



An Inquiry  
Concerning Human  
Understanding  
Section X: Of Miracles

"A miracle is a violation  
of the laws of nature;  
and as a firm and  
unalterable experience  
has established these  
laws, the proof against a  
miracle, from the very  
nature of the fact, is as  
entire as any argument  
from experience can  
possibly be imagined."



1  
00:00:09,030 --> 00:00:07,190  
i want to thank and alyssa and i want to

2  
00:00:11,430 --> 00:00:09,040  
thank everyone for coming

3  
00:00:13,589 --> 00:00:11,440  
um this is um

4  
00:00:15,430 --> 00:00:13,599  
i think this is an important topic

5  
00:00:17,510 --> 00:00:15,440  
um and so i hope it i hope it's

6  
00:00:19,349 --> 00:00:17,520  
interesting and i hope uh um you know we

7  
00:00:20,630 --> 00:00:19,359  
can we can share some thoughts and ideas

8  
00:00:22,550 --> 00:00:20,640  
about it

9  
00:00:27,029 --> 00:00:22,560  
so um

10  
00:00:30,870 --> 00:00:27,039  
david hume let's see oops david hume um

11  
00:00:34,150 --> 00:00:30,880  
wrote an essay called of miracles

12  
00:00:36,389 --> 00:00:34,160  
and in this essay he basically defined a

13  
00:00:38,470 --> 00:00:36,399

miracle and his term is a violation of

14

00:00:41,750 --> 00:00:38,480

the laws of nature

15

00:00:43,270 --> 00:00:41,760

and um basically hume was an empiricist

16

00:00:45,270 --> 00:00:43,280

in the sense that he believed that

17

00:00:47,510 --> 00:00:45,280

experience was really

18

00:00:50,150 --> 00:00:47,520

um how it was our fundamental way of

19

00:00:52,150 --> 00:00:50,160

determining reality so whenever we

20

00:00:54,869 --> 00:00:52,160

removed ourselves from experience that

21

00:00:57,910 --> 00:00:54,879

that is had to rely on testimony for

22

00:00:59,750 --> 00:00:57,920

hume that was kind of a step down okay

23

00:01:03,189 --> 00:00:59,760

now his argument

24

00:01:05,990 --> 00:01:03,199

um of miracles um could be sort of

25

00:01:08,789 --> 00:01:06,000

summarized sort of in

26

00:01:10,789 --> 00:01:08,799

it's basically an attack against

27

00:01:13,270 --> 00:01:10,799

um or basically it focuses on the

28

00:01:16,070 --> 00:01:13,280

reliability unreliability of human

29

00:01:17,270 --> 00:01:16,080

testimony especially regarding religious

30

00:01:22,310 --> 00:01:17,280

miracles

31

00:01:24,950 --> 00:01:22,320

events that are extremely rare

32

00:01:29,190 --> 00:01:24,960

they have a tendency to sort of invoke a

33

00:01:31,590 --> 00:01:29,200

kind of passion and wonder which um

34

00:01:33,749 --> 00:01:31,600

which i think for hume disengages us

35

00:01:36,149 --> 00:01:33,759

from our critical faculties

36

00:01:37,990 --> 00:01:36,159

and miracles tended to happen or to

37

00:01:39,590 --> 00:01:38,000

occur in remote places where there were

38

00:01:41,429 --> 00:01:39,600

a few witnesses

39

00:01:44,950 --> 00:01:41,439

and him also noticed that throughout

40

00:01:47,590 --> 00:01:44,960

time um you know men have been dishonest

41

00:01:49,990 --> 00:01:47,600

have had tendency to exaggerate things

42

00:01:51,830 --> 00:01:50,000

perhaps um to kind of you know get

43

00:01:52,870 --> 00:01:51,840

listeners maybe even to get a sense of

44

00:01:56,630 --> 00:01:52,880

power

45

00:01:59,030 --> 00:01:56,640

so um all of this um meant for him that

46

00:02:00,149 --> 00:01:59,040

the probabilities associated with a

47

00:02:02,469 --> 00:02:00,159

miracle

48

00:02:05,109 --> 00:02:02,479

um or that is as such with the with the

49

00:02:06,789 --> 00:02:05,119

testimony regarding miracle is always

50

00:02:09,109 --> 00:02:06,799

going to be substantially smaller than

51  
00:02:11,270 --> 00:02:09,119  
the probability associated with what he

52  
00:02:13,270 --> 00:02:11,280  
would call reliable testimony which is

53  
00:02:15,510 --> 00:02:13,280  
basically the kind of testimony that

54  
00:02:17,110 --> 00:02:15,520  
we're familiar with testimony that's

55  
00:02:20,790 --> 00:02:17,120  
actually very congruent with our

56  
00:02:25,110 --> 00:02:20,800  
day-to-day experience so for for hume we

57  
00:02:27,990 --> 00:02:25,120  
should never accept a miracle okay now

58  
00:02:29,910 --> 00:02:28,000  
as i'm going to talk about um the the

59  
00:02:31,589 --> 00:02:29,920  
psych critics have a tendency to sort of

60  
00:02:33,589 --> 00:02:31,599  
employ this

61  
00:02:35,670 --> 00:02:33,599  
argument um throughout

62  
00:02:37,990 --> 00:02:35,680  
many of their arguments

63  
00:02:39,750 --> 00:02:38,000

and it does a lot of heavy lifting so

64

00:02:42,790 --> 00:02:39,760

but before i get to that i want to just

65

00:02:44,470 --> 00:02:42,800

summarize um recently

66

00:02:47,910 --> 00:02:44,480

cardinia has

67

00:02:50,390 --> 00:02:47,920

provide presented a very um a very

68

00:02:51,830 --> 00:02:50,400

convenient summary of the meta-analysis

69

00:02:53,110 --> 00:02:51,840

of side data that has occurred in

70

00:02:55,509 --> 00:02:53,120

laboratories

71

00:02:58,550 --> 00:02:55,519

and this is not a conclusive but there's

72

00:03:01,110 --> 00:02:58,560

definitely a lot of material that has

73

00:03:04,390 --> 00:03:01,120

been sort of a different modes of size

74

00:03:06,309 --> 00:03:04,400

such as telepathy precognition remote

75

00:03:09,270 --> 00:03:06,319

viewing pre-sentiment

76  
00:03:10,710 --> 00:03:09,280  
and uh these studies have have become so

77  
00:03:13,430 --> 00:03:10,720  
numerous that they've actually been

78  
00:03:15,270 --> 00:03:13,440  
pooled into meta studies and as you can

79  
00:03:17,350 --> 00:03:15,280  
see this is uh sort of a

80  
00:03:21,030 --> 00:03:17,360  
shortened version of table one from his

81  
00:03:23,110 --> 00:03:21,040  
paper um there's oh there's over 800

82  
00:03:24,630 --> 00:03:23,120  
studies we're talking about that that

83  
00:03:26,789 --> 00:03:24,640  
are the basis of all these different

84  
00:03:30,309 --> 00:03:26,799  
meta analysis

85  
00:03:32,470 --> 00:03:30,319  
and these have happened over decades um

86  
00:03:34,149 --> 00:03:32,480  
accumulated um

87  
00:03:36,229 --> 00:03:34,159  
and from different laboratories

88  
00:03:38,550 --> 00:03:36,239

different different researchers and as

89

00:03:42,229 --> 00:03:38,560

you can see in the right hand column the

90

00:03:44,470 --> 00:03:42,239

the p values suggest that the um the ch

91

00:03:46,309 --> 00:03:44,480

the odds or the likelihood that these

92

00:03:48,149 --> 00:03:46,319

sort of effects could be due to chances

93

00:03:51,910 --> 00:03:48,159

just astronomically

94

00:03:54,229 --> 00:03:51,920

nil or negligible okay so um he also

95

00:03:56,390 --> 00:03:54,239

presents another table that has to do

96

00:03:58,830 --> 00:03:56,400

with anomalous perturbation or what most

97

00:04:01,830 --> 00:03:58,840

people i think would call

98

00:04:03,750 --> 00:04:01,840

psychokinesis there the p values are a

99

00:04:05,670 --> 00:04:03,760

bit smaller with the exception of roger

100

00:04:08,229 --> 00:04:05,680

nelson's uh global consciousness but

101

00:04:12,390 --> 00:04:08,239

still looks like there is across the

102

00:04:14,550 --> 00:04:12,400

board some significant level of

103

00:04:16,870 --> 00:04:14,560

mind matter interaction although some

104

00:04:19,110 --> 00:04:16,880

parapsychologists do inter do question

105

00:04:22,069 --> 00:04:19,120

the uh interpretation of that it looks

106

00:04:24,710 --> 00:04:22,079

like there's something um going on

107

00:04:26,230 --> 00:04:24,720

so um so now i want to get to reburn

108

00:04:29,189 --> 00:04:26,240

alcock's

109

00:04:31,270 --> 00:04:29,199

argument using hume although it's

110

00:04:33,270 --> 00:04:31,280

important to point out that hume's

111

00:04:35,909 --> 00:04:33,280

argument has has really been a kind of

112

00:04:37,189 --> 00:04:35,919

workhouse for the size skeptics um

113

00:04:39,430 --> 00:04:37,199

throughout through the throughout the

114

00:04:42,230 --> 00:04:39,440

decades of debate between uh psy

115

00:04:47,430 --> 00:04:42,240

skeptics and psy advocates um chuck

116

00:04:50,790 --> 00:04:47,440

onerton um mentioned um price's 1955

117

00:04:51,830 --> 00:04:50,800

critique of ryan's paper um in the paper

118

00:04:53,110 --> 00:04:51,840

price

119

00:04:58,390 --> 00:04:53,120

um

120

00:05:00,550 --> 00:04:58,400

has presented us with enough evidence to

121

00:05:02,950 --> 00:05:00,560

convince us that there is something

122

00:05:05,029 --> 00:05:02,960

going on along the lines of telepathy

123

00:05:07,990 --> 00:05:05,039

but then he acknowledges that david

124

00:05:10,629 --> 00:05:08,000

hume's argument by itself was sufficient

125

00:05:13,350 --> 00:05:10,639

to convince him that it had to be wrong

126  
00:05:15,590 --> 00:05:13,360  
and so occasionally um david hume's

127  
00:05:16,710 --> 00:05:15,600  
article argument is sort of popped up

128  
00:05:20,070 --> 00:05:16,720  
here and there

129  
00:05:21,110 --> 00:05:20,080  
um wagenmacher's attack on

130  
00:05:24,150 --> 00:05:21,120  
bim's

131  
00:05:26,870 --> 00:05:24,160  
precognition for example most recently

132  
00:05:29,430 --> 00:05:26,880  
rieber and alcock dismiss all the site

133  
00:05:30,870 --> 00:05:29,440  
evidence presented in cardenia

134  
00:05:31,830 --> 00:05:30,880  
so i'm just going to give you the bare

135  
00:05:33,510 --> 00:05:31,840  
bones

136  
00:05:36,469 --> 00:05:33,520  
of the argument there

137  
00:05:39,189 --> 00:05:36,479  
first of all rebar and alcock

138  
00:05:41,670 --> 00:05:39,199

claim that the psy evidence violates

139

00:05:43,990 --> 00:05:41,680

important principles of established that

140

00:05:47,029 --> 00:05:44,000

are established in physics and they list

141

00:05:50,710 --> 00:05:47,039

these principles as um including

142

00:05:53,749 --> 00:05:50,720

no causal mechanism uh reverses

143

00:05:56,629 --> 00:05:53,759

cause and effect violates thermodynamics

144

