more

3662

02:12:29,350 --> 02:12:26,000

central than before there are a few

3663

02:12:31,910 --> 02:12:29,360

notions that i take to be

3664

02:12:33,270 --> 02:12:31,920

possible that i didn't explore before

3665

02:12:35,030 --> 02:12:33,280

so uh

3666

02:12:37,350 --> 02:12:35,040

something that i'm exploring right now

3667

02:12:38,629 --> 02:12:37,360

is for instance the idea of

3668

02:12:40,470 --> 02:12:38,639

um

3669

02:12:43,350 --> 02:12:40,480

memory knot store being stored in

3670

02:12:46,470 --> 02:12:43,360

synaptic weights only but being stored

3671

02:12:47,669 --> 02:12:46,480

in uh the soma of neurons in the form of

3672

02:12:49,270 --> 02:12:47,679

rna

3673

02:12:51,109 --> 02:12:49,280

and this leads to a

3674

02:12:53,109 --> 02:12:51,119

radical

3675

02:12:54,870 --> 02:12:53,119

change in the way in which i think about

3676

02:12:56,550 --> 02:12:54,880

the formation of memory and the

3677

02:12:58,390 --> 02:12:56,560

execution of

3678

02:12:59,270 --> 02:12:58,400

functions in the brain

3679

02:13:01,030 --> 02:12:59,280

and

3680

02:13:03,430 --> 02:13:01,040

it's not normative in the sense that i

3681

02:13:05,990 --> 02:13:03,440

now believe that we should be things

3682

02:13:07,510 --> 02:13:06,000

doing differently but it it changes the

3683

02:13:09,830 --> 02:13:07,520

way in which i think about neural

3684

02:13:11,510 --> 02:13:09,840

computation and leads me to

3685

02:13:13,109 --> 02:13:11,520

envisioning new experiments that need to

3686

02:13:14,830 --> 02:13:13,119

be done to figure out whether this is

3687

02:13:17,589 --> 02:13:14,840

the case

3688

02:13:19,430 --> 02:13:17,599

and this is an example of where my

3689

02:13:22,069 --> 02:13:19,440

perspective has shifted or another one

3690

02:13:23,430 --> 02:13:22,079

is uh the role of consciousness

3691

02:13:24,629 --> 02:13:23,440

so for instance i

3692

02:13:27,109 --> 02:13:24,639

uh

3693

02:13:29,990 --> 02:13:27,119

used to think that consciousness might

3694

02:13:32,390 --> 02:13:30,000

be a side effect of the way in which

3695

02:13:34,629 --> 02:13:32,400

cognition works in human brains

3696

02:13:37,510 --> 02:13:34,639

and that other systems that process

3697

02:13:40,229 --> 02:13:37,520

information uh in the service of agency

3698

02:13:41,109 --> 02:13:40,239

are not necessarily conscious

3699

02:13:43,030 --> 02:13:41,119

and

3700

02:13:44,470 --> 02:13:43,040

while i still consider that to be

3701

02:13:47,270 --> 02:13:44,480

possible uh

3702

02:13:49,109 --> 02:13:47,280

i think it's also conceivable that

3703

02:13:51,270 --> 02:13:49,119

consciousness at some shape or form is

3704

02:13:53,030 --> 02:13:51,280

crucial to make sense of the world

3705

02:13:54,470 --> 02:13:53,040

basically perception is following

3706

02:13:55,750 --> 02:13:54,480

gradients and it's converging to a

3707

02:13:57,910 --> 02:13:55,760

certain state

3708

02:13:59,430 --> 02:13:57,920

and if you just follow a grain you don't

3709

02:14:00,709 --> 02:13:59,440

even need to have memory of where you're

3710

02:14:02,470 --> 02:14:00,719

coming from

3711

02:14:04,790 --> 02:14:02,480

but certain kinds of reality

3712

02:14:06,390 --> 02:14:04,800

interpretation require construction

3713

02:14:07,990 --> 02:14:06,400

and construction cannot follow a

3714

02:14:09,510 --> 02:14:08,000

gradient constructor needs to make

3715

02:14:11,510 --> 02:14:09,520

experiments and remember which

3716

02:14:13,589 --> 02:14:11,520

experiments worked and why and then

3717

02:14:15,430 --> 02:14:13,599

recall this and use the knowledge of

3718

02:14:18,390 --> 02:14:15,440

that so it needs to make index memories

3719

02:14:20,310 --> 02:14:18,400

of the operations that it performed and

3720

02:14:22,470 --> 02:14:20,320

it also requires some kind of central

3721

02:14:24,550 --> 02:14:22,480

organization to construct you need to

3722

02:14:26,790 --> 02:14:24,560

develop a central plan and then act on

3723

02:14:28,149 --> 02:14:26,800

that central plan so you have some kind

3724

02:14:30,390 --> 02:14:28,159

of top-down

3725

02:14:33,270 --> 02:14:30,400

localized imposition of a

3726
02:14:34,629 --> 02:14:33,280
low-dimensional function on the entirety

3727
02:14:37,109 --> 02:14:34,639
of perception

3728
02:14:38,950 --> 02:14:37,119
and it could be that this coincides

3729
02:14:40,629 --> 02:14:38,960
uh to the large degree with the

3730
02:14:42,390 --> 02:14:40,639
functionality of attentional

3731
02:14:46,550 --> 02:14:42,400
consciousness

3732
02:14:48,790 --> 02:14:46,560
of a government

3733
02:14:51,109 --> 02:14:48,800
and the government is an agent that is

3734
02:14:52,950 --> 02:14:51,119
imposing an offset on the

3735
02:14:54,629 --> 02:14:52,960
payout metrics of individual

3736
02:14:56,310 --> 02:14:54,639
participants in the system to make their

3737
02:14:58,790 --> 02:14:56,320
nash equilibrium compatible with the

3738
02:15:01,669 --> 02:14:58,800

common good so it's basically overcoming

3739

02:15:04,550 --> 02:15:01,679

local incentives in the system uh to

3740

02:15:06,470 --> 02:15:04,560

follow a larger plan so this government

3741

02:15:07,990 --> 02:15:06,480

itself is not creating the incentives

3742

02:15:09,589 --> 02:15:08,000

the incentives are created by game

3743

02:15:11,030 --> 02:15:09,599

theory physics and in underlying

3744

02:15:13,430 --> 02:15:11,040

dynamics of the system that is

3745

02:15:14,950 --> 02:15:13,440

facilitating for instance a society or

3746

02:15:16,870 --> 02:15:14,960

that is facilitating the function of

3747

02:15:18,870 --> 02:15:16,880

your brain you will still have to look

3748

02:15:20,229 --> 02:15:18,880

for food and social interaction in all

3749

02:15:21,830 --> 02:15:20,239

these things

3750

02:15:23,750 --> 02:15:21,840

consciousness is

3751

02:15:25,510 --> 02:15:23,760

channeling the motivation that we have

3752

02:15:28,390 --> 02:15:25,520

it's not creating it

3753

02:15:30,229 --> 02:15:28,400

it's creating a model of uh

3754

02:15:32,229 --> 02:15:30,239

where we are this is what we experience

3755

02:15:34,870 --> 02:15:32,239

as reality and the experience of model

3756

02:15:37,189 --> 02:15:34,880

of what we should be doing these are our

3757

02:15:38,709 --> 02:15:37,199

purposes but there uh the motive power

3758

02:15:41,030 --> 02:15:38,719

in these purposes comes from our

3759

02:15:42,629 --> 02:15:41,040

underlying motivation that is outside of

3760

02:15:44,470 --> 02:15:42,639

consciousness that is older than

3761

02:15:46,790 --> 02:15:44,480

consciousness itself

3762

02:15:49,270 --> 02:15:46,800

on the other hand uh we can see that

3763

02:15:51,030 --> 02:15:49,280

basically all the mammals are conscious

3764

02:15:52,790 --> 02:15:51,040

and this was also something that i was

3765

02:15:54,390 --> 02:15:52,800

not that acutely aware of before i

3766

02:15:57,030 --> 02:15:54,400

started looking

3767

02:15:58,629 --> 02:15:57,040

uh but it seems to be that uh

3768

02:16:01,350 --> 02:15:58,639

apparent in the interaction between

3769

02:16:03,189 --> 02:16:01,360

animals and also the animals and humans

3770

02:16:05,830 --> 02:16:03,199

that there is a mutual awareness of the

3771

02:16:09,030 --> 02:16:05,840

awareness of the other

3772

02:16:13,189 --> 02:16:10,950

thinking has changed in the last few

3773

02:16:15,750 --> 02:16:13,199

years and in part gradually in part more

3774

02:16:17,669 --> 02:16:15,760

radically the most radical one is

3775

02:16:19,430 --> 02:16:17,679

rna-based memory transfer the

3776

02:16:20,950 --> 02:16:19,440

possibility of that and the implications

3777

02:16:22,790 --> 02:16:20,960

for that which is just a very recent

3778

02:16:24,470 --> 02:16:22,800

idea that i have i don't know how long

3779

02:16:26,470 --> 02:16:24,480

i'll hold on to this and what will come

3780

02:16:28,470 --> 02:16:26,480

of this but it's something that

3781

02:16:31,109 --> 02:16:28,480

doesn't change my normative thinking in

3782

02:16:32,870 --> 02:16:31,119

a fundamental way and often is these

3783

02:16:34,790 --> 02:16:32,880

small changes to details of your

3784

02:16:38,070 --> 02:16:34,800

technical worldview that can have a big

3785

02:16:38,950 --> 02:16:38,080

change in your trajectory

3786

02:16:40,950 --> 02:16:38,960

john

3787

02:16:42,950 --> 02:16:40,960

it was very cool uh

3788

02:16:44,389 --> 02:16:42,960

the consciousness as a government i like

3789

02:16:46,549 --> 02:16:44,399

that idea it resonates with some of the

3790

02:16:47,669 --> 02:16:46,559

stuff i've been thinking about so maybe

3791

02:16:49,030 --> 02:16:47,679

we could talk about that at some point

3792

02:16:50,629 --> 02:16:49,040

in the future

3793

02:16:52,709 --> 02:16:50,639

um so for me

3794

02:16:55,750 --> 02:16:52,719

um

3795

02:16:56,709 --> 02:16:55,760

i'm like yoshi i mean i i often i'm

3796

02:16:58,309 --> 02:16:56,719

aware of these things only

3797

02:17:01,910 --> 02:16:58,319

retrospectively

3798

02:17:04,549 --> 02:17:01,920

not prospectively or introspectively um

3799

02:17:07,509 --> 02:17:04,559

so i guess retrospectively

3800

02:17:09,030 --> 02:17:07,519

i'm noticing that i'm really

3801
02:17:11,030 --> 02:17:09,040
i'm focusing on this issue that we

3802
02:17:12,790 --> 02:17:11,040
bumped up against a couple of times

3803
02:17:15,270 --> 02:17:12,800
which is normativity

3804
02:17:16,870 --> 02:17:15,280
and for a longest long time i was very

3805
02:17:18,309 --> 02:17:16,880
much

3806
02:17:20,150 --> 02:17:18,319
like sort of like the problem that

3807
02:17:21,830 --> 02:17:20,160
habermas talks about

3808
02:17:23,429 --> 02:17:21,840
i saw these domains the true the good

3809
02:17:25,030 --> 02:17:23,439
and the beautiful as separate from each

3810
02:17:26,870 --> 02:17:25,040
other and autonomous

3811
02:17:29,030 --> 02:17:26,880
um and

3812
02:17:30,230 --> 02:17:29,040
and then there was a hard fact value

3813
02:17:33,110 --> 02:17:30,240

distinction

3814

02:17:34,150 --> 02:17:33,120

uh things like that and i i'm now

3815

02:17:36,230 --> 02:17:34,160

um

3816

02:17:38,389 --> 02:17:36,240

i'm now really i'm really really

3817

02:17:39,830 --> 02:17:38,399

seriously questioning that i'm seeing

3818

02:17:42,950 --> 02:17:39,840

more and more good arguments for the

3819

02:17:44,629 --> 02:17:42,960

interpenetration of fact and value uh

3820

02:17:46,389 --> 02:17:44,639

and more and more arguments for the

3821

02:17:47,750 --> 02:17:46,399

interpenetration mutual affordance of

3822

02:17:48,950 --> 02:17:47,760

truth goodness

3823

02:17:53,030 --> 02:17:48,960

and beauty

3824

02:18:01,429 --> 02:17:53,910

that

3825

02:18:02,870 --> 02:18:01,439

other issues about the interconnection

3826

02:18:04,629 --> 02:18:02,880

of affect

3827

02:18:05,990 --> 02:18:04,639

and cognition

3828

02:18:07,509 --> 02:18:06,000

um

3829

02:18:09,509 --> 02:18:07,519

and that and like you show that leads

3830

02:18:11,669 --> 02:18:09,519

into more sort of technical things

3831

02:18:14,309 --> 02:18:11,679

i think there's ways of integrating

3832

02:18:16,950 --> 02:18:14,319

processes of relevance realization

3833

02:18:19,349 --> 02:18:16,960

with predictive processing models and i

3834

02:18:21,349 --> 02:18:19,359

just reviewed a paper

3835

02:18:22,950 --> 02:18:21,359

for frontiers i hope it gets published i

3836

02:18:24,629 --> 02:18:22,960

recommend it to get published where

3837

02:18:25,429 --> 02:18:24,639

people are exploring this convergence

3838

02:18:27,190 --> 02:18:25,439

now

3839

02:18:29,509 --> 02:18:27,200

in a really powerful way

3840

02:18:31,110 --> 02:18:29,519

uh one of my former students

3841

02:18:31,990 --> 02:18:31,120

mark miller does excellent work around

3842

02:18:35,190 --> 02:18:32,000

this

3843

02:18:37,509 --> 02:18:35,200

stuff

3844

02:18:39,349 --> 02:18:37,519

much more deeply so there's the

3845

02:18:41,349 --> 02:18:39,359

downstream stuff about

3846

02:18:43,589 --> 02:18:41,359

ways in which particular theories could

3847

02:18:45,429 --> 02:18:43,599

be integrated together and the upstream

3848

02:18:46,790 --> 02:18:45,439

stuff is

3849

02:18:49,030 --> 02:18:46,800

maybe

3850

02:18:51,589 --> 02:18:49,040

the the the enlightenment

3851
02:18:53,030 --> 02:18:51,599
i mean like the european enlightenment

3852
02:18:55,349 --> 02:18:53,040
as a period of time

3853
02:18:57,429 --> 02:18:55,359
the enlightenment idea of the autonomy

3854
02:18:58,790 --> 02:18:57,439
of the normativities is something we

3855
02:19:01,589 --> 02:18:58,800
should go back

3856
02:19:03,349 --> 02:19:01,599
uh to questioning a lot of the machinery

3857
02:19:05,110 --> 02:19:03,359
behind for example the is odd

3858
02:19:06,950 --> 02:19:05,120
distinction the fact value distinction

3859
02:19:09,509 --> 02:19:06,960
has actually been undermined by a lot of

3860
02:19:11,669 --> 02:19:09,519
arguments uh k-sphere has made a good

3861
02:19:13,349 --> 02:19:11,679
case of that and others

3862
02:19:15,750 --> 02:19:13,359
so i'm not i'm not sure where i am on

3863
02:19:18,309 --> 02:19:15,760

that i'm reading some very good books by

3864

02:19:19,750 --> 02:19:18,319

d stream schindler about that but i'm

3865

02:19:23,030 --> 02:19:19,760

really trying to

3866

02:19:26,549 --> 02:19:23,040

get clearer um

3867

02:19:27,750 --> 02:19:26,559

about the relationship uh between uh the

3868

02:19:30,230 --> 02:19:27,760

true the good and the beautiful to give

3869

02:19:31,990 --> 02:19:30,240

the classical name on it and then what

3870

02:19:34,070 --> 02:19:32,000

that means about

3871

02:19:35,030 --> 02:19:34,080

um

3872

02:19:36,870 --> 02:19:35,040

well

3873

02:19:38,070 --> 02:19:36,880

being wise how we best live our lives

3874

02:19:39,750 --> 02:19:38,080

because talking about how we best live

3875

02:19:41,910 --> 02:19:39,760

our lives is a normative judgment and

3876

02:19:43,190 --> 02:19:41,920

how do all those three if

3877

02:19:44,629 --> 02:19:43,200

they aren't

3878

02:19:46,549 --> 02:19:44,639

i mean part of the meaning crisis is

3879

02:19:48,549 --> 02:19:46,559

also the fragmentation of these

3880

02:19:50,389 --> 02:19:48,559

normativities and we put them into weird

3881

02:19:52,790 --> 02:19:50,399

competitions with each other that was

3882

02:19:54,790 --> 02:19:52,800

part of harbor moss's argument

3883

02:19:58,230 --> 02:19:54,800

and if it's possible that we are moving

3884

02:19:59,990 --> 02:19:58,240

beyond that model of the modularity

3885

02:20:01,510 --> 02:20:00,000

of the normativities but rather they're

3886

02:20:03,190 --> 02:20:01,520

i'm not saying their identity by the way

3887

02:20:05,030 --> 02:20:03,200

but their interpenetration and mutual

3888

02:20:06,790 --> 02:20:05,040

affordance into affordance

3889

02:20:07,590 --> 02:20:06,800

that i think has important implications

3890

02:20:09,990 --> 02:20:07,600

for

3891

02:20:11,270 --> 02:20:10,000

how people go about judging what it is

3892

02:20:13,750 --> 02:20:11,280

to lead

3893

02:20:15,910 --> 02:20:13,760

uh the best kind of life um so that's

3894

02:20:16,950 --> 02:20:15,920

where my thinking i i wasn't in that

3895

02:20:18,070 --> 02:20:16,960

position

3896

02:20:20,469 --> 02:20:18,080

um

3897

02:20:22,070 --> 02:20:20,479

i wasn't tackling those issues

3898

02:20:25,830 --> 02:20:22,080

i wasn't

3899

02:20:27,429 --> 02:20:25,840

about them three or four years ago so

3900

02:20:30,469 --> 02:20:27,439

that's

3901

02:20:32,550 --> 02:20:30,479

a significant change for me i had i had

3902

02:20:35,030 --> 02:20:32,560

a whole set of presuppositions

3903

02:20:37,190 --> 02:20:35,040

and and just don't make this heroic i

3904

02:20:39,349 --> 02:20:37,200

didn't sort of like oh by the way

3905

02:20:40,950 --> 02:20:39,359

by reading people like those

3906

02:20:43,190 --> 02:20:40,960

presuppositions have been slowly

3907

02:20:45,910 --> 02:20:43,200

archaeologically excavated

3908

02:20:48,230 --> 02:20:45,920

and i've come to be questioning them

3909

02:20:49,190 --> 02:20:48,240

in a way that i had not foreseen

3910

02:20:56,870 --> 02:20:49,200

and

3911

02:21:01,590 --> 02:20:59,990

okay so this question comes from

3912

02:21:03,270 --> 02:21:01,600

donald hoffman

3913

02:21:05,190 --> 02:21:03,280

he wants to know

3914

02:21:07,190 --> 02:21:05,200

is space-time an aspect of fundamental

3915

02:21:08,950 --> 02:21:07,200

reality

3916

02:21:10,230 --> 02:21:08,960

and also can there be a theory of

3917

02:21:12,309 --> 02:21:10,240

everything so you can tackle whichever

3918

02:21:14,710 --> 02:21:12,319

one you want and we'll start as usual

3919

02:21:17,750 --> 02:21:14,720

with yosha

3920

02:21:20,150 --> 02:21:17,760

no it's not the

3921

02:21:23,270 --> 02:21:20,160

obvious giveaway is that the collapse of

3922

02:21:26,630 --> 02:21:23,280

the waveform marks a point in your past

3923

02:21:29,750 --> 02:21:26,640

beyond which you cannot obtain a model

3924

02:21:32,389 --> 02:21:29,760

of events happening in time and space it

3925

02:21:34,710 --> 02:21:32,399

in a pinpointed fashion

3926

02:21:35,750 --> 02:21:34,720

that is one of the answers another one

3927

02:21:37,990 --> 02:21:35,760

is that

3928

02:21:39,830 --> 02:21:38,000

the traditional notion of time and space

3929

02:21:41,190 --> 02:21:39,840

requires a temporal and spatial

3930

02:21:45,349 --> 02:21:41,200

continuum

3931

02:21:47,670 --> 02:21:45,359

would require that you have basically an

3932

02:21:49,429 --> 02:21:47,680

infinite granularity

3933

02:21:51,270 --> 02:21:49,439

of things that are happening

3934

02:21:53,030 --> 02:21:51,280

which if you turn this into a

3935

02:21:54,790 --> 02:21:53,040

constructive language means that you

3936

02:21:57,110 --> 02:21:54,800

would have to process infinite amounts

3937

02:21:58,070 --> 02:21:57,120

of information in a finite number of

3938

02:21:59,830 --> 02:21:58,080

steps

3939

02:22:01,510 --> 02:21:59,840

and this leads in contradictions in the

3940

02:22:03,429 --> 02:22:01,520

definition of language which means we

3941

02:22:05,750 --> 02:22:03,439

cannot properly define these terms

3942

02:22:09,110 --> 02:22:05,760

without running into contradictions it's

3943

02:22:12,469 --> 02:22:09,120

also not necessary to do this so we can

3944

02:22:15,110 --> 02:22:12,479

create constructs that allow us to model

3945

02:22:17,830 --> 02:22:15,120

the function of the universe to a very

3946

02:22:19,750 --> 02:22:17,840

low level without going to continuity so

3947

02:22:23,349 --> 02:22:19,760

i don't think that space time itself

3948

02:22:25,110 --> 02:22:23,359

exists but it is an apparent thing that

3949

02:22:26,389 --> 02:22:25,120

happens at a certain level of course

3950

02:22:28,710 --> 02:22:26,399

graining

3951

02:22:30,309 --> 02:22:28,720

there and there are properties uh of

3952

02:22:32,550 --> 02:22:30,319

space-time this which means the

3953

02:22:35,190 --> 02:22:32,560

regularity and flatness and so on that

3954

02:22:38,389 --> 02:22:35,200

are probably required for uh having us

3955

02:22:41,670 --> 02:22:38,399

in it so basically for an evolution you

3956

02:22:44,150 --> 02:22:41,680

need to have a region of uh of the

3957

02:22:46,389 --> 02:22:44,160

universe where you can apply the things

3958

02:22:47,830 --> 02:22:46,399

that you learn in one corner uh in

3959

02:22:48,630 --> 02:22:47,840

another corner

3960

02:22:50,790 --> 02:22:48,640

and

3961

02:22:53,030 --> 02:22:50,800

your control actually works over time

3962

02:22:54,389 --> 02:22:53,040

spans and over space

3963

02:22:56,389 --> 02:22:54,399

so uh

3964

02:22:58,950 --> 02:22:56,399

you there is a reason why the universe

3965

02:23:01,190 --> 02:22:58,960

around us looks as if it was happening

3966

02:23:04,790 --> 02:23:01,200

in a nearly continuous space

3967

02:23:06,389 --> 02:23:04,800

and within nearly continuous time

3968

02:23:09,349 --> 02:23:06,399

john

3969

02:23:10,870 --> 02:23:09,359

um so i guess um

3970

02:23:13,670 --> 02:23:10,880

donald's question

3971

02:23:17,510 --> 02:23:15,510

i i guess i would want to talk to him

3972

02:23:19,990 --> 02:23:17,520

about a fundamental ontology do i think

3973

02:23:22,790 --> 02:23:20,000

that time and space are the ultimate

3974

02:23:24,870 --> 02:23:22,800

our ultimate reality uh no i i don't

3975

02:23:27,590 --> 02:23:24,880

think so i think i heard yoshi saying

3976

02:23:29,830 --> 02:23:27,600

something similar to that um

3977

02:23:32,150 --> 02:23:29,840

that doesn't by the way mean that i

3978

02:23:35,349 --> 02:23:32,160

think they're an illusion and i don't

3979

02:23:36,389 --> 02:23:35,359

think yosho was saying that either

3980

02:23:39,190 --> 02:23:36,399

i think

3981

02:23:41,030 --> 02:23:39,200

we have to be very careful about

3982

02:23:42,710 --> 02:23:41,040

when we're talking about these kinds of

3983

02:23:43,990 --> 02:23:42,720

levels

3984

02:23:44,950 --> 02:23:44,000

because

3985

02:23:46,950 --> 02:23:44,960

our

3986

02:23:48,710 --> 02:23:46,960

it's not the case and this is going to

3987

02:23:50,870 --> 02:23:48,720

go towards my answer the second thing

3988

02:23:52,630 --> 02:23:50,880

it's not the case that we can find all

3989

02:23:54,150 --> 02:23:52,640

the explanations we want at any

3990

02:23:55,510 --> 02:23:54,160

particular level

3991

02:23:56,230 --> 02:23:55,520

um

3992

02:23:58,070 --> 02:23:56,240

and

3993

02:23:59,990 --> 02:23:58,080

there's lots of arguments for this but

3994

02:24:02,870 --> 02:24:00,000

um i don't think there's one level from

3995

02:24:04,630 --> 02:24:02,880

which all the explanations uh can be

3996

02:24:06,550 --> 02:24:04,640

generated

3997

02:24:08,070 --> 02:24:06,560

and so in that sense

3998

02:24:09,750 --> 02:24:08,080

if what you mean by a theory of

3999

02:24:11,590 --> 02:24:09,760

everything is a theory in which all

4000

02:24:13,510 --> 02:24:11,600

explanations are reduced

4001
02:24:14,950 --> 02:24:13,520
to i don't know quantum mechanic

4002
02:24:16,870 --> 02:24:14,960
explanations and even if those are

4003
02:24:21,830 --> 02:24:16,880
explanations it's questionable

4004
02:24:21,840 --> 02:24:24,230
so

4005
02:24:27,750 --> 02:24:26,070
do i think time and space are ultimate

4006
02:24:28,790 --> 02:24:27,760
reality no

4007
02:24:29,830 --> 02:24:28,800
i don't think that means they're an

4008
02:24:33,190 --> 02:24:29,840
illusion

4009
02:24:34,070 --> 02:24:33,200