00:05:57,430 --> 00:05:56,639

and violates inverse square laws okay

145

00:05:59,670 --> 00:05:57,440

now

146

00:06:02,469 --> 00:05:59,680

this is sufficient these violation of

147

00:06:04,870 --> 00:06:02,479

principles signifies a violation of

148

00:06:06,870 --> 00:06:04,880

natural laws and therefore they can

149

00:06:09,189 --> 00:06:06,880

invoke hume's argument that the site

150

00:06:12,070 --> 00:06:09,199

evidence must be classified as

151  
00:06:14,710 --> 00:06:12,080  
miraculous and therefore we must dismiss

152  
00:06:17,430 --> 00:06:14,720  
the site evidence no matter how much

153  
00:06:20,309 --> 00:06:17,440  
evidence accumulates so you can see

154  
00:06:21,909 --> 00:06:20,319  
uh hume's argument here is actually um

155  
00:06:23,029 --> 00:06:21,919  
kind of like doing some pretty heavy

156  
00:06:23,909 --> 00:06:23,039  
lifting

157  
00:06:25,590 --> 00:06:23,919  
and

158  
00:06:28,150 --> 00:06:25,600  
it raises an interesting sort of

159  
00:06:30,469 --> 00:06:28,160  
question philosophy of science because

160  
00:06:33,270 --> 00:06:30,479  
in science we usually sort of depend

161  
00:06:35,350 --> 00:06:33,280  
very heavily on evidence but if the

162  
00:06:37,510 --> 00:06:35,360  
evidence under some some circumstances

163  
00:06:39,270 --> 00:06:37,520

can be swept away then we're sort of

164

00:06:40,390 --> 00:06:39,280

left kind of with this sort of

165

00:06:43,270 --> 00:06:40,400

interesting

166

00:06:44,870 --> 00:06:43,280

problem about what how how to tell when

167

00:06:46,469 --> 00:06:44,880

we're doing science and when we're not

168

00:06:47,430 --> 00:06:46,479

doing science and all kinds of

169

00:06:49,830 --> 00:06:47,440

interesting

170

00:06:50,710 --> 00:06:49,840

um questions come up

171

00:06:51,510 --> 00:06:50,720

okay

172

00:06:53,909 --> 00:06:51,520

so

173

00:06:55,749 --> 00:06:53,919

let's take let's let's remind ourselves

174

00:06:57,029 --> 00:06:55,759

though that hume's argument was

175

00:07:00,070 --> 00:06:57,039

primarily

176

00:07:01,670 --> 00:07:00,080

aimed at the at the sort of the faulty

177

00:07:04,230 --> 00:07:01,680

nature of religious

178

00:07:06,230 --> 00:07:04,240

testimony okay so what about how do we

179

00:07:08,070 --> 00:07:06,240

sort of transfer that kind of argument

180

00:07:10,870 --> 00:07:08,080

into the laboratory

181

00:07:12,950 --> 00:07:10,880

um that's something that the science

182

00:07:17,029 --> 00:07:12,960

skeptics don't really

183

00:07:19,589 --> 00:07:17,039

um pay a lot of attention to in my view

184

00:07:22,150 --> 00:07:19,599

there's a few other sort of problems too

185

00:07:24,629 --> 00:07:22,160

that i'll say a few more words about

186

00:07:26,550 --> 00:07:24,639

we can note that the evidence that they

187

00:07:29,510 --> 00:07:26,560

base these principles on the ones that i

188

00:07:31,189 --> 00:07:29,520

just went over are generally taken from

189

00:07:36,390 --> 00:07:31,199

physics

190

00:07:39,189 --> 00:07:36,400

science that we know a lot about but the

191

00:07:41,749 --> 00:07:39,199

psi data arguably might be a different

192

00:07:44,469 --> 00:07:41,759

set of data maybe maybe data that has to

193

00:07:46,309 --> 00:07:44,479

do with maybe consciousness of some kind

194

00:07:48,710 --> 00:07:46,319

maybe even quantum mechanics because a

195

00:07:50,550 --> 00:07:48,720

lot of the psychokinesis data does use

196

00:07:52,790 --> 00:07:50,560

random number generators that are based

197

00:07:54,869 --> 00:07:52,800

on principles of quantum mechanics

198

00:07:56,150 --> 00:07:54,879

and that raises another question of

199

00:07:59,029 --> 00:07:56,160

whether the psi

200

00:08:00,070 --> 00:07:59,039

might be characterized as miraculous or

201  
00:08:02,629 --> 00:08:00,080  
instead

202  
00:08:05,510 --> 00:08:02,639  
as anomalous in that in some sense that

203  
00:08:08,070 --> 00:08:05,520  
is real but just not fitting into our

204  
00:08:11,189 --> 00:08:08,080  
current understanding of uh the world

205  
00:08:13,430 --> 00:08:11,199  
okay perhaps there may be gaps remaining

206  
00:08:15,350 --> 00:08:13,440  
in our understanding of the world and if

207  
00:08:18,629 --> 00:08:15,360  
so could the side data fall into these

208  
00:08:20,950 --> 00:08:18,639  
gaps and perhaps give us some help us

209  
00:08:23,510 --> 00:08:20,960  
understand what's going on with some of

210  
00:08:27,830 --> 00:08:23,520  
these persistent um mysteries i guess

211  
00:08:30,390 --> 00:08:27,840  
you could call them okay um recently um

212  
00:08:31,270 --> 00:08:30,400  
i i found this critique of some of the

213  
00:08:33,430 --> 00:08:31,280

psy

214

00:08:35,750 --> 00:08:33,440

data by sean carroll

215

00:08:37,509 --> 00:08:35,760

and uh he doesn't mention him but he's

216

00:08:39,829 --> 00:08:37,519

sort of another example of someone who's

217

00:08:41,029 --> 00:08:39,839

using an argument that's very similar in

218

00:08:42,949 --> 00:08:41,039

the sense that

219

00:08:45,990 --> 00:08:42,959

um you know that the side data seems to

220

00:08:48,949 --> 00:08:46,000

be so contrary to scientific principles

221

00:08:50,949 --> 00:08:48,959

as we know them that um

222

00:08:52,790 --> 00:08:50,959

that um you know it probably is very

223

00:08:54,630 --> 00:08:52,800

unlikely of course sean carroll is

224

00:08:56,870 --> 00:08:54,640

someone who advocates the many worlds

225

00:08:59,670 --> 00:08:56,880

which we find which is also kind of a

226

00:09:01,190 --> 00:08:59,680

radical claim which has zero evidence as

227

00:09:03,670 --> 00:09:01,200

far as i know

228

00:09:05,350 --> 00:09:03,680

and uh so it's kind of an interesting um

229

00:09:06,790 --> 00:09:05,360

position that he is where of sort of

230

00:09:08,470 --> 00:09:06,800

being a size skeptic but at the same

231

00:09:10,630 --> 00:09:08,480

time advocating something else that

232

00:09:12,790 --> 00:09:10,640

might arguably be that some might find

233

00:09:15,990 --> 00:09:12,800

to be kind of radical

234

00:09:19,430 --> 00:09:16,000

okay so um it turns out that hume does

235

00:09:21,670 --> 00:09:19,440

have in his uh um in his in his essay

236

00:09:24,070 --> 00:09:21,680

something that we can sort of like

237

00:09:25,910 --> 00:09:24,080

see is adaptable to the laboratory

238

00:09:27,030 --> 00:09:25,920

though and and rather than sort of read

239

00:09:28,949 --> 00:09:27,040

this to you

240

00:09:30,870 --> 00:09:28,959

um i'm just going to summarize basically

241

00:09:33,350 --> 00:09:30,880

the idea is that when we're doing

242

00:09:34,949 --> 00:09:33,360

experiments and observations we can sort

243

00:09:36,470 --> 00:09:34,959

of see that there's experiments that

244

00:09:37,990 --> 00:09:36,480

fall on one side

245

00:09:39,990 --> 00:09:38,000

and there's experiments that sort of

246

00:09:42,550 --> 00:09:40,000

have a different effect and we can sort

247

00:09:44,790 --> 00:09:42,560

of see a kind of the accumulation of

248

00:09:47,670 --> 00:09:44,800

experiments as being kind of a way of

249

00:09:49,110 --> 00:09:47,680

weighing the two and if one side is

250

00:09:50,710 --> 00:09:49,120

let's say

251

00:09:52,389 --> 00:09:50,720

heavier if we think of a scale we can

252

00:09:54,790 --> 00:09:52,399

think of one side as being really a lot

253

00:09:57,350 --> 00:09:54,800

heavier than the other the the the

254

00:09:59,990 --> 00:09:57,360

degree that one is heavier or let's say

255

00:10:02,230 --> 00:10:00,000

has a much larger number gives a sense

256

00:10:04,630 --> 00:10:02,240

of what it's more likely really it's

257

00:10:06,630 --> 00:10:04,640

kind of a common sense way of the way we

258

00:10:09,430 --> 00:10:06,640

would think of of experiments but the

259

00:10:11,350 --> 00:10:09,440

important point here is that hume does

260

00:10:13,430 --> 00:10:11,360

seem to suggest that in a laboratory

261

00:10:15,430 --> 00:10:13,440

under controlled experience

262

00:10:17,670 --> 00:10:15,440

under controlled conditions

263

00:10:19,829 --> 00:10:17,680

that numbers do matter and we want to

264

00:10:21,030 --> 00:10:19,839

pay very close attention to you know how

265

00:10:25,269 --> 00:10:21,040

many

266

00:10:27,829 --> 00:10:25,279

we could

267

00:10:29,430 --> 00:10:27,839

get on one side versus another

268

00:10:31,670 --> 00:10:29,440

now it turns out

269

00:10:34,310 --> 00:10:31,680

though that having said that there is

270

00:10:36,870 --> 00:10:34,320

kind of a lifeline that hume's paper

271

00:10:39,110 --> 00:10:36,880

gives to the size skeptics and that is

272

00:10:41,350 --> 00:10:39,120

there is the possibility of

273

00:10:43,750 --> 00:10:41,360

fraud or some sort of questionable

274

00:10:45,190 --> 00:10:43,760

research practices going into the

275

00:10:47,670 --> 00:10:45,200

laboratory now

276

00:10:49,910 --> 00:10:47,680

it's it it was so while a lot of the

277

00:10:52,389 --> 00:10:49,920

problems that hume worried about are are

278

00:10:55,590 --> 00:10:52,399

sort of um not really applicable in a

279

00:10:57,269 --> 00:10:55,600

laboratory there this he does give us

280

00:10:59,430 --> 00:10:57,279

reason to think that there might be some

281

00:11:01,990 --> 00:10:59,440

dishonesty or some

282

00:11:03,750 --> 00:11:02,000

uh questionable practices okay

283

00:11:06,069 --> 00:11:03,760

so and it turns out there is

284

00:11:08,949 --> 00:11:06,079

historically speaking some evidence of

285

00:11:11,030 --> 00:11:08,959

fraud of fraud inside research

286

00:11:13,509 --> 00:11:11,040

walter levy and soul

287

00:11:15,829 --> 00:11:13,519

and uh um and these are the these are

288

00:11:18,069 --> 00:11:15,839

the prominent examples that usually are

289

00:11:20,870 --> 00:11:18,079

discussed um you know it's worth

290

00:11:23,350 --> 00:11:20,880

pointing out that the the the data here

291

00:11:26,790 --> 00:11:23,360