um and i think we should talk about

4010
02:24:35,750 --> 02:24:34,080
um

4011
02:24:40,830 --> 02:24:35,760
there being something like

4012
02:24:43,750 --> 02:24:40,840
a con uh uh a levels uh uh of of reality

4013
02:24:45,670 --> 02:24:43,760

um i think that

4014

02:24:47,750 --> 02:24:45,680

things not only emerge

4015

02:24:50,230 --> 02:24:47,760

out of the quantum base

4016

02:24:52,710 --> 02:24:50,240

um they're also constrained

4017

02:24:55,110 --> 02:24:52,720

uh by uh you know

4018

02:24:56,870 --> 02:24:55,120

law-like features of reality which

4019

02:24:58,389 --> 02:24:56,880

aren't properly talked about as being in

4020

02:24:59,910 --> 02:24:58,399

time and space

4021

02:25:01,030 --> 02:24:59,920

um

4022

02:25:03,030 --> 02:25:01,040

so like

4023

02:25:05,349 --> 02:25:03,040

i don't know what it would mean to say

4024

02:25:07,429 --> 02:25:05,359

like that two plus two equals four is

4025

02:25:08,309 --> 02:25:07,439

that temporal spatial that makes no

4026

02:25:10,870 --> 02:25:08,319

sense

4027

02:25:12,710 --> 02:25:10,880

um even something like equals mc squared

4028

02:25:13,830 --> 02:25:12,720

it doesn't make sense to talk about it

4029

02:25:16,469 --> 02:25:13,840

being

4030

02:25:18,309 --> 02:25:16,479

here or there or starting then or there

4031

02:25:20,469 --> 02:25:18,319

um and of course there's lots of other

4032

02:25:22,550 --> 02:25:20,479

entities like this so

4033

02:25:24,950 --> 02:25:22,560

we have emergence up out of something

4034

02:25:28,389 --> 02:25:24,960

like yoshi was talking about a

4035

02:25:29,910 --> 02:25:28,399

non-temporal spatial probability realm

4036

02:25:31,270 --> 02:25:29,920

and we also have higher order

4037

02:25:32,550 --> 02:25:31,280

constraints

4038

02:25:33,429 --> 02:25:32,560

um

4039

02:25:36,389 --> 02:25:33,439

that

4040

02:25:39,190 --> 02:25:36,399

also don't seem to be spatial temporal

4041

02:25:41,429 --> 02:25:39,200

and i think i think of time and space as

4042

02:25:43,349 --> 02:25:41,439

caught between that emergence and their

4043

02:25:44,309 --> 02:25:43,359

emanation i think part of what we're

4044

02:25:46,070 --> 02:25:44,319

doing

4045

02:25:48,710 --> 02:25:46,080

when we're playing with quantum

4046

02:25:50,710 --> 02:25:48,720

mechanics and relativity relativistic

4047

02:25:52,230 --> 02:25:50,720

stuff and trying to reconcile them not

4048

02:25:54,389 --> 02:25:52,240

this is not a perfect mapping but we're

4049

02:25:56,070 --> 02:25:54,399

trying to get clear about how those

4050

02:25:58,790 --> 02:25:56,080

levels uh

4051
02:25:59,670 --> 02:25:58,800
are appropriately real together

4052
02:26:01,349 --> 02:25:59,680
um

4053
02:26:03,270 --> 02:26:01,359
and so

4054
02:26:04,710 --> 02:26:03,280
that would be my answer to both

4055
02:26:06,389 --> 02:26:04,720
questions i don't think they're

4056
02:26:09,030 --> 02:26:06,399
ultimately real i don't think that says

4057
02:26:11,670 --> 02:26:09,040
they're an illusion um and i don't think

4058
02:26:13,910 --> 02:26:11,680
there is a theory of everything because

4059
02:26:16,469 --> 02:26:13,920
i don't think if by theory of everything

4060
02:26:18,630 --> 02:26:16,479
you mean i'm gonna pick one level and

4061
02:26:21,510 --> 02:26:18,640
that's the level at which i will be able

4062
02:26:24,710 --> 02:26:21,520
to explain everything i mean

4063
02:26:26,389 --> 02:26:24,720

yoshi for example uh and he's perfectly

4064

02:26:28,870 --> 02:26:26,399

legitimate for him doing this is not a

4065

02:26:31,190 --> 02:26:28,880

criticism he picks a computational level

4066

02:26:32,550 --> 02:26:31,200

right and right and that's the level

4067

02:26:35,190 --> 02:26:32,560

from which he works

4068

02:26:37,429 --> 02:26:35,200

uh but that doesn't mean that like

4069

02:26:38,230 --> 02:26:37,439

like he thinks uh

4070

02:26:41,030 --> 02:26:38,240

he

4071

02:26:42,630 --> 02:26:41,040

criticism which i take to be a

4072

02:26:45,510 --> 02:26:42,640

pseudo-criticism oh but the

4073

02:26:47,830 --> 02:26:45,520

computational is ultimately just right

4074

02:26:48,630 --> 02:26:47,840

uh thermodynamic or something like that

4075

02:26:49,750 --> 02:26:48,640

um

4076

02:26:51,429 --> 02:26:49,760

and

4077

02:26:53,349 --> 02:26:51,439

you know thermodynamics is a way to talk

4078

02:26:54,550 --> 02:26:53,359

about computation it's it's the other

4079

02:26:56,630 --> 02:26:54,560

way around

4080

02:26:59,590 --> 02:26:56,640

so and in some sense there uh you know

4081

02:27:02,150 --> 02:26:59,600

that has a glass panel maybe uh it's a

4082

02:27:05,349 --> 02:27:02,160

famous book that he has written in which

4083

02:27:07,910 --> 02:27:05,359

he describes uh somewhat metaphorically

4084

02:27:11,030 --> 02:27:07,920

a world in which uh people do science

4085

02:27:12,389 --> 02:27:11,040

and philosophy by playing a certain game

4086

02:27:14,710 --> 02:27:12,399

with glass beats

4087

02:27:16,790 --> 02:27:14,720

yes and this game is never completely

4088

02:27:19,590 --> 02:27:16,800

explained how it works right yeah yeah

4089

02:27:21,510 --> 02:27:19,600

so but you you are free to uh project

4090

02:27:23,590 --> 02:27:21,520

whatever you want and this so you can

4091

02:27:25,429 --> 02:27:23,600

imagine it something like an extremely

4092

02:27:27,429 --> 02:27:25,439

complicated abacus

4093

02:27:28,870 --> 02:27:27,439

in which you are shifting these glass

4094

02:27:31,110 --> 02:27:28,880

speeds around according to very

4095

02:27:33,030 --> 02:27:31,120

intricate rules and it allows you to

4096

02:27:35,429 --> 02:27:33,040

uh to reason about the world in some

4097

02:27:37,190 --> 02:27:35,439

kind of automatic fashion

4098

02:27:39,030 --> 02:27:37,200

and you're playing it against each other

4099

02:27:40,950 --> 02:27:39,040

but you are playing it according to

4100

02:27:43,190 --> 02:27:40,960

rules and the individual that is playing

4101
02:27:45,429 --> 02:27:43,200
it is not crucial for this game at all

4102
02:27:46,950 --> 02:27:45,439
it's the rules of the game itself

4103
02:27:48,630 --> 02:27:46,960
and so i think what happened with

4104
02:27:50,469 --> 02:27:48,640
computation is that we discovered a

4105
02:27:53,030 --> 02:27:50,479
glass pattern sphere

4106
02:27:55,429 --> 02:27:53,040
and we discovered the equivalence of all

4107
02:27:57,030 --> 02:27:55,439
glass pattern spheres that can possibly

4108
02:27:59,750 --> 02:27:57,040
be constructed

4109
02:28:01,990 --> 02:27:59,760
and whenever we found something new to

4110
02:28:04,230 --> 02:28:02,000
express ideas we also discovered for

4111
02:28:06,550 --> 02:28:04,240
this new thing to express ideas that it

4112
02:28:09,510 --> 02:28:06,560
can be mapped to a glassblown spear

4113
02:28:11,190 --> 02:28:09,520

and now there is this big question um

4114

02:28:12,630 --> 02:28:11,200

can there be a glass filled spiel of

4115

02:28:14,710 --> 02:28:12,640

everything which means could the

4116

02:28:16,389 --> 02:28:14,720

universe exist within a glass pattern

4117

02:28:18,630 --> 02:28:16,399

sphere

4118

02:28:20,630 --> 02:28:18,640

and from where i stand it seems to be

4119

02:28:24,070 --> 02:28:20,640

that the answer is yes but i don't know

4120

02:28:26,469 --> 02:28:24,080

this uh so i cannot know this before i

4121

02:28:28,150 --> 02:28:26,479

haven't succeeded in doing so but in

4122

02:28:30,150 --> 02:28:28,160

some sense that's the game that i'm

4123

02:28:32,469 --> 02:28:30,160

playing here

4124

02:28:34,630 --> 02:28:32,479

it's a good book i love herman hessa i

4125

02:28:39,349 --> 02:28:34,640

recommend the book um

4126

02:28:40,550 --> 02:28:39,359

um yeah i guess i i tend to uh

4127

02:28:42,150 --> 02:28:40,560

i tend to be

4128

02:28:43,750 --> 02:28:42,160

a little bit more

4129

02:28:46,630 --> 02:28:43,760

pragmatic in the philosophical sense

4130

02:28:48,710 --> 02:28:46,640

about uh scientific explanations uh

4131

02:28:50,870 --> 02:28:48,720

meant that they're always bound to

4132

02:28:51,910 --> 02:28:50,880

my interests my concerns the concerns of

4133

02:28:53,670 --> 02:28:51,920

my group

4134

02:28:56,469 --> 02:28:53,680

and again you've said things that are

4135

02:28:58,469 --> 02:28:56,479

not inconsistent with that um

4136

02:28:59,429 --> 02:28:58,479

so

4137

02:29:01,510 --> 02:28:59,439

well i don't know if there's anything

4138

02:29:03,670 --> 02:29:01,520

more to say i mean that could launch us

4139

02:29:05,110 --> 02:29:03,680

into another long discussion perhaps

4140

02:29:06,950 --> 02:29:05,120

but i think i've tried to answer the

4141

02:29:08,870 --> 02:29:06,960

question um

4142

02:29:11,030 --> 02:29:08,880

i don't think they're ultimately real i

4143

02:29:11,990 --> 02:29:11,040

think they are intermediate literally

4144

02:29:15,110 --> 02:29:12,000

real

4145

02:29:17,510 --> 02:29:15,120

right in some ways um as i've tried to

4146

02:29:19,110 --> 02:29:17,520

say um that doesn't mean they're an

4147

02:29:20,630 --> 02:29:19,120

illusion

4148

02:29:24,790 --> 02:29:20,640

and i

4149

02:29:26,309 --> 02:29:24,800

i i'm suspicious of uh grand reductive

4150

02:29:28,550 --> 02:29:26,319

explanations

4151
02:29:30,309 --> 02:29:28,560
maybe more suspicious than yeshua uh

4152
02:29:31,270 --> 02:29:30,319
because i've watched them fail in the

4153
02:29:37,830 --> 02:29:31,280
history

4154
02:29:39,270 --> 02:29:37,840
i think more

4155
02:29:40,710 --> 02:29:39,280
and it's unclear whether or not what

4156
02:29:42,710 --> 02:29:40,720
yoshi's

4157
02:29:44,469 --> 02:29:42,720
proposing does a reduction or does what

4158
02:29:45,349 --> 02:29:44,479
i'm now going to talk about what i see

4159
02:29:48,070 --> 02:29:45,359
now

4160
02:29:50,150 --> 02:29:48,080
um is kind of reciprocal reciprocal

4161
02:29:51,670 --> 02:29:50,160
reconstruction between these various

4162
02:29:54,150 --> 02:29:51,680
levels of discourse

4163
02:29:55,750 --> 02:29:54,160

i see the ai people

4164

02:29:57,990 --> 02:29:55,760
changing the minds of the

4165

02:29:59,750 --> 02:29:58,000
neuroscientists and vice versa

4166

02:30:01,910 --> 02:29:59,760
and the ai people changing the minds of

4167

02:30:04,230 --> 02:30:01,920
the psychologists and vice versa it's

4168

02:30:07,349 --> 02:30:04,240
not that anyone anybody one person

4169

02:30:08,710 --> 02:30:07,359
claims uh to have this um and i don't

4170

02:30:11,990 --> 02:30:08,720
know if the glass speed game would be a

4171

02:30:15,270 --> 02:30:12,000
claim of reduction to itself or a game

4172

02:30:16,710 --> 02:30:15,280
in which we can really facilitate uh the

4173

02:30:18,630 --> 02:30:16,720
most optimal kind of reciprocal

4174

02:30:21,110 --> 02:30:18,640
reconstruction between our various

4175

02:30:23,110 --> 02:30:21,120
ontologies and strategies of measuring

4176

02:30:25,270 --> 02:30:23,120

and explaining the world

4177

02:30:26,950 --> 02:30:25,280

so that's how i would answer that sad

4178

02:30:29,270 --> 02:30:26,960

face has a question can we get a

4179

02:30:32,630 --> 02:30:29,280

discussion on their perspectives of

4180

02:30:33,990 --> 02:30:32,640

on the chinese room thought experiment

4181

02:30:35,990 --> 02:30:34,000

so should i go first this time because

4182

02:30:38,150 --> 02:30:36,000

yeah sure please

4183

02:30:39,590 --> 02:30:38,160

um

4184

02:30:41,030 --> 02:30:39,600

so

4185

02:30:42,309 --> 02:30:41,040

the chinese room first of all i don't

4186

02:30:44,150 --> 02:30:42,319

think it's an argument i think it's a

4187

02:30:46,710 --> 02:30:44,160

demonstration of arguments already that

4188

02:30:48,630 --> 02:30:46,720

are already prefigured in descartes but

4189

02:30:49,510 --> 02:30:48,640

nevertheless i think searle deserves

4190

02:30:51,110 --> 02:30:49,520

credit

4191

02:30:52,389 --> 02:30:51,120

um

4192

02:30:55,429 --> 02:30:52,399

i think he's right about sort of the

4193

02:30:58,710 --> 02:30:55,439

standard system and room reply

4194

02:31:01,910 --> 02:30:58,720

uh sorry this the sort of system and

4195

02:31:03,110 --> 02:31:01,920

robot reply that's what i meant to say

4196

02:31:05,030 --> 02:31:03,120

um

4197

02:31:06,469 --> 02:31:05,040

i don't think he has an answer to the

4198

02:31:07,910 --> 02:31:06,479

virtual

4199

02:31:09,990 --> 02:31:07,920

machine reply

4200

02:31:11,670 --> 02:31:10,000

um because he didn't foresee it

4201
02:31:15,349 --> 02:31:11,680
but i think he would respond to the

4202
02:31:18,150 --> 02:31:15,359
virtual machine reply uh by invoking his

4203
02:31:19,750 --> 02:31:18,160
argument about multiple realizability

4204
02:31:22,790 --> 02:31:19,760
and that multiple realizability

4205
02:31:25,030 --> 02:31:22,800
indicates that an entity an ai's

4206
02:31:27,030 --> 02:31:25,040
presupposes multiple realizability

4207
02:31:30,389 --> 02:31:27,040
ai is not in

4208
02:31:32,550 --> 02:31:30,399
intrinsically exist

4209
02:31:34,550 --> 02:31:32,560
it's only attributed because of multiple

4210
02:31:37,030 --> 02:31:34,560
realizability i think

4211
02:31:38,469 --> 02:31:37,040
the response to that is

4212
02:31:40,950 --> 02:31:38,479
i don't think the distinction between

4213
02:31:42,309 --> 02:31:40,960

attributed and intrinsic as as clean as

4214

02:31:44,389 --> 02:31:42,319

he makes it for example is the

4215

02:31:47,190 --> 02:31:44,399

distinction itself intrinsic or

4216

02:31:50,230 --> 02:31:47,200

attributed that's a very deep problem

4217

02:31:51,990 --> 02:31:50,240

and secondly uh we do think that there

4218

02:31:54,389 --> 02:31:52,000

are things that are multiply realizable

4219

02:31:56,790 --> 02:31:54,399

that nevertheless intrinsically exist

4220

02:31:59,190 --> 02:31:56,800

uh combustion erosion evolution are

4221

02:32:01,990 --> 02:31:59,200

clear examples so i don't think his

4222

02:32:05,270 --> 02:32:02,000

intuitive criteria of the for splitting

4223

02:32:08,870 --> 02:32:05,280

intrinsic and attributed is sufficient i

4224

02:32:11,910 --> 02:32:08,880

think we um have to look at other

4225

02:32:14,630 --> 02:32:11,920

accounts of how we think things have a

4226
02:32:15,910 --> 02:32:14,640
kind of independent existence from us

4227
02:32:18,150 --> 02:32:15,920
and so

4228
02:32:20,309 --> 02:32:18,160
the degree to which things are

4229
02:32:22,950 --> 02:32:20,319
we think things are self-organizing in

4230
02:32:25,190 --> 02:32:22,960
some fashion guarantees that a kind of

4231
02:32:26,070 --> 02:32:25,200
autonomous existence

4232
02:32:27,830 --> 02:32:26,080
that

4233
02:32:31,190 --> 02:32:27,840
cyril needs to acknowledge and because

4234
02:32:32,469 --> 02:32:31,200
he because he invokes biology and other

4235
02:32:33,590 --> 02:32:32,479
things i think he is ultimately

4236
02:32:35,670 --> 02:32:33,600
committed

4237
02:32:37,590 --> 02:32:35,680
to what i just said so i think the

4238
02:32:39,590 --> 02:32:37,600

chinese room argument doesn't settle

4239

02:32:43,030 --> 02:32:39,600

anything in and of itself i think you

4240

02:32:45,510 --> 02:32:43,040

get shifted to the virtual machine reply

4241

02:32:47,910 --> 02:32:45,520

the virtual machining reply would get

4242

02:32:50,070 --> 02:32:47,920

addressed by searle's arguments

4243

02:32:52,070 --> 02:32:50,080

about multiple realizability and things

4244

02:32:53,590 --> 02:32:52,080

being intrinsic or attributed and i

4245

02:32:56,150 --> 02:32:53,600

think that's where the crux of the

4246

02:32:57,110 --> 02:32:56,160

argument is and i think

4247

02:32:58,230 --> 02:32:57,120

we

4248

02:33:00,070 --> 02:32:58,240

don't

4249

02:33:00,950 --> 02:33:00,080

always think

4250

02:33:02,230 --> 02:33:00,960

that

4251
02:33:04,150 --> 02:33:02,240
things

4252
02:33:06,309 --> 02:33:04,160
that are multiply realizable are

4253
02:33:08,469 --> 02:33:06,319
necessarily attributed and i gave you

4254
02:33:10,230 --> 02:33:08,479
some instances and i think that's where

4255
02:33:12,389 --> 02:33:10,240
the argument bottoms out and that's

4256
02:33:14,790 --> 02:33:12,399
would be my reply to the chinese

4257
02:33:17,190 --> 02:33:14,800
argument it seems to me that there are

4258
02:33:20,150 --> 02:33:17,200
things that are multiply realizable but

4259
02:33:22,550 --> 02:33:20,160
we nevertheless take to be intrinsic uh

4260
02:33:25,110 --> 02:33:22,560
that they exist intrinsically not just

4261
02:33:27,429 --> 02:33:25,120
by our attribute money

4262
02:33:29,510 --> 02:33:27,439
only exists by attribution we all agree

4263
02:33:31,510 --> 02:33:29,520

it exists and exists and if we stop

4264

02:33:33,349 --> 02:33:31,520

agreeing it doesn't exist um i don't

4265

02:33:35,270 --> 02:33:33,359

think combustion erosion or revolution

4266

02:33:36,070 --> 02:33:35,280

which are multiply realizable

4267

02:33:38,710 --> 02:33:36,080

um

4268

02:33:42,070 --> 02:33:38,720

exist in that way and so i think his

4269

02:33:45,030 --> 02:33:42,080

clean dichotomy breaks down um

4270

02:33:47,030 --> 02:33:45,040

and so that would be my my answer um i

4271

02:33:49,190 --> 02:33:47,040

think it's important work i i teach this

4272

02:33:50,790 --> 02:33:49,200

i teach surah i teach the chinese rule

4273

02:33:52,710 --> 02:33:50,800

argument but i teach this whole series

4274

02:33:55,910 --> 02:33:52,720

of arguments and it gets down to some

4275

02:33:57,190 --> 02:33:55,920

very fundamental issues that cyril

4276

02:33:59,270 --> 02:33:57,200

certainly

4277

02:34:00,790 --> 02:33:59,280

argument and his intuitions about how

4278

02:34:02,469 --> 02:34:00,800

you distinguish the intrinsic from the

4279

02:34:04,550 --> 02:34:02,479

attributed

4280

02:34:06,389 --> 02:34:04,560

that's not well argued

4281

02:34:07,750 --> 02:34:06,399

that and he does and he doesn't for

4282

02:34:09,510 --> 02:34:07,760

example deal with the cases i just

4283

02:34:11,349 --> 02:34:09,520

proposed to you of things that are

4284

02:34:14,550 --> 02:34:11,359

clearly multiply realizable and

4285

02:34:16,389 --> 02:34:14,560

intrinsically exist so his idea that if

4286

02:34:17,590 --> 02:34:16,399

it's multiply realizable it must be

4287

02:34:19,750 --> 02:34:17,600

attributed

4288

02:34:21,590 --> 02:34:19,760

seems to be falsifiable

4289

02:34:25,429 --> 02:34:21,600

and i think that there that's where the

4290

02:34:25,439 --> 02:34:28,150

yoshi

4291

02:34:33,110 --> 02:34:31,190

the multiple realizability is a stent

4292

02:34:35,429 --> 02:34:33,120

and for something deeper it has to do

4293

02:34:37,750 --> 02:34:35,439

with the fact that causal structure can

4294

02:34:39,590 --> 02:34:37,760

be insulated from the substrate

4295

02:34:41,429 --> 02:34:39,600

and to insulate causal structure from

4296

02:34:43,670 --> 02:34:41,439

the substrate means that you now have a

4297

02:34:45,750 --> 02:34:43,680

causal description that happens

4298

02:34:47,670 --> 02:34:45,760

independently of the underlying physics

4299

02:34:49,349 --> 02:34:47,680

for instance the stock market could work

4300

02:34:50,950 --> 02:34:49,359

in different universes

4301

02:34:52,870 --> 02:34:50,960

the stock market in some sense is an

4302

02:34:54,790 --> 02:34:52,880

independent course attraction as soon as

4303

02:34:57,190 --> 02:34:54,800

you have touring machines that can be

4304

02:34:58,870 --> 02:34:57,200

built in many kinds of universes you can

4305

02:35:00,790 --> 02:34:58,880

build causal structure on top of these

4306

02:35:03,270 --> 02:35:00,800

turing machines that is arbitrary right

4307

02:35:05,190 --> 02:35:03,280

you could build a computer game in other

4308

02:35:07,510 --> 02:35:05,200

universes as long as you can build a

4309

02:35:09,429 --> 02:35:07,520

computer in these other universes and

4310

02:35:13,510 --> 02:35:09,439

this computer game can have arbitrary

4311

02:35:16,550 --> 02:35:13,520

physics like a computer game can have

4312

02:35:18,630 --> 02:35:16,560

and and in the sense i think that money

4313

02:35:20,950 --> 02:35:18,640

would also exist if we stop believing in

4314

02:35:22,950 --> 02:35:20,960

it as long as we have functional

4315

02:35:25,190 --> 02:35:22,960

mechanisms that implement the response

4316

02:35:28,070 --> 02:35:25,200

to money so as long as you have banks

4317

02:35:30,630 --> 02:35:28,080

implemented in software and atms and

4318

02:35:32,550 --> 02:35:30,640

stock markets and amazon is accepting

4319

02:35:33,910 --> 02:35:32,560

money and so on and so on

4320

02:35:35,830 --> 02:35:33,920

right the money would retain its

4321

02:35:37,429 --> 02:35:35,840

functional character independent of the

4322

02:35:39,910 --> 02:35:37,439

beliefs of people

4323

02:35:42,710 --> 02:35:39,920

and so we have updated in a sense

4324

02:35:45,590 --> 02:35:42,720

because we uh no longer just see money

4325

02:35:47,270 --> 02:35:45,600

as an agreement between people but uh

4326

02:35:49,190 --> 02:35:47,280

this agreement between people has been

4327

02:35:50,389 --> 02:35:49,200

extended into machinery that we have

4328

02:35:52,230 --> 02:35:50,399

built in the world that works

4329

02:35:52,950 --> 02:35:52,240

independently of the beliefs that people

4330

02:35:54,389 --> 02:35:52,960

have

4331

02:35:56,230 --> 02:35:54,399

and this leads us to the question of

4332

02:35:58,790 --> 02:35:56,240

what is software

4333

02:36:00,950 --> 02:35:58,800

and software is not a thing

4334

02:36:03,270 --> 02:36:00,960

right software is something else in

4335

02:36:05,190 --> 02:36:03,280

which sense does software exist

4336

02:36:07,030 --> 02:36:05,200

and the best answer that i have so far

4337

02:36:09,190 --> 02:36:07,040

discovered is that software is a

4338

02:36:12,469 --> 02:36:09,200

physical law

4339

02:36:13,910 --> 02:36:12,479

instance arrange matter in this

4340

02:36:16,550 --> 02:36:13,920

particular way

4341

02:36:18,630 --> 02:36:16,560

the following thing will happen

4342

02:36:20,309 --> 02:36:18,640

and this is true for software right so

4343

02:36:22,389 --> 02:36:20,319

no matter where you are in the universe

4344

02:36:23,910 --> 02:36:22,399

in which universe you are if you

4345

02:36:25,990 --> 02:36:23,920

produce the following functional

4346

02:36:27,670 --> 02:36:26,000

arrangement of things the following

4347

02:36:30,230 --> 02:36:27,680

thing will happen this is what software

4348

02:36:32,950 --> 02:36:30,240

is about so the programmer in some sense

4349

02:36:35,750 --> 02:36:32,960

is discovering by constructing certain

4350

02:36:37,670 --> 02:36:35,760