um is not included in the in the meta

292

00:11:28,949 --> 00:11:26,800

analysis it's also worth pointing out um

293

00:11:31,269 --> 00:11:28,959

that walter levy was actually discovered

294

00:11:33,910 --> 00:11:31,279

by other psy researchers

295

00:11:35,509 --> 00:11:33,920

um which is kind of interesting and uh

296

00:11:38,470 --> 00:11:35,519

it sort of i think goes to the point

297

00:11:41,190 --> 00:11:38,480

that the psy researchers do have a kind

298

00:11:43,030 --> 00:11:41,200

of cultural of vigilance that is trying

299

00:11:44,870 --> 00:11:43,040

to be on the lookout for anything that's

300

00:11:46,389 --> 00:11:44,880

not quite kosher

301

00:11:49,430 --> 00:11:46,399

um it's also worth pointing out that

302

00:11:50,949 --> 00:11:49,440

both of these paid very heavy prices um

303

00:11:53,509 --> 00:11:50,959

when the fraud was discovered although i

304

00:11:56,230 --> 00:11:53,519

think seoul was discovered after his uh

305

00:11:58,150 --> 00:11:56,240

after his passing but certainly it cast

306

00:11:59,910 --> 00:11:58,160

a shadow on all their research even

307

00:12:01,269 --> 00:11:59,920

research that had been

308

00:12:03,509 --> 00:12:01,279

perhaps

309

00:12:04,710 --> 00:12:03,519

not involved in any kind of fraud okay

310

00:12:07,269 --> 00:12:04,720

so

311

00:12:09,590 --> 00:12:07,279

is that sufficient to really just kind

312

00:12:11,829 --> 00:12:09,600

of say well okay some fraud has happened

313

00:12:14,069 --> 00:12:11,839

we should sort of like um

314

00:12:16,550 --> 00:12:14,079

well of course that's not really the way

315

00:12:19,990 --> 00:12:16,560

that science works in general fraud

316

00:12:22,870 --> 00:12:20,000

occurs we generally sort of don't um you

317

00:12:24,870 --> 00:12:22,880

know um toss out um you know various

318

00:12:26,389 --> 00:12:24,880

kinds of research that other people have

319

00:12:27,670 --> 00:12:26,399

done that might be similar if they

320

00:12:29,590 --> 00:12:27,680

haven't been

321

00:12:32,150 --> 00:12:29,600

um you know accused of fraud or actually

322

00:12:35,509 --> 00:12:32,160

haven't been established as having fraud

323

00:12:37,590 --> 00:12:35,519

so there is a literature on fraud um

324

00:12:39,990 --> 00:12:37,600

a survey and i'm not sure i'm going to

325

00:12:41,430 --> 00:12:40,000

pronounce his name right chavez's or

326

00:12:43,829 --> 00:12:41,440

luis

327

00:12:44,550 --> 00:12:43,839

found scientific fraud to be correlated

328

00:12:46,790 --> 00:12:44,560

with

329

00:12:49,190 --> 00:12:46,800

often prospects of job placement and

330

00:12:51,670 --> 00:12:49,200

academic prestige okay so you can sort

331

00:12:54,790 --> 00:12:51,680

of imagine the situation where someone

332

00:12:57,670 --> 00:12:54,800

wants to have a wants to maintain a a

333

00:12:59,829 --> 00:12:57,680

prestigious academic um position or

334

00:13:02,310 --> 00:12:59,839

wants to sort of be hired by a

335

00:13:04,949 --> 00:13:02,320

university and but just had doesn't have

336

00:13:06,870 --> 00:13:04,959

that publication or maybe a publication

337

00:13:08,949 --> 00:13:06,880

that has the right kind of finding and

338

00:13:12,230 --> 00:13:08,959

so there's a lot of there can be a lot

339

00:13:15,190 --> 00:13:12,240

of pressure to kind of uh sort of um

340

00:13:17,590 --> 00:13:15,200

maybe alter the results maybe

341

00:13:19,110 --> 00:13:17,600

they might even see benign to the to the

342

00:13:21,190 --> 00:13:19,120

person committing it

343

00:13:23,750 --> 00:13:21,200

but we can note that historically psy

344

00:13:24,550 --> 00:13:23,760

researchers have not improved their jobs

345

00:13:28,310 --> 00:13:24,560

um

346

00:13:30,550 --> 00:13:28,320

through through sign research okay so

347

00:13:32,710 --> 00:13:30,560

the the kind of motivations and

348

00:13:35,829 --> 00:13:32,720

incentives that have been associated

349

00:13:39,189 --> 00:13:35,839

with fraud in more let's say mainstream

350

00:13:41,509 --> 00:13:39,199

research are are not actually present

351

00:13:43,590 --> 00:13:41,519

and i've noticed and i've called

352

00:13:46,230 --> 00:13:43,600

attention the fact that people have

353

00:13:47,189 --> 00:13:46,240

committed fraud and psy you know paid a

354

00:13:49,269 --> 00:13:47,199

very

355

00:13:52,150 --> 00:13:49,279

large price it's not really clear that

356

00:13:54,069 --> 00:13:52,160

there's any kind of benefit um even

357

00:13:55,590 --> 00:13:54,079

let's say if you you talk about daryl

358

00:13:58,150 --> 00:13:55,600

bim i mean he had

359

00:13:59,509 --> 00:13:58,160

it got a lot of attention but um it's

360

00:14:01,509 --> 00:13:59,519

not really clear that in terms of

361

00:14:04,470 --> 00:14:01,519

prestige or certainly in terms of money

362

00:14:07,110 --> 00:14:04,480

that it really gave them you know

363

00:14:09,350 --> 00:14:07,120

gave him much so by so by and large we

364

00:14:10,790 --> 00:14:09,360

can notice that the incentives

365

00:14:12,710 --> 00:14:10,800

to to commit fraud in the psych

366

00:14:16,389 --> 00:14:12,720

committee are probably substantially

367

00:14:18,310 --> 00:14:16,399

less that would be my my view from uh um

368

00:14:20,550 --> 00:14:18,320

you know from from the data on the

369

00:14:23,829 --> 00:14:20,560

nature of fraud we can also notice that

370

00:14:25,030 --> 00:14:23,839

this kind of like um culture or or the

371

00:14:26,949 --> 00:14:25,040

historical

372

00:14:28,550 --> 00:14:26,959

um kind of uh um

373

00:14:31,590 --> 00:14:28,560

you know um

374

00:14:35,189 --> 00:14:31,600

pattern uh in in the sci community has

375

00:14:37,990 --> 00:14:35,199

led arguably to improvements in quality

376

00:14:41,189 --> 00:14:38,000

um cardinian cite studies that find the

377

00:14:42,870 --> 00:14:41,199

psi effects um do not diminish with

378

00:14:44,870 --> 00:14:42,880

variables representing

379

00:14:47,269 --> 00:14:44,880

quality good note that parapsychology

380

00:14:50,310 --> 00:14:47,279

journals have a tendency to encourage

381

00:14:52,310 --> 00:14:50,320

publication where no results of note are

382

00:14:54,550 --> 00:14:52,320

found or when the when the when the null

383

00:14:57,750 --> 00:14:54,560

is it can't be rejected

384

00:15:00,069 --> 00:14:57,760

shell drag found high quality um that

385

00:15:01,269 --> 00:15:00,079

the cy research had a tendency to

386

00:15:03,990 --> 00:15:01,279

um

387

00:15:06,310 --> 00:15:04,000

to to lead the way in high quality

388

00:15:08,150 --> 00:15:06,320

so um i'll go i'll say a little bit more

389

00:15:10,470 --> 00:15:08,160

just going to to history here there's

390

00:15:12,629 --> 00:15:10,480

there's the gansfeld method which i

391

00:15:13,430 --> 00:15:12,639

think many of you understand

392

00:15:19,430 --> 00:15:13,440

um

393

00:15:20,870 --> 00:15:19,440

pioneered by chuck onerton employed a

394

00:15:22,710 --> 00:15:20,880

noise reduction

395

00:15:24,949 --> 00:15:22,720

based on the idea that sensory

396

00:15:27,350 --> 00:15:24,959

deprivation heightens areas of

397

00:15:28,389 --> 00:15:27,360

consciousness more sensitive to side

398

00:15:32,230 --> 00:15:28,399

after

399

00:15:34,949 --> 00:15:32,240

28 gainsfield studies um honerton and

400

00:15:36,629 --> 00:15:34,959

hyman a psi critic

401  
00:15:39,110 --> 00:15:36,639  
collaborate and generate a set of

402  
00:15:41,430 --> 00:15:39,120  
protocols this of course is well known

403  
00:15:42,550 --> 00:15:41,440  
um eliminating sources of sensory

404  
00:15:43,350 --> 00:15:42,560  
linkage

405  
00:15:45,430 --> 00:15:43,360  
um

406  
00:15:48,310 --> 00:15:45,440  
pioneering automation of selection of

407  
00:15:50,470 --> 00:15:48,320  
images shown to the sender and so forth

408  
00:15:53,030 --> 00:15:50,480  
and the important point here is that you

409  
00:15:56,389 --> 00:15:53,040  
have sort of a this this collaboration

410  
00:15:58,470 --> 00:15:56,399  
really does suggest that um

411  
00:16:00,949 --> 00:15:58,480  
that is something different from

412  
00:16:04,389 --> 00:16:00,959  
what i think most sort of uh mainstream

413  
00:16:06,550 --> 00:16:04,399

researchers um sort of endure to kind of

414

00:16:09,110 --> 00:16:06,560

improve kind of generate a very tight

415

00:16:11,350 --> 00:16:09,120

quality control and and and the results

416

00:16:13,350 --> 00:16:11,360

have been 108 studies which show you

417

00:16:15,590 --> 00:16:13,360

know highly significant with

418

00:16:18,710 --> 00:16:15,600

astronomically small um

419

00:16:21,350 --> 00:16:18,720

likelihood of chance okay now recently

420

00:16:22,710 --> 00:16:21,360

there have been some um psy researchers

421

00:16:24,710 --> 00:16:22,720

that have said look

422

00:16:27,189 --> 00:16:24,720

can we explain the gans build

423

00:16:29,350 --> 00:16:27,199

meta-analysis through some combination

424

00:16:32,470 --> 00:16:29,360

of questionable research practices and

425

00:16:35,189 --> 00:16:32,480

fraud occurring simultaneously and they

426  
00:16:37,110 --> 00:16:35,199  
borrowed the the sort of the levels of

427  
00:16:38,470 --> 00:16:37,120  
questionable research practices that

428  
00:16:39,590 --> 00:16:38,480  
have been sort of obtained through

429  
00:16:42,629 --> 00:16:39,600  
surveys

430  
00:16:44,389 --> 00:16:42,639  
in more mainstream um in mainstream

431  
00:16:46,310 --> 00:16:44,399  
areas of research

432  
00:16:49,110 --> 00:16:46,320  
but as i've noted you know given the

433  
00:16:50,870 --> 00:16:49,120  
ganzfeld's history it's probably a bit

434  
00:16:51,990 --> 00:16:50,880  
of a stretch to assume that the same

435  
00:16:55,189 --> 00:16:52,000  
level of

436  
00:16:55,910 --> 00:16:55,199  
qrps and fraud is other

437  
00:16:57,829 --> 00:16:55,920  
is

438  
00:16:59,910 --> 00:16:57,839

that it's comparable it's probably a

439

00:17:02,069 --> 00:16:59,920