very peculiar circumstances a very

4351

02:36:38,389 --> 02:36:37,680

specific physical law

4352

02:36:39,670 --> 02:36:38,399

and

4353

02:36:40,710 --> 02:36:39,680

i just want to interrupt that's really

4354

02:36:44,070 --> 02:36:40,720

cool

4355

02:36:45,349 --> 02:36:44,080

idea

4356

02:36:46,469 --> 02:36:45,359

i want to make sure i'm sorry for it i

4357

02:36:48,150 --> 02:36:46,479

want to make sure i'm following you

4358

02:36:49,830 --> 02:36:48,160

you're proposing that software has the

4359

02:36:52,230 --> 02:36:49,840

same kind of ontological status as

4360

02:36:55,030 --> 02:36:52,240

physical laws exactly yes wow that's

4361

02:36:56,469 --> 02:36:55,040

really really cool i hadn't that's cool

4362

02:36:59,190 --> 02:36:56,479

keep going please i just wanted to yeah

4363

02:37:01,110 --> 02:36:59,200

that's very cool yeah i thought when i

4364

02:37:03,190 --> 02:37:01,120

stumbled on this insight that it was a

4365

02:37:05,110 --> 02:37:03,200

good insight that basically started

4366

02:37:07,110 --> 02:37:05,120

to make sense right because it's an

4367

02:37:09,910 --> 02:37:07,120

apparent pattern in the interaction of

4368

02:37:14,309 --> 02:37:12,150

that's very good i like that that's very

4369

02:37:16,630 --> 02:37:14,319

good that's very good

4370

02:37:18,309 --> 02:37:16,640

so uh this also means uh because i think

4371

02:37:19,830 --> 02:37:18,319

that mental states are best understood

4372

02:37:21,830 --> 02:37:19,840

as software states

4373

02:37:23,990 --> 02:37:21,840

that the ontological status of our

4374

02:37:26,870 --> 02:37:24,000

mental states is different from the

4375

02:37:29,349 --> 02:37:26,880

ontological states of uh the one that we

4376

02:37:31,670 --> 02:37:29,359

attribute to physical things

4377

02:37:34,230 --> 02:37:31,680

so this has to do with the notion of

4378

02:37:36,230 --> 02:37:34,240

identity of a mental state

4379

02:37:38,230 --> 02:37:36,240

that is similar to the identity of a

4380

02:37:40,630 --> 02:37:38,240

physical law which means it's not this

4381

02:37:43,030 --> 02:37:40,640

point wise identity yeah yeah it's a

4382

02:37:46,230 --> 02:37:43,040

functional identity yeah yeah and uh now

4383

02:37:48,630 --> 02:37:46,240

let's go back to uh sir the original

4384

02:37:51,030 --> 02:37:48,640

chinese room argument is very simplistic

4385

02:37:51,910 --> 02:37:51,040

in a sense like it's a children's story

4386

02:37:53,750 --> 02:37:51,920

myth

4387

02:37:55,910 --> 02:37:53,760

that searle himself doesn't believe in

4388

02:37:58,230 --> 02:37:55,920

and it's an argument that is by absurd

4389

02:38:00,790 --> 02:37:58,240

when he repeats it today made in bad

4390

02:38:02,950 --> 02:38:00,800

faith the azir is affiliated with this

4391

02:38:05,590 --> 02:38:02,960

his actual contributions to philosophy

4392

02:38:07,349 --> 02:38:05,600

have been largely an extension of

4393

02:38:09,830 --> 02:38:07,359

austin's speech act theory that are

4394

02:38:11,910 --> 02:38:09,840

boring and wouldn't give praise to fame

4395

02:38:13,590 --> 02:38:11,920

but the

4396

02:38:15,429 --> 02:38:13,600

chinese womb is somebody that everybody

4397

02:38:17,510 --> 02:38:15,439

understands because it interfaces with

4398

02:38:18,630 --> 02:38:17,520

certain intuitions and it's an intuition

4399

02:38:20,550 --> 02:38:18,640

pump

4400

02:38:22,309 --> 02:38:20,560

and if you disassemble these intuitions

4401
02:38:24,950 --> 02:38:22,319
and try to make them more distinct and

4402
02:38:27,110 --> 02:38:24,960
more clear then many of them fall apart

4403
02:38:29,990 --> 02:38:27,120
and searle is aware because he's not

4404
02:38:31,510 --> 02:38:30,000
stupid he's a very smart individual of

4405
02:38:33,429 --> 02:38:31,520
many of the ways in which they fall

4406
02:38:35,110 --> 02:38:33,439
apart but he is still repeating the

4407
02:38:36,950 --> 02:38:35,120
original chinese room argument because

4408
02:38:37,990 --> 02:38:36,960
it's his brand

4409
02:38:39,190 --> 02:38:38,000
so

4410
02:38:41,750 --> 02:38:39,200
it's not because he believes in it and

4411
02:38:43,110 --> 02:38:41,760
if you actually read his uh this work he

4412
02:38:44,950 --> 02:38:43,120
is aware of many of the counter

4413
02:38:47,750 --> 02:38:44,960

arguments and he knows that he needs to

4414

02:38:49,349 --> 02:38:47,760

go into a few levels of complications to

4415

02:38:51,990 --> 02:38:49,359

have an interesting argument and to have

4416

02:38:54,230 --> 02:38:52,000

an interesting case that he's making so

4417

02:38:56,550 --> 02:38:54,240

the uh superficial level of the chinese

4418

02:38:58,389 --> 02:38:56,560

room argument is maybe not that

4419

02:39:00,550 --> 02:38:58,399

interesting a slate extension that is

4420

02:39:03,030 --> 02:39:00,560

more interesting is the chinese brain

4421

02:39:05,990 --> 02:39:03,040

argument that so is also aware of and

4422

02:39:07,510 --> 02:39:06,000

the chinese brain argument suggests that

4423

02:39:09,429 --> 02:39:07,520

instead of having this library with

4424

02:39:11,270 --> 02:39:09,439

books in it in which you execute the

4425

02:39:13,590 --> 02:39:11,280

algorithm we use a different

4426
02:39:17,110 --> 02:39:13,600
implementation of that whole thing and

4427
02:39:20,150 --> 02:39:17,120
instead what we do is we take uh

4428
02:39:22,630 --> 02:39:20,160
a mechanization of the neuron itself

4429
02:39:24,550 --> 02:39:22,640
so if we accept that what the brain is

4430
02:39:26,230 --> 02:39:24,560
doing is facilitated by the interaction

4431
02:39:28,150 --> 02:39:26,240
of neurons

4432
02:39:29,830 --> 02:39:28,160
their urine has to follow certain rules

4433
02:39:31,590 --> 02:39:29,840
in order to make that happen

4434
02:39:33,830 --> 02:39:31,600
and maybe we can spell out these rules

4435
02:39:37,750 --> 02:39:33,840
in our thought experiment and then we

4436
02:39:39,750 --> 02:39:37,760
assign a chinese person to a neuron

4437
02:39:41,910 --> 02:39:39,760
and maybe we need a few more we maybe

4438
02:39:44,150 --> 02:39:41,920

need 86 billion chinese people in

4439

02:39:45,670 --> 02:39:44,160

instead of 1.4 but

4440

02:39:48,230 --> 02:39:45,680

it's a thought experiment so not a

4441

02:39:50,230 --> 02:39:48,240

problem at all and now instead of

4442

02:39:51,990 --> 02:39:50,240

neurons we have chinese which follow

4443

02:39:53,270 --> 02:39:52,000

these words or we could use machines

4444

02:39:54,790 --> 02:39:53,280

instead of the chinese that are

4445

02:39:56,230 --> 02:39:54,800

following these rules

4446

02:39:57,830 --> 02:39:56,240

and so

4447

02:40:00,070 --> 02:39:57,840

i think that this matching between a

4448

02:40:02,469 --> 02:40:00,080

neuron and a chinese person is not

4449

02:40:03,910 --> 02:40:02,479

completely absurd on the face of it of

4450

02:40:05,110 --> 02:40:03,920

course it would be much larger and we

4451

02:40:07,670 --> 02:40:05,120

blow it up

4452

02:40:10,230 --> 02:40:07,680

and now sir would say of course the

4453

02:40:12,469 --> 02:40:10,240

chinese brain doesn't have the necessary

4454

02:40:14,309 --> 02:40:12,479

and sufficient conditions to produce a

4455

02:40:16,550 --> 02:40:14,319

conscious mind and then

4456

02:40:18,630 --> 02:40:16,560

access to meaning so it doesn't change

4457

02:40:20,630 --> 02:40:18,640

anything but the chinese room or the

4458

02:40:22,630 --> 02:40:20,640

chinese brain is performing these

4459

02:40:24,070 --> 02:40:22,640

operations the chinese brain is still

4460

02:40:26,309 --> 02:40:24,080

not able to

4461

02:40:27,910 --> 02:40:26,319

speak chinese because the individual

4462

02:40:30,150 --> 02:40:27,920

identities of the chinese people and

4463

02:40:31,830 --> 02:40:30,160

their knowledge does not interfere in

4464

02:40:34,950 --> 02:40:31,840

any way with their emulation of the

4465

02:40:37,190 --> 02:40:34,960

functionality of individual neurons so

4466

02:40:38,870 --> 02:40:37,200

now if we have established this case

4467

02:40:40,630 --> 02:40:38,880

where sir would say the chinese brain is

4468

02:40:43,190 --> 02:40:40,640

not conscious but your brain is

4469

02:40:45,510 --> 02:40:43,200

conscious let's see where is the

4470

02:40:48,950 --> 02:40:45,520

boundary between those two systems so

4471

02:40:50,630 --> 02:40:48,960

let's take your brain blow it up until a

4472

02:40:52,710 --> 02:40:50,640

person and the new one have roughly the

4473

02:40:54,710 --> 02:40:52,720

same size so change the time so it

4474

02:40:56,389 --> 02:40:54,720

doesn't matter how much the chinese need

4475

02:40:58,230 --> 02:40:56,399

to talk to each other to make the new

4476

02:41:00,870 --> 02:40:58,240

world functionality happening and set

4477

02:41:02,309 --> 02:41:00,880

messages back and forth so let's keep

4478

02:41:04,710 --> 02:41:02,319

this an identity and now we take

4479

02:41:06,870 --> 02:41:04,720

basically take your neurons and uh cell

4480

02:41:09,270 --> 02:41:06,880

accepts that neurons are facilitating

4481

02:41:11,190 --> 02:41:09,280

mental activity he is not a

4482

02:41:12,870 --> 02:41:11,200

mysteriousness or so he doesn't know how

4483

02:41:14,870 --> 02:41:12,880

the brain does it but he agrees that the

4484

02:41:17,349 --> 02:41:14,880

brain is doing it he's a physicalist in

4485

02:41:19,670 --> 02:41:17,359

a sense so now uh

4486

02:41:21,750 --> 02:41:19,680

let's replace step by step the neurons

4487

02:41:23,270 --> 02:41:21,760

by some other machinery for instance

4488

02:41:25,110 --> 02:41:23,280

chinese people or machines that have

4489

02:41:27,670 --> 02:41:25,120

neural lag functionality

4490

02:41:29,429 --> 02:41:27,680

and so at some point says this loses the

4491

02:41:31,429 --> 02:41:29,439

ability to be conscious so the

4492

02:41:32,550 --> 02:41:31,439

consciousness is drag drowning out of

4493

02:41:34,950 --> 02:41:32,560

the system

4494

02:41:37,510 --> 02:41:34,960

by this replacement process

4495

02:41:38,510 --> 02:41:37,520

and what this means is that swirl has a

4496

02:41:41,190 --> 02:41:38,520

strong

4497

02:41:43,270 --> 02:41:41,200

anti-functionalist position he basically

4498

02:41:45,510 --> 02:41:43,280

says that the function of the individual

4499

02:41:47,030 --> 02:41:45,520

parts is not producing the essential

4500

02:41:49,110 --> 02:41:47,040

behavior they are somehow in essence

4501
02:41:50,950 --> 02:41:49,120
he's an essentialist

4502
02:41:52,070 --> 02:41:50,960
and i don't know how to get essentialism

4503
02:41:54,469 --> 02:41:52,080
to work

4504
02:41:56,710 --> 02:41:54,479
because nobody has ever seen an essence

4505
02:41:58,389 --> 02:41:56,720
right we can talk about an essence but

4506
02:42:00,550 --> 02:41:58,399
it's epi phenomena

4507
02:42:03,030 --> 02:42:00,560
and the problem with epi phenomenalism

4508
02:42:04,630 --> 02:42:03,040
is is the following epiphanology is if

4509
02:42:07,110 --> 02:42:04,640
we go back to our dualism from the

4510
02:42:09,190 --> 02:42:07,120
beginning of our conversation today

4511
02:42:10,950 --> 02:42:09,200
it's the idea that there is maybe a read

4512
02:42:12,630 --> 02:42:10,960
access from the mind

4513
02:42:14,469 --> 02:42:12,640

where the mind is reading physics but no

4514

02:42:16,550 --> 02:42:14,479

right access from the mind into physics

4515

02:42:17,750 --> 02:42:16,560

so it's not violating the causal closure

4516

02:42:19,270 --> 02:42:17,760

of physics

4517

02:42:21,670 --> 02:42:19,280

but there is a problem with epi

4518

02:42:23,750 --> 02:42:21,680

phenomenalism and that is

4519

02:42:25,349 --> 02:42:23,760

uh the phenomenal experience that you

4520

02:42:27,110 --> 02:42:25,359

don't think you can explain in the

4521

02:42:28,389 --> 02:42:27,120

physical mechanism is not driving

4522

02:42:31,990 --> 02:42:28,399

anything of what you are saying

4523

02:42:34,630 --> 02:42:32,000

including your utterances of beliefs

4524

02:42:37,030 --> 02:42:34,640

so when an epiphany says but i feel and

4525

02:42:39,349 --> 02:42:37,040

this cannot be explained by physics this

4526

02:42:41,190 --> 02:42:39,359

is caused by physics right because the

4527

02:42:42,790 --> 02:42:41,200

epithelialist has to move their mouse or

4528

02:42:45,110 --> 02:42:42,800

move their fingers to

4529

02:42:47,030 --> 02:42:45,120

express the statement and all these

4530

02:42:48,550 --> 02:42:47,040

movements are caused by an entirely

4531

02:42:51,510 --> 02:42:48,560

mechanical process

4532

02:42:54,230 --> 02:42:51,520

the true feeling which happens next to

4533

02:42:55,990 --> 02:42:54,240

the physical mechanical part of their

4534

02:42:58,309 --> 02:42:56,000

mind the philosophical zombie and so on

4535

02:42:59,590 --> 02:42:58,319

is not driving any behavior so basically

4536

02:43:01,510 --> 02:42:59,600

there would be this locked in

4537

02:43:04,070 --> 02:43:01,520

epithelialism that would helplessly

4538

02:43:05,910 --> 02:43:04,080

watching their body make statements in

4539

02:43:07,510 --> 02:43:05,920

favor or against epiphanicalism but

4540

02:43:09,670 --> 02:43:07,520

there would be no causal relationship

4541

02:43:11,910 --> 02:43:09,680

between the epithelialism so no

4542

02:43:13,190 --> 02:43:11,920

epiphanialist is an epiphanist because

4543

02:43:14,950 --> 02:43:13,200

they have phenomenal experience that

4544

02:43:16,469 --> 02:43:14,960

cannot be explained by physics that is

4545

02:43:19,429 --> 02:43:16,479

the issue here

4546

02:43:21,590 --> 02:43:19,439

and so if sir goes down that past he

4547

02:43:25,190 --> 02:43:21,600

goes down to a very inconvenient place

4548

02:43:28,389 --> 02:43:26,710

okay john i know that you have to get

4549

02:43:29,750 --> 02:43:28,399

going so how about i read the last

4550

02:43:31,510 --> 02:43:29,760

question if it would take too long for

4551
02:43:32,950 --> 02:43:31,520
you to reply then send me an email and

4552
02:43:36,389 --> 02:43:32,960
then i'll read it when i'm re-editing

4553
02:43:39,030 --> 02:43:36,399
this podcast sure okay sure so the last

4554
02:43:40,790 --> 02:43:39,040
question comes from xantheus he says or

4555
02:43:42,230 --> 02:43:40,800
she says these models of consciousness

4556
02:43:43,830 --> 02:43:42,240
seem to focus on explaining the

4557
02:43:46,070 --> 02:43:43,840
production of intelligence or

4558
02:43:48,870 --> 02:43:46,080
assimilation but it is it isn't

4559
02:43:50,550 --> 02:43:48,880
necessarily clear to me why a simulation

4560
02:43:52,630 --> 02:43:50,560
should be able to perceive

4561
02:43:54,389 --> 02:43:52,640
experience itself if we think of meta

4562
02:43:56,550 --> 02:43:54,399
consciousness as a combination of

4563
02:43:58,710 --> 02:43:56,560

intelligence and consciousness the model

4564

02:44:01,349 --> 02:43:58,720

seems to focus mainly on the rise of

4565

02:44:03,990 --> 02:44:01,359

intelligence in meta consciousness how

4566

02:44:08,550 --> 02:44:04,000

do you explain the ability to perceive

4567

02:44:12,710 --> 02:44:10,870

john you start

4568

02:44:13,510 --> 02:44:12,720

um

4569

02:44:15,349 --> 02:44:13,520

so

4570

02:44:17,269 --> 02:44:15,359

it's just a very short easy question

4571

02:44:19,349 --> 02:44:17,279

wrap it up for today with this answering

4572

02:44:21,990 --> 02:44:19,359

the simple question

4573

02:44:23,349 --> 02:44:22,000

uh i mean the the

4574

02:44:24,870 --> 02:44:23,359

it's important to ask that question but

4575

02:44:26,230 --> 02:44:24,880

it's important to not ask that question

4576

02:44:29,110 --> 02:44:26,240

the wrong way

4577

02:44:30,550 --> 02:44:29,120

um you could always ask what it is like

4578

02:44:32,309 --> 02:44:30,560

and the thing and this is like moore's

4579

02:44:34,309 --> 02:44:32,319

thing about the good i can ask that for

4580

02:44:35,830 --> 02:44:34,319

any proposal

4581

02:44:37,429 --> 02:44:35,840

you can even ask that well you know what

4582

02:44:39,670 --> 02:44:37,439

it's like is to have qualia well what's

4583

02:44:41,910 --> 02:44:39,680

it like to have qualia do i have qualia

4584

02:44:42,790 --> 02:44:41,920

of my quality like you have to you like

4585

02:44:44,230 --> 02:44:42,800

there

4586

02:44:46,550 --> 02:44:44,240

and this is the difficulty you have to

4587

02:44:49,030 --> 02:44:46,560

come to a place where

4588

02:44:50,630 --> 02:44:49,040

you're saying that's what it is like to

4589

02:44:52,070 --> 02:44:50,640

be what it is like

4590

02:44:54,550 --> 02:44:52,080

um and we didn't get into it too much

4591

02:44:57,190 --> 02:44:54,560

but like i said at the very beginning

4592

02:45:01,110 --> 02:44:57,200

that primary sense of relevance

4593

02:45:03,670 --> 02:45:01,120

and i think is a big piece of what it's

4594

02:45:05,190 --> 02:45:03,680

likeness it's it's why things stand out

4595

02:45:07,190 --> 02:45:05,200

and they are salient and they're

4596

02:45:09,750 --> 02:45:07,200

backgrounded it's why things are

4597

02:45:12,389 --> 02:45:09,760

aspectualized for us to use one of soros

4598

02:45:14,389 --> 02:45:12,399

notions um

4599

02:45:16,230 --> 02:45:14,399

and many people are converging on the

4600

02:45:19,110 --> 02:45:16,240

idea that the function

4601
02:45:21,269 --> 02:45:19,120
of consciousness is this kind of higher

4602
02:45:23,190 --> 02:45:21,279
order relevance realization and that's

4603
02:45:26,830 --> 02:45:23,200
why it overlaps with working memory and

4604
02:45:30,150 --> 02:45:26,840
attentional machinery um

4605
02:45:32,950 --> 02:45:30,160
so what it's like

4606
02:45:34,309 --> 02:45:32,960
if that's right if what it's like is

4607
02:45:36,150 --> 02:45:34,319
this ability

4608
02:45:38,630 --> 02:45:36,160
to

4609
02:45:40,630 --> 02:45:38,640
do salience landscaping

4610
02:45:43,750 --> 02:45:40,640
to have this dynamic texture of how

4611
02:45:45,110 --> 02:45:43,760
things are relevant to you

4612
02:45:46,790 --> 02:45:45,120
if that's a big part of what it's like

4613
02:45:48,630 --> 02:45:46,800

and i think it is by the way because all

4614

02:45:50,150 --> 02:45:48,640

of the in the pure consciousness event

4615

02:45:51,750 --> 02:45:50,160

all of those other

4616

02:45:53,349 --> 02:45:51,760

things that are so beloved all the

4617

02:45:54,630 --> 02:45:53,359

adjectival qualias and all the other

4618

02:45:56,389 --> 02:45:54,640

things they go away and consciousness

4619

02:45:58,870 --> 02:45:56,399

doesn't so those things can't be

4620

02:46:00,870 --> 02:45:58,880

necessary conditions for consciousness

4621

02:46:01,910 --> 02:46:00,880

if that's par a significant part of what

4622

02:46:02,950 --> 02:46:01,920

it's like

4623

02:46:04,870 --> 02:46:02,960

then

4624

02:46:10,309 --> 02:46:04,880

being intelligent

4625

02:46:12,950 --> 02:46:10,319

capacity to zero in on relevant

4626
02:46:14,389 --> 02:46:12,960
information exclude relevant information

4627
02:46:16,389 --> 02:46:14,399
that's why you get

4628
02:46:18,389 --> 02:46:16,399
high correlations between measures of

4629
02:46:20,630 --> 02:46:18,399
general intelligence and measures of

4630
02:46:22,469 --> 02:46:20,640
working memory uh but of course there's

4631
02:46:24,550 --> 02:46:22,479
deep inter there's deep

4632
02:46:26,790 --> 02:46:24,560
anatomical relations between the

4633
02:46:29,190 --> 02:46:26,800
machinery of working memory and

4634
02:46:32,070 --> 02:46:29,200
attention and fluid intelligence and

4635
02:46:34,070 --> 02:46:32,080
consciousness so

4636
02:46:36,309 --> 02:46:34,080
i think the question is now being

4637
02:46:38,309 --> 02:46:36,319
to a place where i want to say no no no

4638
02:46:39,590 --> 02:46:38,319

and by the way think of notice how you

4639

02:46:41,750 --> 02:46:39,600

run on that

4640

02:46:44,150 --> 02:46:41,760

you genuinely you gen

4641

02:46:46,150 --> 02:46:44,160

you generally attribute

4642

02:46:48,710 --> 02:46:46,160

consciousness where you s where you

4643

02:46:49,990 --> 02:46:48,720

attribute high orders of intel of of

4644

02:46:53,750 --> 02:46:50,000

intelligence

4645

02:46:56,309 --> 02:46:53,760

you track them together uh like uh uh

4646

02:46:59,190 --> 02:46:56,319

yasha i i i don't well i go further i

4647

02:47:01,590 --> 02:46:59,200

don't even eat mammals uh because of

4648

02:47:03,830 --> 02:47:01,600

that conclusion about mammals likewise

4649

02:47:07,429 --> 02:47:03,840

yeah well there you go um

4650

02:47:09,110 --> 02:47:07,439

and so for me right

4651
02:47:11,750 --> 02:47:09,120
there there has to be a level at which

4652
02:47:13,349 --> 02:47:11,760
you accept an identity statement

4653
02:47:15,349 --> 02:47:13,359
because like i said you can always play

4654
02:47:17,910 --> 02:47:15,359
the game no matter what i that is what

4655
02:47:20,070 --> 02:47:17,920
it if i say x is what it is like you can

4656
02:47:22,630 --> 02:47:20,080
then then you can just do ah but what is

4657
02:47:25,349 --> 02:47:22,640
it like to write x you have to come to a

4658
02:47:28,070 --> 02:47:25,359
place where you accept the i i

4659
02:47:30,150 --> 02:47:28,080
an identity claim

4660
02:47:32,790 --> 02:47:30,160
and i'm proposing to you that if you

4661
02:47:34,309 --> 02:47:32,800
look into the guts of intelligence at

4662
02:47:35,429 --> 02:47:34,319
least general intelligence fluid

4663
02:47:37,030 --> 02:47:35,439

intelligence

4664

02:47:38,230 --> 02:47:37,040

and then you look into the guts of

4665

02:47:39,349 --> 02:47:38,240

consciousness and where do we need

4666

02:47:41,110 --> 02:47:39,359

consciousness we seem to need

4667

02:47:44,070 --> 02:47:41,120

consciousness for situations that are

4668

02:47:46,469 --> 02:47:44,080

novel for that are complex that are

4669

02:47:47,910 --> 02:47:46,479

ill-defined and situations that don't

4670

02:47:49,750 --> 02:47:47,920

have those demands we can we can make

4671

02:47:52,870 --> 02:47:49,760

automatic unconscious

4672

02:47:55,110 --> 02:47:52,880

uh that's a good point made by burnside

4673

02:47:57,190 --> 02:47:55,120

i don't think the questions about

4674

02:48:00,070 --> 02:47:57,200

intelligence and consciousness are

4675

02:48:01,910 --> 02:48:00,080

ultimately separable questions and i

4676
02:48:04,710 --> 02:48:01,920
think there's good reasons for that i've

4677
02:48:07,670 --> 02:48:04,720
just given you some and therefore

4678
02:48:10,469 --> 02:48:07,680
i think at some level

4679
02:48:12,469 --> 02:48:10,479
and i i maybe yosha will like this

4680
02:48:15,030 --> 02:48:12,479
when a system is sufficiently

4681
02:48:18,070 --> 02:48:15,040
intelligent