little bit of a stretch palmer's also

440

00:17:04,870 --> 00:17:02,079

criticized the number of uh assumptions

441

00:17:08,309 --> 00:17:04,880

that biermann and his co-authors uh

442

00:17:10,789 --> 00:17:08,319

found so so even with however that kind

443

00:17:11,590 --> 00:17:10,799

of questionable um sort of

444

00:17:13,189 --> 00:17:11,600

uh

445

00:17:15,750 --> 00:17:13,199

that questionable assumption about the

446

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

levels of questionable practices they

447

00:17:19,829 --> 00:17:17,919

still could not account for the whole

448

00:17:23,189 --> 00:17:19,839

effect there's it although

449

00:17:25,669 --> 00:17:23,199

as as i pointed out the uh the p-value

450

00:17:28,270 --> 00:17:25,679

is smaller than 10 to the minus 16. they

451  
00:17:31,190 --> 00:17:28,280  
were able to drop it quite a bit to

452  
00:17:33,990 --> 00:17:31,200  
.005 but still there seems to be a very

453  
00:17:35,990 --> 00:17:34,000  
substantial sort of real effect

454  
00:17:38,630 --> 00:17:36,000  
and then if we sort of go back

455  
00:17:41,590 --> 00:17:38,640  
um maybe i should just you know like if

456  
00:17:44,150 --> 00:17:41,600  
i can do this quickly um if you can sort

457  
00:17:47,990 --> 00:17:44,160  
of imagine doing a similar exercise

458  
00:17:49,830 --> 00:17:48,000  
where you sort of plug in qrps um to all

459  
00:17:51,510 --> 00:17:49,840  
of these and sort of like what are you

460  
00:17:54,070 --> 00:17:51,520  
gonna find well it looks like you you

461  
00:17:56,470 --> 00:17:54,080  
probably end up with a sort of a joint

462  
00:17:58,549 --> 00:17:56,480  
p-value that is still astronomically

463  
00:18:00,390 --> 00:17:58,559

small i mean the likelihood that all of

464

00:18:02,789 --> 00:18:00,400

these even if you have something on the

465

00:18:03,669 --> 00:18:02,799

level of p equals 0.05 you so if you

466

00:18:05,990 --> 00:18:03,679

sort of

467

00:18:08,950 --> 00:18:06,000

bring all of those and ask yourself well

468

00:18:11,669 --> 00:18:08,960

what is the likelihood that all of these

469

00:18:13,350 --> 00:18:11,679

data are generated by some sort of like

470

00:18:15,669 --> 00:18:13,360

combination of fraud and questionable

471

00:18:17,430 --> 00:18:15,679

research practices it seems like we're

472

00:18:20,630 --> 00:18:17,440

still kind of stuck in this very

473

00:18:22,390 --> 00:18:20,640

extremely unlikely kind of uh

474

00:18:24,070 --> 00:18:22,400

kind of situation

475

00:18:26,230 --> 00:18:24,080

so um now

476

00:18:28,470 --> 00:18:26,240

doug stokes um is someone who said wait

477

00:18:30,150 --> 00:18:28,480

a minute maybe there's just fraud across

478

00:18:31,350 --> 00:18:30,160

the board maybe there's even some sort

479

00:18:33,830 --> 00:18:31,360

of

480

00:18:35,909 --> 00:18:33,840

coordination between researchers so it

481

00:18:38,470 --> 00:18:35,919

almost seems like we have to go down the

482

00:18:41,430 --> 00:18:38,480

road of maybe considering a conspiracy

483

00:18:43,669 --> 00:18:41,440

theory usually scientists sort of roll

484

00:18:45,750 --> 00:18:43,679

their eyes at this point and say well

485

00:18:48,150 --> 00:18:45,760

you know we general conspiracy theories

486

00:18:51,190 --> 00:18:48,160

are just inherently unlikely in the

487

00:18:54,070 --> 00:18:51,200

extreme in this case remember that would

488

00:18:56,150 --> 00:18:54,080

mean you would have various um

489

00:18:59,110 --> 00:18:56,160

researchers somehow able to sort of

490

00:19:02,150 --> 00:18:59,120

maintain a coordination and silence of

491

00:19:04,870 --> 00:19:02,160

some kind of fraud over decades and

492

00:19:06,710 --> 00:19:04,880

exactly what are the benefits from doing

493

00:19:09,190 --> 00:19:06,720

that it's just not really clear but we

494

00:19:11,510 --> 00:19:09,200

also know that it would sort of be

495

00:19:13,430 --> 00:19:11,520

catastrophic um in terms of people's

496

00:19:16,070 --> 00:19:13,440

reputations so there would be a huge

497

00:19:18,150 --> 00:19:16,080

cost so all the all the answers really

498

00:19:20,230 --> 00:19:18,160

all the when we take a hard look at

499

00:19:23,190 --> 00:19:20,240

fraud it really seems inherently

500

00:19:24,870 --> 00:19:23,200

unlikely so let's consider the other

501  
00:19:26,230 --> 00:19:24,880  
side of the equation is it possible

502  
00:19:27,909 --> 00:19:26,240  
there's something

503  
00:19:29,190 --> 00:19:27,919  
really going on that we should be paying

504  
00:19:30,390 --> 00:19:29,200  
attention to

505  
00:19:32,950 --> 00:19:30,400  
um

506  
00:19:34,789 --> 00:19:32,960  
well one thing let's come back to our

507  
00:19:36,789 --> 00:19:34,799  
original sort of

508  
00:19:39,029 --> 00:19:36,799  
question where i said

509  
00:19:41,110 --> 00:19:39,039  
it looks like the size skeptics are

510  
00:19:44,310 --> 00:19:41,120  
basing their whole argument in large

511  
00:19:46,150 --> 00:19:44,320  
part on looking at

512  
00:19:49,190 --> 00:19:46,160  
various kinds of

513  
00:19:50,950 --> 00:19:49,200

constraints or principles based on one

514

00:19:53,110 --> 00:19:50,960

set of data that they're applying to

515

00:19:54,230 --> 00:19:53,120

another set of data but is that really

516

00:19:56,710 --> 00:19:54,240

valid

517

00:19:59,590 --> 00:19:56,720

hume and another important argument

518

00:20:02,470 --> 00:19:59,600

argued that we never directly experience

519

00:20:04,710 --> 00:20:02,480

causation or causal relationships but

520

00:20:06,390 --> 00:20:04,720

rather only the regularities of how

521

00:20:08,390 --> 00:20:06,400

objects move together

522

00:20:10,630 --> 00:20:08,400

so for hume there's always this

523

00:20:13,190 --> 00:20:10,640

substantial gap between what was

524

00:20:16,390 --> 00:20:13,200

ultimately let's say matters of

525

00:20:19,190 --> 00:20:16,400

causation and our experience and because

526  
00:20:21,270 --> 00:20:19,200  
this gap is always present we can never

527  
00:20:24,950 --> 00:20:21,280  
really fully characterize

528  
00:20:27,430 --> 00:20:24,960  
um to some arbitrarily uh precise way

529  
00:20:30,470 --> 00:20:27,440  
what the causal laws actually are

530  
00:20:32,870 --> 00:20:30,480  
and thus it seems to invalidate this

531  
00:20:35,510 --> 00:20:32,880  
attempt by the size skeptics to take

532  
00:20:40,549 --> 00:20:35,520  
principles that are sort of inferred in

533  
00:20:45,350 --> 00:20:42,870  
so in the history of science we do have

534  
00:20:47,909 --> 00:20:45,360  
these episodes of anomalous findings

535  
00:20:50,149 --> 00:20:47,919  
regarding some new area of inquiry and

536  
00:20:53,029 --> 00:20:50,159  
often the pattern is is that we've got

537  
00:20:56,070 --> 00:20:53,039  
one set of one sort of new domain let's

538  
00:20:58,549 --> 00:20:56,080

say for example the way that einstein

539

00:20:59,590 --> 00:20:58,559

explored relativity we had

540

00:21:01,750 --> 00:20:59,600

newton's

541

00:21:03,750 --> 00:21:01,760

laws which worked very well and then

542

00:21:07,270 --> 00:21:03,760

until finally we considered sort of

543

00:21:09,750 --> 00:21:07,280

maybe much larger areas of space where a

544

00:21:12,230 --> 00:21:09,760

much different kind of um sort of laws

545

00:21:14,390 --> 00:21:12,240

of nature were needed um quantum

546

00:21:17,110 --> 00:21:14,400

mechanics is another example

547

00:21:20,630 --> 00:21:17,120

um is non-classical in the sense that it

548

00:21:22,390 --> 00:21:20,640

entails some kind of non-local behavior

549

00:21:24,870 --> 00:21:22,400

and these persistent mysteries of

550

00:21:27,029 --> 00:21:24,880

quantum mechanics suggests sort of a

551  
00:21:29,190 --> 00:21:27,039  
persistent gap in our understanding of

552  
00:21:30,789 --> 00:21:29,200  
the sort of deeper ontology of the

553  
00:21:33,110 --> 00:21:30,799  
physical world

554  
00:21:34,789 --> 00:21:33,120  
and also philosophers continue to

555  
00:21:37,430 --> 00:21:34,799  
struggle to fit consciousness or

556  
00:21:40,310 --> 00:21:37,440  
subjective experience in our theater in

557  
00:21:42,310 --> 00:21:40,320  
our theories based on the physical world

558  
00:21:44,470 --> 00:21:42,320  
so

559  
00:21:46,390 --> 00:21:44,480  
chalmers david chalmers

560  
00:21:48,470 --> 00:21:46,400  
um is coined the term hard problem of

561  
00:21:50,630 --> 00:21:48,480  
consciousness and he's noticed that he's

562  
00:21:53,350 --> 00:21:50,640  
argued that consciousness in some sense

563  
00:21:55,590 --> 00:21:53,360

a kind of anomaly okay so he says that

564

00:21:58,149 --> 00:21:55,600

consciousness right now is a kind of

565

00:22:00,390 --> 00:21:58,159

anomaly one that we need to integrate

566

00:22:02,710 --> 00:22:00,400

into our view of the world but don't

567

00:22:06,070 --> 00:22:02,720

really see how faced with an anomaly

568

00:22:08,710 --> 00:22:06,080

like this radical ideas might be needed

569

00:22:11,190 --> 00:22:08,720

and he says he thinks it may need one or

570

00:22:12,789 --> 00:22:11,200

two crazy ideas before we can really

571

00:22:14,789 --> 00:22:12,799

sort of make progress on the hard

572

00:22:15,750 --> 00:22:14,799

problem of consciousness

573

00:22:17,510 --> 00:22:15,760

and

574

00:22:19,270 --> 00:22:17,520

chalmers is someone who argues that we

575

00:22:21,669 --> 00:22:19,280

probably need to take consciousness as

576

00:22:23,669 --> 00:22:21,679

fundamental in some sense not something

577

00:22:25,029 --> 00:22:23,679

that just emerges from non-conscious

578

00:22:27,750 --> 00:22:25,039

particles

579

00:22:30,549 --> 00:22:27,760

um another philosopher of consciousness

580

00:22:32,310 --> 00:22:30,559

keith frankish has sort of a a very

581

00:22:34,870 --> 00:22:32,320

different view of consciousness he says

582

00:22:37,750 --> 00:22:34,880

that consciousness is a not is truly

583

00:22:40,149 --> 00:22:37,760

anomalous in the sense of being radical

584

00:22:42,630 --> 00:22:40,159

inexplicable within our established

585

00:22:45,430 --> 00:22:42,640

scientific worldview but he views the

586

00:22:47,430 --> 00:22:45,440

idea that consciousness is so radical

587

00:22:49,350 --> 00:22:47,440

from our um

588

00:22:51,750 --> 00:22:49,360

from our conventional views that it's

589

00:22:53,590 --> 00:22:51,760

probably some kind of illusion it's

590

00:22:56,310 --> 00:22:53,600

probably some something that's not

591

00:22:58,870 --> 00:22:56,320

really as real as we think it is which

592

00:23:00,470 --> 00:22:58,880

of course is kind of a strange thing

593

00:23:01,510 --> 00:23:00,480

because it just seems like the one thing

594

00:23:03,430 --> 00:23:01,520

we should

595

00:23:04,870 --> 00:23:03,440

maybe take as real as our conscious

596

00:23:07,510 --> 00:23:04,880

experience

597

00:23:09,110 --> 00:23:07,520

but frankish feels that our are we

598

00:23:11,510 --> 00:23:09,120

should we should probably

599

00:23:13,750 --> 00:23:11,520

find ways where where we're where we're

600

00:23:17,029 --> 00:23:13,760

not really having consciousness the way

601  
00:23:19,029 --> 00:23:17,039  
we think are now if you think about this

602  
00:23:21,029 --> 00:23:19,039  
this is kind of astonishing because it

603  
00:23:24,230 --> 00:23:21,039  
means with regarding consciousness we

604  
00:23:25,990 --> 00:23:24,240  
may have two sets of data the side data

605  
00:23:27,990 --> 00:23:26,000  
and our own

606  
00:23:29,190 --> 00:23:28,000  
experiences that suggest that

607  
00:23:31,750 --> 00:23:29,200  
consciousness

608  
00:23:33,669 --> 00:23:31,760  
is really something that doesn't fit in

609  
00:23:35,990 --> 00:23:33,679  
with our conscious experience

610  
00:23:38,070 --> 00:23:36,000  
if we do take our consciousness

611  
00:23:40,870 --> 00:23:38,080  
conscious experiences is real and

612  
00:23:43,190 --> 00:23:40,880  
therefore anomalous it really in my view

613  
00:23:45,350 --> 00:23:43,200

opens the door

614

00:23:47,190 --> 00:23:45,360

or should i open our minds to the idea

615

00:23:49,110 --> 00:23:47,200

that maybe the psi data is sort of

616

00:23:50,630 --> 00:23:49,120

telling us something about the nature of

617

00:23:53,669 --> 00:23:50,640

consciousness

618

00:23:55,909 --> 00:23:53,679

so if we think about on the side data it

619

00:23:58,230 --> 00:23:55,919

arguably falls into the domains of

620

00:24:00,390 --> 00:23:58,240

quantum mechanics and consciousness this

621

00:24:02,230 --> 00:24:00,400

these two areas that we're still sort of

622

00:24:04,630 --> 00:24:02,240

like trying to understand

623

00:24:07,029 --> 00:24:04,640

um like i said before the psi data some

624

00:24:09,269 --> 00:24:07,039

of the side data does sort of seem to be

625

00:24:11,750 --> 00:24:09,279

linked with quantum mechanics uh dean

626

00:24:13,990 --> 00:24:11,760

rayden also has some experiments on the

627

00:24:16,549 --> 00:24:14,000

double slit experiment which suggests

628

00:24:19,909 --> 00:24:16,559

some sensitivity to mental intention

629

00:24:22,149 --> 00:24:19,919

so it seems like these persistent areas

630

00:24:23,990 --> 00:24:22,159

give us reason to think that you know

631

00:24:25,990 --> 00:24:24,000

the psi data is something that we have

632

00:24:29,190 --> 00:24:26,000

to take more seriously and can't just

633

00:24:30,310 --> 00:24:29,200

sweep away so just inclusion to wrap

634

00:24:32,070 --> 00:24:30,320

things up

635

00:24:34,149 --> 00:24:32,080

i want to point out that the probability

636

00:24:37,029 --> 00:24:34,159

that the data summarized by

637

00:24:38,149 --> 00:24:37,039

recently by cardenia is generated that

638

00:24:40,710 --> 00:24:38,159

that is the probability that it's

639

00:24:41,830 --> 00:24:40,720

generated by fraudulent or questionable

640

00:24:44,789 --> 00:24:41,840

practices

641

00:24:47,430 --> 00:24:44,799

it appears to be extremely unlikely and

642

00:24:50,630 --> 00:24:47,440

that and further i believe hume would

643

00:24:53,430 --> 00:24:50,640

not endorse uh what the practice of

644

00:24:55,350 --> 00:24:53,440

extrapolating principles or constraints

645

00:24:57,750 --> 00:24:55,360

that are inferred from one domain such

646

00:24:58,710 --> 00:24:57,760

as physics and sort of like try to sort

647

00:25:01,029 --> 00:24:58,720

of

648

00:25:02,710 --> 00:25:01,039

apply them in a very different one okay

649

00:25:05,190 --> 00:25:02,720

such as consciousness

650

00:25:08,149 --> 00:25:05,200

and as it happens the side data seems to

651  
00:25:10,630 --> 00:25:08,159  
fall within domains where there remain

652  
00:25:11,909 --> 00:25:10,640  
persistent gaps in our understanding as

653  
00:25:14,789 --> 00:25:11,919  
i said quantum mechanics and

654  
00:25:17,350 --> 00:25:14,799  
consciousness so overall i believe the

655  
00:25:19,830 --> 00:25:17,360  
greater likelihood is that psy

656  
00:25:22,710 --> 00:25:19,840  
as with consciousness um represents

657  
00:25:23,590 --> 00:25:22,720  
something that's real yet anomalous not

658  
00:25:29,029 --> 00:25:23,600  
quite

659  
00:25:31,669 --> 00:25:29,039  
sort of more conventional understandings

660  
00:25:34,630 --> 00:25:31,679  
now i'm not certain to answer my sort of

661  
00:25:36,630 --> 00:25:34,640  
question in the title i i i'm not sure

662  
00:25:38,870 --> 00:25:36,640  
uh hume would agree with all this i mean

663  
00:25:41,029 --> 00:25:38,880

i guess we should we could try to

664

00:25:43,190 --> 00:25:41,039

you know maybe um

665

00:25:45,029 --> 00:25:43,200

reanimate his body his corpse but then

666

00:25:47,350 --> 00:25:45,039

he would that would be a miracle and i

667

00:25:50,470 --> 00:25:47,360

think he would be very um put off by

668

00:25:53,110 --> 00:25:50,480

that so uh anyways probably best to say

669

00:25:55,430 --> 00:25:53,120

that um he we don't really know what he

670

00:25:57,830 --> 00:25:55,440

would say but it's possible but i think

671

00:26:00,310 --> 00:25:57,840

what we can say is that his arguments do

672

00:26:04,070 --> 00:26:00,320

not provide the resources that sai

673

00:26:08,390 --> 00:26:04,080

skeptics um maintain to dismiss the psy

674

00:26:10,630 --> 00:26:08,400

data so uh anyway i wanna now thank you

675

00:26:13,430 --> 00:26:10,640

i'm gonna hand york the mic

676

00:26:16,149 --> 00:26:13,440

uh well i'm sorry to say that this isn't

677

00:26:18,149 --> 00:26:16,159

exactly a question except maybe a

678

00:26:21,830 --> 00:26:18,159

rhetorical one

679

00:26:25,350 --> 00:26:21,840

but i notice that the

680

00:26:27,430 --> 00:26:25,360

um rebrand alcott paper uh

681

00:26:29,830 --> 00:26:27,440

invokes the

682

00:26:32,870 --> 00:26:29,840

inverse square law

683

00:26:36,310 --> 00:26:32,880

uh criticism for what is probably the

684

00:26:39,430 --> 00:26:36,320

thousandth time over the last century

685

00:26:42,789 --> 00:26:39,440

um and the problem with it i i don't see

686

00:26:45,110 --> 00:26:42,799

why anyone takes it seriously because

687

00:26:47,590 --> 00:26:45,120

our everyday experience is full of

688

00:26:50,789 --> 00:26:47,600

genuine physical phenomena that don't

689

00:26:53,830 --> 00:26:50,799

obey the inverse square law the

690

00:26:55,669 --> 00:26:53,840

uh best example

691

00:26:59,190 --> 00:26:55,679

uh

692

00:27:01,269 --> 00:26:59,200

for a brief response is

693

00:27:01,990 --> 00:27:01,279

radio broadcasts

694

00:27:04,310 --> 00:27:02,000

the

695

00:27:07,269 --> 00:27:04,320

signal-to-noise ratio of a radio

696

00:27:08,070 --> 00:27:07,279

broadcast does obey the inverse square

697

00:27:10,390 --> 00:27:08,080

law

698

00:27:12,630 --> 00:27:10,400

but what you hear

699

00:27:14,870 --> 00:27:12,640

what comes out of the speaker of a radio

700

00:27:17,430 --> 00:27:14,880

we don't perceive radio directly

701  
00:27:19,830 --> 00:27:17,440  
we perceive the informational content of

702  
00:27:21,750 --> 00:27:19,840  
a signal that is broadcast

703  
00:27:24,470 --> 00:27:21,760  
using radio

704  
00:27:26,549 --> 00:27:24,480  
and as long as the signal-to-noise ratio

705  
00:27:27,909 --> 00:27:26,559  
is above the threshold that our receiver

706  
00:27:30,149 --> 00:27:27,919  
can discriminate

707  
00:27:32,950 --> 00:27:30,159  
we get exactly the same broadcast

708  
00:27:34,470 --> 00:27:32,960  
whether we're a thousand miles away or

709  
00:27:37,669 --> 00:27:34,480  
standing right next to the broadcast

710  
00:27:41,590 --> 00:27:37,679  
station the information content does not

711  
00:27:45,830 --> 00:27:43,590  
so there are there are other complaints

712  
00:27:49,110 --> 00:27:45,840  
i could make about the rebrand all

713  
00:27:50,389 --> 00:27:49,120

paper but i think i should leave that to

714

00:27:52,950 --> 00:27:50,399

uh

715

00:27:54,950 --> 00:27:52,960

leave open the space for other people

716

00:27:56,789 --> 00:27:54,960

yeah there okay well thank you

717

00:28:00,070 --> 00:27:56,799

thank you

718

00:28:02,389 --> 00:28:00,080

yeah there's a i i i i did a i did a

719

00:28:05,029 --> 00:28:02,399

paper version where i critiqued rieber

720

00:28:08,389 --> 00:28:05,039

and alcock that was in a previous issue

721

00:28:11,590 --> 00:28:08,399

of uh journal of scientific exploration

722

00:28:14,230 --> 00:28:11,600

and uh i sort of went into more detail

723

00:28:16,389 --> 00:28:14,240

um each of the of the uh sort of

724

00:28:18,470 --> 00:28:16,399

principles and i said why

725

00:28:20,870 --> 00:28:18,480

why i think they don't really work while

726

00:28:23,190 --> 00:28:20,880

they may arguably work in sort of

727

00:28:26,149 --> 00:28:23,200

classical physics how they arguably

728

00:28:28,230 --> 00:28:26,159

don't quite work well in if we want to

729

00:28:31,909 --> 00:28:28,240

look in areas such as consciousness and

730

00:28:34,710 --> 00:28:31,919