4682
02:48:22,230 --> 02:48:19,990
uh that's what i would argue

4683
02:48:23,830 --> 02:48:22,240
uh for the reasons i've just given and

4684
02:48:25,910 --> 02:48:23,840
asking me but what is it like to be

4685
02:48:27,190 --> 02:48:25,920
intelligent or what's it like to be like

4686
02:48:28,950 --> 02:48:27,200
notice you don't ask the question about

4687
02:48:30,389 --> 02:48:28,960
what is it like to be conscious in the

4688
02:48:31,110 --> 02:48:30,399

sense of what's behind

4689

02:48:33,830 --> 02:48:31,120

it

4690

02:48:37,349 --> 02:48:33,840

right you have to come to a level at

4691

02:48:42,870 --> 02:48:40,309

no that's what that's this this is what

4692

02:48:44,469 --> 02:48:42,880

it is liking is this is the function

4693

02:48:47,190 --> 02:48:44,479

it's performing this is the kind of

4694

02:48:49,349 --> 02:48:47,200

process it is

4695

02:48:51,510 --> 02:48:49,359

if not if you don't put some bound on

4696

02:48:53,429 --> 02:48:51,520

where that identity is possible then you

4697

02:48:55,110 --> 02:48:53,439

just get an infinite regret aggressive

4698

02:48:57,030 --> 02:48:55,120

this question because no matter what i

4699

02:48:59,349 --> 02:48:57,040

pause it for you you can step back and

4700

02:49:00,790 --> 02:48:59,359

say but what is it like to x

4701
02:49:02,150 --> 02:49:00,800
and then i'll say well what's it like to

4702
02:49:04,550 --> 02:49:02,160
x is to y and you'll say but what is it

4703
02:49:06,150 --> 02:49:04,560
like to why this is like the

4704
02:49:08,630 --> 02:49:06,160
the four-year-old asks you why all the

4705
02:49:10,550 --> 02:49:08,640
time right you have to come to a place

4706
02:49:13,110 --> 02:49:10,560
and what i can't give you is i can't

4707
02:49:14,150 --> 02:49:13,120
give you a phenomenological experience

4708
02:49:16,230 --> 02:49:14,160
of that

4709
02:49:18,230 --> 02:49:16,240
because you're trying to ask how

4710
02:49:20,070 --> 02:49:18,240
phenomenological experience is itself

4711
02:49:21,910 --> 02:49:20,080
possible

4712
02:49:23,510 --> 02:49:21,920
what i can give you are these plausible

4713
02:49:26,150 --> 02:49:23,520

arguments about overlapping

4714

02:49:28,230 --> 02:49:26,160

functionality etc

4715

02:49:29,830 --> 02:49:28,240

that's how i would answer that question

4716

02:49:32,070 --> 02:49:29,840

okay let me try

4717

02:49:34,630 --> 02:49:32,080

so uh there is an issue for instance

4718

02:49:37,030 --> 02:49:34,640

free will free will is

4719

02:49:38,950 --> 02:49:37,040

an intermediate representation i think

4720

02:49:41,190 --> 02:49:38,960

free will is what decision making under

4721

02:49:43,110 --> 02:49:41,200

uncertainty looks like from your own

4722

02:49:44,550 --> 02:49:43,120

perspective between discovering the

4723

02:49:46,870 --> 02:49:44,560

first person perspective and

4724

02:49:49,349 --> 02:49:46,880

deconstructing it again

4725

02:49:50,790 --> 02:49:49,359

and once you have destruct deconstructed

4726
02:49:52,389 --> 02:49:50,800
your first person perspective you

4727
02:49:54,070 --> 02:49:52,399
basically realize that there is a

4728
02:49:55,269 --> 02:49:54,080
particular procedure that you are

4729
02:49:56,710 --> 02:49:55,279
following when you are making your

4730
02:49:58,550 --> 02:49:56,720
decisions

4731
02:50:00,070 --> 02:49:58,560
and when you observe yourself following

4732
02:50:01,990 --> 02:50:00,080
that procedure you will not have an

4733
02:50:04,070 --> 02:50:02,000
experience of free will

4734
02:50:05,510 --> 02:50:04,080
it's just we rarely get to the point in

4735
02:50:07,269 --> 02:50:05,520
our short lives where we fully

4736
02:50:10,630 --> 02:50:07,279
deconstruct this

4737
02:50:12,230 --> 02:50:10,640
and i just give this example to argue

4738
02:50:14,389 --> 02:50:12,240

for the possibility and i'm not sure

4739

02:50:15,830 --> 02:50:14,399

there's no certainty there that

4740

02:50:17,590 --> 02:50:15,840

consciousness might be an intermediate

4741

02:50:19,990 --> 02:50:17,600

representation

4742

02:50:21,670 --> 02:50:20,000

it's best the simplification of the

4743

02:50:23,670 --> 02:50:21,680

state of affairs and which we are in

4744

02:50:25,750 --> 02:50:23,680

before we automate all the necessary

4745

02:50:28,550 --> 02:50:25,760

behaviors that an intelligent system

4746

02:50:30,070 --> 02:50:28,560

might have want to exhibit in uh when

4747

02:50:31,750 --> 02:50:30,080

it's being confronted with the world in

4748

02:50:33,429 --> 02:50:31,760

which we are in

4749

02:50:35,110 --> 02:50:33,439

the reason why we

4750

02:50:36,950 --> 02:50:35,120

experience things is not because

4751
02:50:39,349 --> 02:50:36,960
physical systems would be capable of

4752
02:50:41,830 --> 02:50:39,359
doing so it's quite the opposite neurons

4753
02:50:45,110 --> 02:50:41,840
cannot experience what it would be like

4754
02:50:47,190 --> 02:50:45,120
to be a person that is confronted with a

4755
02:50:49,030 --> 02:50:47,200
complex world and it changes its

4756
02:50:51,510 --> 02:50:49,040
attitudes in response to what's

4757
02:50:53,830 --> 02:50:51,520
happening to it in this complex world

4758
02:50:56,230 --> 02:50:53,840
but for the organization of the neurons

4759
02:50:57,590 --> 02:50:56,240
that is uh controlling the behavior of

4760
02:50:59,590 --> 02:50:57,600
the organism

4761
02:51:01,510 --> 02:50:59,600
it would be very useful

4762
02:51:03,269 --> 02:51:01,520
to have this

4763
02:51:05,269 --> 02:51:03,279

knowledge of what it would be like to be

4764

02:51:07,349 --> 02:51:05,279

a person that is changing its attitudes

4765

02:51:09,670 --> 02:51:07,359

in response to what's happening to it

4766

02:51:11,750 --> 02:51:09,680

so what the neurons are doing is they

4767

02:51:14,070 --> 02:51:11,760

implement a model of what that would be

4768

02:51:16,550 --> 02:51:14,080

like a simulation of what that would be

4769

02:51:18,550 --> 02:51:16,560

like in the same way as the neurons

4770

02:51:20,469 --> 02:51:18,560

create a simulation of euclidean

4771

02:51:22,950 --> 02:51:20,479

universe with objects that bump into

4772

02:51:25,990 --> 02:51:22,960

each other and have causal interaction

4773

02:51:28,389 --> 02:51:26,000

the neurons create the model of agents

4774

02:51:29,990 --> 02:51:28,399

that try a care about future states and

4775

02:51:31,910 --> 02:51:30,000

how they play out and make decisions

4776
02:51:33,510 --> 02:51:31,920
about this and one of these agents is

4777
02:51:35,830 --> 02:51:33,520
going to be a model of the organism

4778
02:51:37,349 --> 02:51:35,840
itself and the behavior that motivates

4779
02:51:39,349 --> 02:51:37,359
the organism

4780
02:51:41,030 --> 02:51:39,359
and the reason why we experience things

4781
02:51:42,870 --> 02:51:41,040
is not because we are in the brain it's

4782
02:51:44,389 --> 02:51:42,880
because we are in that model we are in

4783
02:51:46,870 --> 02:51:44,399
that simulation we are in that dream

4784
02:51:49,110 --> 02:51:46,880
that is woven by the brain to explain

4785
02:51:51,030 --> 02:51:49,120
its own behavior the experience sings

4786
02:51:52,950 --> 02:51:51,040
for the same reason that the character

4787
02:51:55,110 --> 02:51:52,960
in a novel experiences things it's

4788
02:51:56,550 --> 02:51:55,120

because it's written in the story

4789

02:51:58,469 --> 02:51:56,560

and the story that we experience of

4790

02:51:59,670 --> 02:51:58,479

course is not a linear narrative made up

4791

02:52:01,429 --> 02:51:59,680

of words

4792

02:52:02,950 --> 02:52:01,439

it's a more complicated world it's a

4793

02:52:04,630 --> 02:52:02,960

causal structure

4794

02:52:06,630 --> 02:52:04,640

that contains

4795

02:52:08,950 --> 02:52:06,640

the necessary properties to simulate

4796

02:52:10,230 --> 02:52:08,960

physics and personality and agency and

4797

02:52:13,110 --> 02:52:10,240

so on

4798

02:52:15,030 --> 02:52:13,120

and we find ourselves in that dream

4799

02:52:16,150 --> 02:52:15,040

so our experience of the world is

4800

02:52:18,630 --> 02:52:16,160

virtual

4801
02:52:23,590 --> 02:52:18,640
it's a result of the capacity of neurons

4802
02:52:27,429 --> 02:52:25,349
there was a question that came from anil

4803
02:52:29,110 --> 02:52:27,439
seth professor anil seth and there's a

4804
02:52:30,230 --> 02:52:29,120
podcast of anil seth on this channel if

4805
02:52:33,190 --> 02:52:30,240
you'd like to check it out on

4806
02:52:35,349 --> 02:52:33,200
consciousness professor anil seth asks

4807
02:52:37,910 --> 02:52:35,359
yosha do you believe consciousness to be

4808
02:52:40,150 --> 02:52:37,920
substrate independent i.e a silicone

4809
02:52:43,510 --> 02:52:40,160
computer in principle could be conscious

4810
02:52:46,150 --> 02:52:43,520
and if so why yosha responded to me via

4811
02:52:48,070 --> 02:52:46,160
email and said there is no known reason

4812
02:52:50,230 --> 02:52:48,080
why the process playing out in the brain

4813
02:52:52,150 --> 02:52:50,240

cannot be functionally replicated on a

4814

02:52:53,830 --> 02:52:52,160

silicon-based computer i think that

4815

02:52:55,750 --> 02:52:53,840

consciousness is not so much a side

4816

02:52:57,429 --> 02:52:55,760

effect of how a biological brain makes

4817

02:52:59,750 --> 02:52:57,439

sense of the world but of the need to

4818

02:53:02,070 --> 02:52:59,760

create a coherent representation out of

4819

02:53:03,750 --> 02:53:02,080

dynamic perceptual features because of

4820

02:53:05,670 --> 02:53:03,760

this i think it's likely that

4821

02:53:08,309 --> 02:53:05,680

intelligent autonomous sense-making

4822

02:53:10,469 --> 02:53:08,319

agents with similar complexity as ours

4823

02:53:12,710 --> 02:53:10,479

may be considered conscious in ways that

4824

02:53:14,950 --> 02:53:12,720

are comparable to ours even if they run

4825

02:53:16,950 --> 02:53:14,960

on a silicon substrate

4826

02:53:18,870 --> 02:53:16,960

there's an important caveat our

4827

02:53:20,790 --> 02:53:18,880

computers provide some functionality

4828

02:53:22,710 --> 02:53:20,800

which is hard to achieve in the brain

4829

02:53:24,389 --> 02:53:22,720

they're almost fully deterministic

4830

02:53:26,309 --> 02:53:24,399

they're synchronized in ways that allow

4831

02:53:28,309 --> 02:53:26,319

each part to rely on the functionality

4832

02:53:29,990 --> 02:53:28,319

of all others at any given time and they

4833

02:53:31,830 --> 02:53:30,000

can make information available very

4834

02:53:33,429 --> 02:53:31,840

quickly throughout the entire processing

4835

02:53:35,590 --> 02:53:33,439

architecture crucial parts of the

4836

02:53:37,830 --> 02:53:35,600

phenomenology of human consciousness

4837

02:53:39,750 --> 02:53:37,840

especially reflexive consciousness may

4838

02:53:41,429 --> 02:53:39,760

be the result of self-organizing

4839

02:53:43,670 --> 02:53:41,439

processes that our brains cannot do

4840

02:53:46,230 --> 02:53:43,680

without but that may not be necessary in

4841

02:53:48,469 --> 02:53:46,240

our digital computers

4842

02:53:51,190 --> 02:53:48,479

thank you both for coming the audience

4843

02:53:53,150 --> 02:53:51,200

thanks you there were i think 500 people

4844

02:53:57,590 --> 02:53:53,160

at its peak and right now it's around

4845

02:53:59,590 --> 02:53:57,600

430 or so so it hovered from 400 to 500.