quantum mechanics but i did not use your

731

00:28:37,269 --> 00:28:34,720

point of yorkshire so i appreciate you

732

00:28:38,070 --> 00:28:37,279

for for sharing that um but but but i

733

00:28:43,110 --> 00:28:38,080

did

734

00:28:46,070 --> 00:28:43,120

um just to kind of one one in particular

735

00:28:48,630 --> 00:28:46,080

is lack of causal mechanism that this is

736

00:28:49,430 --> 00:28:48,640

kind of also wagonmacher also attacked

737

00:28:51,430 --> 00:28:49,440

them

738

00:28:53,110 --> 00:28:51,440

in that the idea is that we need a sort

739

00:28:53,909 --> 00:28:53,120

of causal mechanism

740

00:28:56,230 --> 00:28:53,919

um

741

00:28:58,149 --> 00:28:56,240

one pro one problem of that is that in

742

00:28:59,590 --> 00:28:58,159

in quantum mechanics the the collapse of

743

00:29:02,310 --> 00:28:59,600

the wave function

744

00:29:04,789 --> 00:29:02,320

uh or as bait as bone david bohm

745

00:29:07,029 --> 00:29:04,799

explains in his um interpretations of

746

00:29:09,590 --> 00:29:07,039

quantum mechanics causal mechanisms

747

00:29:12,149 --> 00:29:09,600

don't really seem to play the kind of

748

00:29:14,470 --> 00:29:12,159

role in quantum mechanics if at all and

749

00:29:17,909 --> 00:29:14,480

then david chalmers actually sort of

750

00:29:19,990 --> 00:29:17,919

characterizes the hard problem as the as

751

00:29:22,230 --> 00:29:20,000

is trying to sort of explain the um

752

00:29:24,870 --> 00:29:22,240

aspects of consciousness that can't be

753

00:29:28,149 --> 00:29:24,880

really characterized in terms of sort of

754

00:29:30,149 --> 00:29:28,159

mechanisms and and functions so you know

755

00:29:32,470 --> 00:29:30,159

once we sort of leave the the confines

756

00:29:34,230 --> 00:29:32,480

of classical physics these principles i

757

00:29:36,310 --> 00:29:34,240

think that uh reber and alcock want to

758

00:29:37,190 --> 00:29:36,320

sort of hinge so much of their argument

759

00:29:41,430 --> 00:29:37,200

on

760

00:29:45,909 --> 00:29:42,710

anybody

761

00:29:49,110 --> 00:29:45,919

okay um i see another raised hand

762

00:29:51,190 --> 00:29:49,120

um okay i'm gonna hand uh i think it's

763

00:29:52,470 --> 00:29:51,200

kenny the mic um

764

00:29:55,590 --> 00:29:52,480

the thing that's been bothering me

765

00:29:57,830 --> 00:29:55,600

throughout this discussion so far

766

00:30:00,230 --> 00:29:57,840

is something that i think

767

00:30:03,029 --> 00:30:00,240

as members of sse we would all more or

768

00:30:05,269 --> 00:30:03,039

less agree on and that's the idea that

769

00:30:07,269 --> 00:30:05,279

our understanding of physics is woefully

770

00:30:09,830 --> 00:30:07,279

incomplete

771

00:30:11,510 --> 00:30:09,840

it is severely limited

772

00:30:14,149 --> 00:30:11,520

and

773

00:30:16,389 --> 00:30:14,159

to say that physics can't explain

774

00:30:19,029 --> 00:30:16,399

x y or z

775

00:30:21,669 --> 00:30:19,039

really to me means we have not yet

776

00:30:24,710 --> 00:30:21,679

arrived at

777

00:30:25,590 --> 00:30:24,720

a complete understanding of physics

778

00:30:28,710 --> 00:30:25,600

so

779

00:30:31,669 --> 00:30:28,720

mechanism

780

00:30:32,950 --> 00:30:31,679

and therefore that thing isn't real

781

00:30:35,269 --> 00:30:32,960

well i would

782

00:30:37,590 --> 00:30:35,279

i would hasten to

783

00:30:39,269 --> 00:30:37,600

remind the speaker not you but the

784

00:30:41,269 --> 00:30:39,279

speaker in general

785

00:30:43,350 --> 00:30:41,279

that we don't understand

786

00:30:45,830 --> 00:30:43,360

all kinds of things

787

00:30:48,230 --> 00:30:45,840

that a revision of physics a severe

788

00:30:50,710 --> 00:30:48,240

revision of physics might eventually

789

00:30:52,789 --> 00:30:50,720

help us understand

790

00:30:55,110 --> 00:30:52,799

so

791

00:30:56,310 --> 00:30:55,120

i'm all into causal mechanisms

792

00:30:58,070 --> 00:30:56,320

but

793

00:30:59,430 --> 00:30:58,080

i just don't think we're smart enough

794

00:31:02,470 --> 00:30:59,440

yet

795

00:31:03,830 --> 00:31:02,480

another question or just a comment but i

796

00:31:06,470 --> 00:31:03,840

would be interested in how you feel

797

00:31:07,350 --> 00:31:06,480

about that yeah um what's interesting in

798

00:31:09,269 --> 00:31:07,360

the real

799

00:31:11,269 --> 00:31:09,279

paper they they actually

800

00:31:14,230 --> 00:31:11,279

acknowledge the fact that

801  
00:31:16,710 --> 00:31:14,240  
on sir isaac newton um his theory of

802  
00:31:18,789 --> 00:31:16,720  
gravitation didn't really have a a

803  
00:31:21,110 --> 00:31:18,799  
mechanism it's sort of in sort of an

804  
00:31:24,149 --> 00:31:21,120  
action distance that seems to be but yet

805  
00:31:25,830 --> 00:31:24,159  
people and and people talked about how

806  
00:31:27,669 --> 00:31:25,840  
you know that worried them a little bit

807  
00:31:30,230 --> 00:31:27,679  
it worried newton too but it's that

808  
00:31:33,269 --> 00:31:30,240  
people used it people found it to be

809  
00:31:36,549 --> 00:31:33,279  
very useful very accurate way of sort of

810  
00:31:38,470 --> 00:31:36,559  
uh describing the behavior of objects so

811  
00:31:41,430 --> 00:31:38,480  
in their in their own paper they seem to

812  
00:31:44,149 --> 00:31:41,440  
kind of acknowledge that sometimes we

813  
00:31:45,110 --> 00:31:44,159

don't really need a causal mechanism

814

00:31:47,909 --> 00:31:45,120

um

815

00:31:48,630 --> 00:31:47,919

to uh to sort of like you know go along

816

00:31:50,310 --> 00:31:48,640

with

817

00:31:54,230 --> 00:31:50,320

you know to at least you know try to

818

00:31:57,990 --> 00:31:54,240

sort of uh um explain or um or at least

819

00:32:00,549 --> 00:31:58,000

um describe aspects of of the world so

820

00:32:03,669 --> 00:32:00,559

they kind of in a way defeat their own

821

00:32:06,230 --> 00:32:03,679

um claim in a way um and as i said also

822

00:32:09,990 --> 00:32:06,240

that there probably there may well be

823

00:32:12,149 --> 00:32:10,000

um areas of of physics that um maybe we

824

00:32:13,830 --> 00:32:12,159

that don't involve sort of those kinds

825

00:32:16,070 --> 00:32:13,840

of causal mechanisms but you're quite

826

00:32:17,669 --> 00:32:16,080

right there may be causal mechanisms

827

00:32:20,310 --> 00:32:17,679

that we just don't know about you know

828

00:32:22,789 --> 00:32:20,320

and that's another possibility um so

829

00:32:26,389 --> 00:32:22,799

anyway i i you know i take your point

830

00:32:28,630 --> 00:32:26,399

that and i think they you know sort of

831

00:32:30,389 --> 00:32:28,640

are they're sort of vulnerable to

832

00:32:34,549 --> 00:32:30,399

critique as well

833

00:32:38,549 --> 00:32:37,110

hi logan hi george

834

00:32:39,669 --> 00:32:38,559

i think uh

835

00:32:40,470 --> 00:32:39,679

can you hear me

836

00:32:43,909 --> 00:32:40,480

yes

837

00:32:45,909 --> 00:32:43,919

okay great sorry uh here we go hi hi uh

838

00:32:47,990 --> 00:32:45,919

we talked a bit over uh email thank you

839

00:32:50,870 --> 00:32:48,000

for inviting me to this wonderful talk

840

00:32:53,830 --> 00:32:50,880

um i have a question i have plenty of

841

00:32:55,750 --> 00:32:53,840

comments i have a question um which is

842

00:32:58,070 --> 00:32:55,760

uh i'm going to assume that you are

843

00:33:00,870 --> 00:32:58,080

familiar with the famous um

844

00:33:02,789 --> 00:33:00,880

uh sagan standard uh you know uh

845

00:33:05,509 --> 00:33:02,799

described in the aphorism extraordinary

846

00:33:07,990 --> 00:33:05,519

claims require extraordinary evidence

847

00:33:09,669 --> 00:33:08,000

yeah curious how you would map

848

00:33:11,909 --> 00:33:09,679

hume's view

849

00:33:13,269 --> 00:33:11,919

to that standard

850

00:33:15,990 --> 00:33:13,279

um which is something that's always

851

00:33:18,389 --> 00:33:16,000

bothered me i'm an experimentalist

852

00:33:20,230 --> 00:33:18,399

and uh and for all you experimentalists

853

00:33:21,190 --> 00:33:20,240

out there um if you know you know trying

854

00:33:24,470 --> 00:33:21,200

to get a

855

00:33:27,590 --> 00:33:24,480

a paper just of some some ordinary claim

856

00:33:29,110 --> 00:33:27,600

through peer review oftentimes it seems

857

00:33:31,430 --> 00:33:29,120

to require extraordinary evidence to

858

00:33:32,710 --> 00:33:31,440

convince these reviewers so i've never

859

00:33:34,549 --> 00:33:32,720

really

860

00:33:36,070 --> 00:33:34,559

bought into this

861

00:33:37,430 --> 00:33:36,080

this uh

862

00:33:38,789 --> 00:33:37,440

criterion

863

00:33:40,549 --> 00:33:38,799

and so um

864

00:33:42,149 --> 00:33:40,559

in you know just you know uh listening

865

00:33:44,070 --> 00:33:42,159

to your talk on

866

00:33:47,909 --> 00:33:44,080

on hume i was wondering if if you could

867

00:33:48,950 --> 00:33:47,919

see a a mapping between the two yeah

868

00:33:50,149 --> 00:33:48,960

um

869

00:33:53,669 --> 00:33:50,159

well

870

00:33:54,870 --> 00:33:53,679

i yeah him him sort of i think tries to

871

00:33:57,909 --> 00:33:54,880

argue that

872

00:34:00,710 --> 00:33:57,919

um miracles are um

873

00:34:03,750 --> 00:34:00,720

are kind of like just inherently unr the

874

00:34:06,870 --> 00:34:03,760

testimony regarding miracles is just

875

00:34:10,069 --> 00:34:06,880

inherently unreliable um i think that

876

00:34:11,909 --> 00:34:10,079

sagan um sagan's idea is a little bit

877

00:34:14,869 --> 00:34:11,919

different from him although there's that

878

00:34:17,349 --> 00:34:14,879

they are sort of comparable um i guess

879

00:34:18,470 --> 00:34:17,359

the problem i have with sagans is i

880

00:34:20,230 --> 00:34:18,480

don't know

881

00:34:21,589 --> 00:34:20,240

i mean there's not there's not much of a

882

00:34:22,629 --> 00:34:21,599

definition

883

00:34:26,230 --> 00:34:22,639

around

884

00:34:28,230 --> 00:34:26,240

x what extraordinary means um like i

885

00:34:31,030 --> 00:34:28,240

mean to me like

886

00:34:33,669 --> 00:34:31,040

there's there's the there's the

887

00:34:37,030 --> 00:34:33,679

i mentioned briefly um

888

00:34:38,790 --> 00:34:37,040

sean carroll so he claims that the

889

00:34:40,790 --> 00:34:38,800

quantum mechan the best explanation of

890

00:34:42,710 --> 00:34:40,800

quantum mechanics is the multiverse that

891

00:34:45,270 --> 00:34:42,720

is every time there's a quantum event

892

00:34:47,430 --> 00:34:45,280

the universe splits but we can never see

893

00:34:49,430 --> 00:34:47,440

it because we we're in one universe and

894

00:34:51,510 --> 00:34:49,440

then there's another universe now that's

895

00:34:53,190 --> 00:34:51,520

a pretty extraordinary claim in my view

896

00:34:55,669 --> 00:34:53,200

in fact it's probably way more

897

00:34:56,869 --> 00:34:55,679

extraordinary than

898

00:34:58,870 --> 00:34:56,879

than um

899

00:34:59,750 --> 00:34:58,880

than than inside

900

00:35:02,470 --> 00:34:59,760

but

901  
00:35:04,550 --> 00:35:02,480  
psy actually has evidence whereas

902  
00:35:06,710 --> 00:35:04,560  
sean carroll doesn't really provide any

903  
00:35:08,230 --> 00:35:06,720  
evidence other than just simply an

904  
00:35:11,190 --> 00:35:08,240  
argument around the

905  
00:35:13,349 --> 00:35:11,200  
interpretation of the wave function so

906  
00:35:15,750 --> 00:35:13,359  
so this this this notion of

907  
00:35:17,670 --> 00:35:15,760  
extraordinary claim requires

908  
00:35:19,829 --> 00:35:17,680  
extraordinary evidence it seems like it

909  
00:35:22,150 --> 00:35:19,839  
depends on

910  
00:35:25,910 --> 00:35:22,160  
that there's it's it doesn't seem to

911  
00:35:28,630 --> 00:35:25,920  
be a principle that's kind of used um

912  
00:35:31,030 --> 00:35:28,640  
in a consistent way across science and

913  
00:35:33,829 --> 00:35:31,040

and of course the the terms

914

00:35:36,069 --> 00:35:33,839

extraordinary seems to be kind of um

915

00:35:38,870 --> 00:35:36,079

seems to be kind of vague or

916

00:35:41,589 --> 00:35:38,880

or ill-defined um as i mentioned in my

917

00:35:43,510 --> 00:35:41,599

talk um i think that um

918

00:35:45,670 --> 00:35:43,520

keith frankish the the philosopher of

919

00:35:48,710 --> 00:35:45,680

consciousness would argue that

920

00:35:51,589 --> 00:35:48,720

consciousness our conscious experiences

921

00:35:53,109 --> 00:35:51,599

um are actually so extraordinary that we

922

00:35:55,190 --> 00:35:53,119

should probably

923

00:35:56,870 --> 00:35:55,200

say that they that they're unlikely to

924

00:36:00,150 --> 00:35:56,880

exist okay that's

925

00:36:02,230 --> 00:36:00,160

that's kind of a way he argues so um

926

00:36:04,550 --> 00:36:02,240

it's it's it's a very inherently

927

00:36:07,589 --> 00:36:04,560

problematic kind of maxim

928

00:36:09,829 --> 00:36:07,599

um when you try to apply it um sort of

929

00:36:12,390 --> 00:36:09,839

outside in especially in these areas

930

00:36:14,710 --> 00:36:12,400

like quantum mechanics and consciousness

931

00:36:15,750 --> 00:36:14,720

where we have these sort of persistent

932

00:36:19,190 --> 00:36:15,760

mysteries

933

00:36:21,190 --> 00:36:19,200

um so um i guess i guess the way to try

934

00:36:23,589 --> 00:36:21,200

to do a mapping to try to come back to

935

00:36:25,510 --> 00:36:23,599

your question is that we would you know

936

00:36:28,470 --> 00:36:25,520

maybe maybe someone

937

00:36:30,069 --> 00:36:28,480

with humes uh um you know it's it seems

938

00:36:32,390 --> 00:36:30,079

like that they were saying that if

939

00:36:34,790 --> 00:36:32,400

something's extraordinary we would have

940

00:36:37,190 --> 00:36:34,800

to have a lot of data a lot of

941

00:36:39,030 --> 00:36:37,200

experiments the kind of like kind of

942

00:36:42,230 --> 00:36:39,040

like you know confirmation of

943

00:36:43,109 --> 00:36:42,240

confirmation but the problem there in my

944

00:36:45,430 --> 00:36:43,119

view

945

00:36:47,030 --> 00:36:45,440

um you know we sort of have that we have

946

00:36:48,790 --> 00:36:47,040

a lot of data

947

00:36:51,829 --> 00:36:48,800

we have meta-analysis

948

00:36:54,150 --> 00:36:51,839

of based on studies across

949

00:36:57,190 --> 00:36:54,160

time across different laboratories and

950

00:37:00,470 --> 00:36:57,200

researchers different modalities such as

951  
00:37:02,870 --> 00:37:00,480  
um you know precognition presentement um

952  
00:37:05,270 --> 00:37:02,880  
you know remote viewing and so forth so

953  
00:37:08,630 --> 00:37:05,280  
it just seems like you know even on that

954  
00:37:10,870 --> 00:37:08,640  
score you know we we probably we could

955  
00:37:12,069 --> 00:37:10,880  
probably even manage it so

956  
00:37:14,870 --> 00:37:12,079  
when i hear

957  
00:37:16,310 --> 00:37:14,880  
um the term or the or that maxim i'm

958  
00:37:17,750 --> 00:37:16,320  
thinking that what what people are

959  
00:37:19,990 --> 00:37:17,760  
trying to get into

960  
00:37:21,430 --> 00:37:20,000  
is more of a social construction in

961  
00:37:22,950 --> 00:37:21,440  
other words we're just

962  
00:37:24,710 --> 00:37:22,960  
you know things like sci are just

963  
00:37:26,069 --> 00:37:24,720

outside of science

964

00:37:28,230 --> 00:37:26,079

they don't really ha

965

00:37:29,030 --> 00:37:28,240

it's it's it's in this in the sense that

966

00:37:31,030 --> 00:37:29,040

it just

967

00:37:33,910 --> 00:37:31,040

to them maybe conjures

968

00:37:35,430 --> 00:37:33,920

um you know um associations with

969

00:37:36,470 --> 00:37:35,440

religion or something like that so that

970

00:37:38,230 --> 00:37:36,480

they

971

00:37:40,150 --> 00:37:38,240

it's very so in other words it's very

972

00:37:42,069 --> 00:37:40,160

difficult to sort of apply

973

00:37:43,750 --> 00:37:42,079

um scientific principles and be

974

00:37:45,990 --> 00:37:43,760

consistent about it and say that side

975

00:37:47,990 --> 00:37:46,000

doesn't exist so there's all these other

976  
00:37:49,670 --> 00:37:48,000  
kinds of arguments that sort of that are

977  
00:37:51,270 --> 00:37:49,680  
sort of thrown around

978  
00:37:53,190 --> 00:37:51,280  
and at the end of the day

979  
00:37:55,430 --> 00:37:53,200  
it seems like the arguments in my view

980  
00:37:56,310 --> 00:37:55,440  
are kind of weak so i don't know i i

981  
00:37:58,950 --> 00:37:56,320  
hope

982  
00:38:01,349 --> 00:37:58,960  
some of that answers your question

983  
00:38:03,910 --> 00:38:01,359  
thank you all right thank you logan

984  
00:38:06,310 --> 00:38:03,920  
all right so i have a question from da

985  
00:38:09,190 --> 00:38:06,320  
chain pio

986  
00:38:11,510 --> 00:38:09,200  
he says that inverse square does not

987  
00:38:12,870 --> 00:38:11,520  
apply to all physical phenomena for

988  
00:38:15,430 --> 00:38:12,880

example

989

00:38:17,270 --> 00:38:15,440

laser propagation does not abide the

990

00:38:20,150 --> 00:38:17,280

inverse square law

991

00:38:22,710 --> 00:38:20,160

every music was once new and every

992

00:38:24,950 --> 00:38:22,720

physical phenomenon was once anomalous

993

00:38:28,150 --> 00:38:24,960

what if psy is a kind of coherent

994

00:38:32,550 --> 00:38:30,870

what what if what if psy was a coherent

995

00:38:35,910 --> 00:38:32,560

phenomenon

996

00:38:36,870 --> 00:38:35,920

i'm not exactly sure i understand the

997

00:38:39,750 --> 00:38:36,880

question

998

00:38:41,510 --> 00:38:39,760

um but but i certainly take your point

999

00:38:42,470 --> 00:38:41,520

that you know everything that we're

1000

00:38:44,710 --> 00:38:42,480

learning

1001  
00:38:46,870 --> 00:38:44,720  
in the universe by coherent i assume you

1002  
00:38:49,430 --> 00:38:46,880  
mean it it actually is

1003  
00:38:51,910 --> 00:38:49,440  
kind of normal that is it fits with our

1004  
00:38:53,670 --> 00:38:51,920  
reality it's coherent in that sense i

1005  
00:38:54,630 --> 00:38:53,680  
i'm sort of presuming that that's

1006  
00:38:57,349 --> 00:38:54,640  
presumed

1007  
00:38:59,349 --> 00:38:57,359  
yeah i'm presuming that um that is to

1008  
00:39:01,270 --> 00:38:59,359  
say that it may seem anomalous because

1009  
00:39:03,510 --> 00:39:01,280  
we've got this set of data from

1010  
00:39:04,550 --> 00:39:03,520  
classical physics that suggests well it

1011  
00:39:07,670 --> 00:39:04,560  
can't fit

1012  
00:39:08,470 --> 00:39:07,680  
but everything as you point out um you

1013  
00:39:10,870 --> 00:39:08,480

know

1014

00:39:13,030 --> 00:39:10,880

does um does seem anomalous at first

1015

00:39:14,870 --> 00:39:13,040

when you're first learning about it so

1016

00:39:17,349 --> 00:39:14,880

it could well be that it's

1017

00:39:19,270 --> 00:39:17,359

maybe not only maybe it's maybe it's

1018

00:39:21,829 --> 00:39:19,280

just normal and i think uh

1019

00:39:23,670 --> 00:39:21,839

um that's that i think is a really good

1020

00:39:24,790 --> 00:39:23,680

way of thinking about psy assuming

1021

00:39:26,950 --> 00:39:24,800

that's what you're what you're

1022

00:39:28,550 --> 00:39:26,960

suggesting and i think that uh

1023

00:39:37,109 --> 00:39:28,560

um

1024

00:39:38,950 --> 00:39:37,119

first sight it's uh first sight trying

1025

00:39:41,589 --> 00:39:38,960

to think of the author's name carpenter

1026  
00:39:44,390 --> 00:39:41,599  
that's it basically um develops a very

1027  
00:39:46,550 --> 00:39:44,400  
sophisticated um framework for

1028  
00:39:48,630 --> 00:39:46,560  
psychology thinking of psy is just

1029  
00:39:51,589 --> 00:39:48,640  
normal but it sort of comes through our

1030  
00:39:54,829 --> 00:39:51,599  
subconscious and he's got a very sort of

1031  
00:39:57,670 --> 00:39:54,839  
rich framework for understanding how

1032  
00:39:59,750 --> 00:39:57,680  
um based on various mechanisms in our

1033  
00:40:02,550 --> 00:39:59,760  
psychology how we might be filtering out

1034  
00:40:05,510 --> 00:40:02,560  