4846

02:54:01,429 --> 02:53:59,600

thank you all thank you yoshi thank you

4847

02:54:03,349 --> 02:54:01,439

john

4848

02:54:05,910 --> 02:54:03,359

thank you thank you for setting this up

4849

02:54:07,510 --> 02:54:05,920

it was a very pleasant conversation i

4850

02:54:11,269 --> 02:54:07,520

was surprised that we don't seem to have

4851
02:54:15,110 --> 02:54:13,190
well maybe maybe it's the level we were

4852
02:54:18,389 --> 02:54:15,120
talking at i i sort of wanted to talk at

4853
02:54:20,309 --> 02:54:18,399
a very fundamental ontological level and

4854
02:54:23,110 --> 02:54:20,319
um

4855
02:54:25,190 --> 02:54:23,120
i wanted to understand you much more

4856
02:54:27,190 --> 02:54:25,200
than just sort of simply debate you uh

4857
02:54:29,670 --> 02:54:27,200
likewise and i think that we have a uh

4858
02:54:32,950 --> 02:54:29,680
both bound by the same rules of the

4859
02:54:35,030 --> 02:54:32,960
glass parent field in a way yes yes yes

4860
02:54:36,230 --> 02:54:35,040
yeah very good so

4861
02:54:38,230 --> 02:54:36,240
thank you very much it's a great

4862
02:54:40,710 --> 02:54:38,240
pleasure meeting you uh

4863
02:54:43,429 --> 02:54:40,720

i enjoyed this conversation uh amanda

4864

02:54:45,190 --> 02:54:43,439

thank you soon thank you very much

4865

02:54:48,230 --> 02:54:45,200

take care of both of you

4866

02:54:50,550 --> 02:54:48,240

and yoshi you'll send me your audio

4867

02:54:51,510 --> 02:54:50,560

i vote great okay we'll communicate over

4868

02:54:53,190 --> 02:54:51,520

email

4869

02:54:55,030 --> 02:54:53,200

all right have a good afternoon everyone

4870

02:54:56,630 --> 02:54:55,040

thank you very good rest of the day

4871

02:54:58,469 --> 02:54:56,640

wherever you are

4872

02:55:00,070 --> 02:54:58,479

thank you everyone thank you for your

4873

02:55:02,630 --> 02:55:00,080

time and attention

4874

02:55:04,070 --> 02:55:02,640

okay everyone i will be sticking around

4875

02:55:05,269 --> 02:55:04,080

and i'll answer some audience questions

4876

02:55:12,230 --> 02:55:05,279

but i gotta get

4877

02:55:16,790 --> 02:55:14,710

okay so phrase 14 phrasal 14 wants to

4878

02:55:18,790 --> 02:55:16,800

know what i consider thomas metzinger on

4879

02:55:20,230 --> 02:55:18,800

the program i don't know who that is

4880

02:55:21,349 --> 02:55:20,240

so i will look into that i'll make a

4881

02:55:22,870 --> 02:55:21,359

note

4882

02:55:24,710 --> 02:55:22,880

yes i should let you know that there's a

4883

02:55:27,190 --> 02:55:24,720

sponsor of today's episode and it's a

4884

02:55:32,150 --> 02:55:27,200

new one it's a small podcast by the name

4885

02:55:36,070 --> 02:55:34,070

and it's run by someone named thiago who

4886

02:55:38,469 --> 02:55:36,080

reached out to me and he touches on

4887

02:55:40,550 --> 02:55:38,479

similar themes so if you look at so that

4888

02:55:41,990 --> 02:55:40,560

person is who's responsible for bringing

4889

02:55:45,269 --> 02:55:42,000

this talk together

4890

02:55:46,630 --> 02:55:45,279

thank you thiago okay

4891

02:55:48,469 --> 02:55:46,640

i guess i should get going if there are

4892

02:55:50,870 --> 02:55:48,479

any quick questions for me

4893

02:55:52,870 --> 02:55:50,880

then i'll answer right now if not then i

4894

02:55:54,230 --> 02:55:52,880

will say goodbye to you all and get

4895

02:55:55,750 --> 02:55:54,240

something to eat

4896

02:55:57,750 --> 02:55:55,760

okay so is there any chance of having

4897

02:55:59,349 --> 02:55:57,760

nema or connie hamed on the channel i've

4898

02:56:01,110 --> 02:55:59,359

reached out to nema several times it

4899

02:56:03,030 --> 02:56:01,120

turns out that my brother

4900

02:56:04,950 --> 02:56:03,040

went to university with them studying

4901
02:56:06,309 --> 02:56:04,960
physics at the same time so i'll see if

4902
02:56:08,950 --> 02:56:06,319
i can use that connection though they

4903
02:56:11,349 --> 02:56:08,960
parted ways after graduate school

4904
02:56:13,750 --> 02:56:11,359
lisa feldman barrett yes she's on the

4905
02:56:15,429 --> 02:56:13,760
list though i need to look into her work

4906
02:56:17,110 --> 02:56:15,439
et vin wants to know if i expected to

4907
02:56:18,550 --> 02:56:17,120
have more disagreements i thought i was

4908
02:56:20,309 --> 02:56:18,560
surprised at what yosha said where he

4909
02:56:21,429 --> 02:56:20,319
said well we agree more than we disagree

4910
02:56:23,030 --> 02:56:21,439
i thought it was mainly filled with

4911
02:56:25,030 --> 02:56:23,040
disagreements or more about

4912
02:56:27,030 --> 02:56:25,040
clarifications than disagreements which

4913
02:56:28,870 --> 02:56:27,040

can be their own disagreement giulio

4914

02:56:31,830 --> 02:56:28,880

wants to know what i get a traditional

4915

02:56:33,429 --> 02:56:31,840

advice monk the answer is yes and if you

4916

02:56:36,550 --> 02:56:33,439

take a look at this video that i have

4917

02:56:38,710 --> 02:56:36,560

about the 2022 plans

4918

02:56:40,870 --> 02:56:38,720

you'll see that i do

4919

02:56:43,429 --> 02:56:40,880

have a great interest in speaking with

4920

02:56:45,269 --> 02:56:43,439

people from the more eastern ends of the

4921

02:56:46,710 --> 02:56:45,279

philosophical spectrum

4922

02:56:49,510 --> 02:56:46,720

so yes the answer is yes and that'll be

4923

02:56:51,910 --> 02:56:49,520

toward the latter half of the year

4924

02:56:53,750 --> 02:56:51,920

now the reason for why it's so far away

4925

02:56:55,590 --> 02:56:53,760

is because it

4926

02:56:57,110 --> 02:56:55,600

my background is in math and physics so

4927

02:56:58,870 --> 02:56:57,120

let's say i'm supposed to let's say i'm

4928

02:57:00,389 --> 02:56:58,880

going to be interviewing someone for

4929

02:57:02,870 --> 02:57:00,399

their theory of everything like let's

4930

02:57:04,710 --> 02:57:02,880

say garrett lisey it'll be much easier

4931

02:57:06,710 --> 02:57:04,720

for me to understand his theory than it

4932

02:57:08,550 --> 02:57:06,720

would be for me to understand someone

4933

02:57:11,030 --> 02:57:08,560

who's an advice a monk

4934

02:57:12,389 --> 02:57:11,040

it would take much more time because i'd

4935

02:57:14,309 --> 02:57:12,399

like to implement some meditative

4936

02:57:16,150 --> 02:57:14,319

strategies that is i'd like to meditate

4937

02:57:17,910 --> 02:57:16,160

some meditation practice

4938

02:57:20,790 --> 02:57:17,920

in order to experientially understand

4939

02:57:23,110 --> 02:57:20,800

what they're saying and it's not

4940

02:57:25,750 --> 02:57:23,120

it's not trivial to me and i don't take

4941

02:57:27,990 --> 02:57:25,760

it lightly martin you want to know is

4942

02:57:29,590 --> 02:57:28,000

bach a materialist dualist or idealist

4943

02:57:30,950 --> 02:57:29,600

he says he's not an idealist he comes

4944

02:57:33,269 --> 02:57:30,960

close which isn't he's like a

4945

02:57:34,630 --> 02:57:33,279

physicalist idealist and he's not i

4946

02:57:35,910 --> 02:57:34,640

don't know if he's a materialist i think

4947

02:57:37,830 --> 02:57:35,920

he would it would be closer to

4948

02:57:43,590 --> 02:57:37,840

materialism one of my goals with this

4949

02:57:47,429 --> 02:57:45,429

and luckily i didn't have to interject

4950

02:57:48,870 --> 02:57:47,439

much i thought that what was going to

4951
02:57:50,950 --> 02:57:48,880
happen was they were going to be

4952
02:57:52,309 --> 02:57:50,960
difficult to follow because much of what

4953
02:57:53,990 --> 02:57:52,319
they say

4954
02:57:55,830 --> 02:57:54,000
and this is evidenced in the comment

4955
02:57:57,429 --> 02:57:55,840
section of any of their videos

4956
02:57:59,429 --> 02:57:57,439
people can't follow people have a

4957
02:58:02,070 --> 02:57:59,439
difficult time understanding because

4958
02:58:03,110 --> 02:58:02,080
it's so steeped in cognitive scientific

4959
02:58:06,469 --> 02:58:03,120
jargon

4960
02:58:07,510 --> 02:58:06,479
terminology that's unfamiliar to most

4961
02:58:09,190 --> 02:58:07,520
and then

4962
02:58:11,030 --> 02:58:09,200
on top of that with yoshibok there's

4963
02:58:13,190 --> 02:58:11,040

computer science analogies and then on

4964

02:58:15,349 --> 02:58:13,200

top of that there's yoshibok's idiolect

4965

02:58:16,550 --> 02:58:15,359

like his personal language where the

4966

02:58:18,870 --> 02:58:16,560

analogies

4967

02:58:21,990 --> 02:58:18,880

between computer science and reality

4968

02:58:24,630 --> 02:58:22,000

are made in a manner that is unique to

4969

02:58:26,790 --> 02:58:24,640

him and he's so

4970

02:58:27,510 --> 02:58:26,800

familiar with his own model that i don't

4971

02:58:28,870 --> 02:58:27,520

think

4972

02:58:31,269 --> 02:58:28,880

him nor

4973

02:58:34,230 --> 02:58:31,279

nor john vervicky are aware when they're

4974

02:58:36,070 --> 02:58:34,240

speaking above or below someone

4975

02:58:37,910 --> 02:58:36,080

and i was thinking that i would have to

4976

02:58:39,349 --> 02:58:37,920

step in and slow down and break down

4977

02:58:42,630 --> 02:58:39,359

sentences

4978

02:58:43,590 --> 02:58:42,640

however that didn't need to happen

4979

02:58:45,190 --> 02:58:43,600

at all

4980

02:58:47,670 --> 02:58:45,200

okay well

4981

02:58:51,590 --> 02:58:47,680

thank you everyone thank you and have a

4982

02:58:55,269 --> 02:58:53,510

the podcast is now finished if you'd

4983

02:58:58,389 --> 02:58:55,279

like to support conversations like this

4984

02:59:02,550 --> 02:58:58,399

then do consider going to patreon.com

4985

02:59:05,110 --> 02:59:02,560

c-u-r-t j-a-i-m-u-n-g-a-l

4986

02:59:06,950 --> 02:59:05,120

that is kurt jymungal it's support from

4987

02:59:08,790 --> 02:59:06,960

the patrons and from the sponsors that