the psy information or actually sort of

1035  
00:40:07,270 --> 00:40:05,520  
like um sort of using it uh to inform

1036  
00:40:09,910 --> 00:40:07,280  
our world so i think that he's got a

1037  
00:40:12,870 --> 00:40:09,920  
good sort of framework for exploring psy

1038  
00:40:15,270 --> 00:40:12,880

is something normal um that we that most

1039

00:40:17,430 --> 00:40:15,280

of us sort of have to some degree

1040

00:40:19,910 --> 00:40:17,440

um and maybe we just sort of have to get

1041

00:40:21,670 --> 00:40:19,920

past this idea that it's somehow

1042

00:40:24,309 --> 00:40:21,680

something that's kind of strange but

1043

00:40:27,990 --> 00:40:24,319

actually just part of our world that we

1044

00:40:30,069 --> 00:40:28,000

are learning about so anyway hope that's

1045

00:40:31,829 --> 00:40:30,079

so i've got one more raised hand and

1046

00:40:32,950 --> 00:40:31,839

then a final question from york and

1047

00:40:35,030 --> 00:40:32,960

that's all the time we're going to have

1048

00:40:37,430 --> 00:40:35,040

so i'm going to go ahead and pass the

1049

00:40:39,109 --> 00:40:37,440

mic to newsy

1050

00:40:40,790 --> 00:40:39,119

and that will be the last raised hand

1051

00:40:42,710 --> 00:40:40,800

question for today

1052

00:40:46,309 --> 00:40:42,720

so my question was triggered by the

1053

00:40:47,829 --> 00:40:46,319

mention of conspiracy theory uh that you

1054

00:40:49,349 --> 00:40:47,839

know there is this sort of wild

1055

00:40:52,390 --> 00:40:49,359

conjecture that there might be a

1056

00:40:55,270 --> 00:40:52,400

conspiracy theory by people who

1057

00:40:58,069 --> 00:40:55,280

proponents of psy so we could turn turn

1058

00:41:00,630 --> 00:40:58,079

this around and say that

1059

00:41:03,510 --> 00:41:00,640

it could be that psy is not accepted in

1060

00:41:06,390 --> 00:41:03,520

spite of the voluminous evidence because

1061

00:41:09,030 --> 00:41:06,400

there is a conspiracy theory against psy

1062

00:41:12,069 --> 00:41:09,040

i'm not suggesting there is but we could

1063

00:41:13,750 --> 00:41:12,079

turn the tables around because there are

1064

00:41:18,790 --> 00:41:13,760

probably

1065

00:41:20,870 --> 00:41:18,800

dissonance and resistance maybe

1066

00:41:22,150 --> 00:41:20,880

unconscious resistance because it seems

1067

00:41:24,230 --> 00:41:22,160

to me that

1068

00:41:25,990 --> 00:41:24,240

conventional religion

1069

00:41:28,870 --> 00:41:26,000

might be threatened they would probably

1070

00:41:32,550 --> 00:41:28,880

have a lot to lose if it turned out that

1071

00:41:34,710 --> 00:41:32,560

psy is true because various claims about

1072

00:41:35,990 --> 00:41:34,720

prayers and miracles the way they're

1073

00:41:38,230 --> 00:41:36,000

explained

1074

00:41:41,349 --> 00:41:38,240

traditionally in conventional religion

1075

00:41:43,750 --> 00:41:41,359

would have to be modified so uh so so

1076

00:41:45,589 --> 00:41:43,760

one is just sort of a sarcastic kind of

1077

00:41:48,150 --> 00:41:45,599

comment okay you know if they're saying

1078

00:41:50,150 --> 00:41:48,160

that we have a cons doing a conspiracy

1079

00:41:52,150 --> 00:41:50,160

theory maybe somebody is doing it

1080

00:41:53,990 --> 00:41:52,160

against the psy folks so that's just a

1081

00:41:56,790 --> 00:41:54,000

sort of facetious comment but on a

1082

00:41:59,270 --> 00:41:56,800

serious note i was wondering if some

1083

00:42:01,349 --> 00:41:59,280

someone has written a paper or compiled

1084

00:42:03,270 --> 00:42:01,359

some thoughts about

1085

00:42:05,430 --> 00:42:03,280

who if psy

1086

00:42:08,069 --> 00:42:05,440

was well it's already proved in my

1087

00:42:09,510 --> 00:42:08,079

opinion and yours also but if it was

1088

00:42:12,710 --> 00:42:09,520

accepted

1089

00:42:15,670 --> 00:42:12,720

widely why in a wider sense by the

1090

00:42:18,870 --> 00:42:15,680

public at large who are the parties that

1091

00:42:21,510 --> 00:42:18,880

would stand to lose either materially or

1092

00:42:24,069 --> 00:42:21,520

in terms of prestige or whatever so we

1093

00:42:26,470 --> 00:42:24,079

would just conjecture that perhaps those

1094

00:42:28,790 --> 00:42:26,480

are the parties who are resisting it

1095

00:42:30,870 --> 00:42:28,800

most so that's my question

1096

00:42:32,870 --> 00:42:30,880

yeah um well that's a very interesting

1097

00:42:34,790 --> 00:42:32,880

question um i mean

1098

00:42:37,270 --> 00:42:34,800

right off the bat in my

1099

00:42:39,190 --> 00:42:37,280

opinion i think that uh

1100

00:42:41,190 --> 00:42:39,200

you know there are a lot of scientists

1101

00:42:43,910 --> 00:42:41,200

uh let's say

1102

00:42:47,270 --> 00:42:43,920

many of whom are very prestigious um

1103

00:42:49,270 --> 00:42:47,280

have uh kind of uh staked a lot on the

1104

00:42:51,109 --> 00:42:49,280

fact that psy is kind of nonsense so you

1105

00:42:52,630 --> 00:42:51,119

know they maybe they would be

1106

00:42:55,109 --> 00:42:52,640

viewed as being sort of on the wrong

1107

00:42:57,349 --> 00:42:55,119

side of history or maybe

1108

00:42:59,910 --> 00:42:57,359

um you know just sort of maybe their

1109

00:43:01,750 --> 00:42:59,920

prestige would lose um

1110

00:43:05,190 --> 00:43:01,760

i i think this is a very interesting

1111

00:43:07,910 --> 00:43:05,200

question um in the sense that um it does

1112

00:43:10,069 --> 00:43:07,920

seem like there's kind of a resistance

1113

00:43:12,069 --> 00:43:10,079

that is um

1114

00:43:14,630 --> 00:43:12,079

that seems to be beyond what you would

1115

00:43:17,190 --> 00:43:14,640

normally think of is rational in a way

1116

00:43:19,109 --> 00:43:17,200

that's that's i mean you often when you

1117

00:43:21,190 --> 00:43:19,119

you you you see some of the arguments

1118

00:43:23,109 --> 00:43:21,200

made by skeptics you feel like they're

1119

00:43:24,950 --> 00:43:23,119

it's almost like they're willfully

1120

00:43:27,589 --> 00:43:24,960

ignoring

1121

00:43:30,790 --> 00:43:27,599

very important pieces of the data

1122

00:43:34,309 --> 00:43:30,800

and so um i remember uh a little while

1123

00:43:37,430 --> 00:43:34,319

ago i read uh stephen pinker's um

1124

00:43:40,309 --> 00:43:37,440

recent book um it's called forgot what

1125

00:43:42,150 --> 00:43:40,319

it's called enlightenment and he he

1126

00:43:44,230 --> 00:43:42,160

actually sort of mentions its science

1127

00:43:46,150 --> 00:43:44,240

passing basically just says well you

1128

00:43:48,550 --> 00:43:46,160

know this stuff is weird and that's all

1129

00:43:50,470 --> 00:43:48,560

he says he doesn't engage with the data

1130

00:43:52,230 --> 00:43:50,480

doesn't really even you know kind of

1131

00:43:54,550 --> 00:43:52,240

bring up any arguments at all and here's

1132

00:43:55,430 --> 00:43:54,560

a he's written a huge book that's all

1133

00:43:57,030 --> 00:43:55,440

about

1134

00:43:59,910 --> 00:43:57,040

the the importance of taking science

1135

00:44:01,109 --> 00:43:59,920

seriously so it's a very sort of like

1136

00:44:03,349 --> 00:44:01,119

strange

1137

00:44:04,950 --> 00:44:03,359

kind of thing and in my own theory if

1138

00:44:07,589 --> 00:44:04,960

you will it's not really a conspiracy

1139

00:44:09,349 --> 00:44:07,599

theory but i think the way that a lot of

1140

00:44:11,190 --> 00:44:09,359

academia and

1141

00:44:12,870 --> 00:44:11,200

prestigious universities work that it's

1142

00:44:16,790 --> 00:44:12,880

very important that they maintain their

1143

00:44:18,950 --> 00:44:16,800

brand okay so harvard um princeton all

1144

00:44:20,550 --> 00:44:18,960

these very prestigious schools a lot of

1145

00:44:23,430 --> 00:44:20,560

what i mean if you think if you look at

1146

00:44:25,030 --> 00:44:23,440

the tuition and the and the grants that

1147

00:44:27,430 --> 00:44:25,040

they sort of bring in

1148

00:44:29,910 --> 00:44:27,440

huge sums of money and that and and that

1149

00:44:33,109 --> 00:44:29,920

in large part is due to the main the

1150

00:44:34,630 --> 00:44:33,119

ability to maintain a kind of brand that

1151

00:44:35,510 --> 00:44:34,640

science is real

1152

00:44:37,990 --> 00:44:35,520

and

1153

00:44:40,069 --> 00:44:38,000

as a product of history probably more

1154

00:44:41,510 --> 00:44:40,079

than anything else psy just simply has

1155

00:44:44,150 --> 00:44:41,520

the wrong brand

1156

00:44:46,309 --> 00:44:44,160

it's associated with um you know maybe

1157

00:44:48,790 --> 00:44:46,319

the supernatural in its history and

1158

00:44:51,910 --> 00:44:48,800

perhaps to some degree even to the

1159

00:44:55,190 --> 00:44:51,920

present day so that means that any

1160

00:44:58,710 --> 00:44:55,200

individual university that sanctions um

1161

00:45:01,109 --> 00:44:58,720

research into psy has a tendency for it

1162

00:45:02,710 --> 00:45:01,119

to to be looked at for the other

1163

00:45:04,630 --> 00:45:02,720

various kinds of

1164

00:45:07,430 --> 00:45:04,640

of of of uh

1165

00:45:09,430 --> 00:45:07,440

of of institutions is having is sort of

1166

00:45:11,030 --> 00:45:09,440

maybe damaging their brand or that is

1167

00:45:13,030 --> 00:45:11,040

they i think that they would they would

1168

00:45:15,030 --> 00:45:13,040

see themselves as risking damaging their

1169

00:45:17,030 --> 00:45:15,040

brand and remember their brand

1170

00:45:19,030 --> 00:45:17,040

is crucial in

1171

00:45:20,390 --> 00:45:19,040

in terms of getting tuition and grant

1172

00:45:22,309 --> 00:45:20,400

money and

1173

00:45:24,950 --> 00:45:22,319

and you know really really really very

1174

00:45:26,470 --> 00:45:24,960

large sums of money so i think that this

1175

00:45:28,870 --> 00:45:26,480

sort of like problem that the

1176

00:45:30,950 --> 00:45:28,880

universities have they have to i mean

1177

00:45:34,309 --> 00:45:30,960

certain types of research of course are

1178

00:45:36,390 --> 00:45:34,319

very important but questionable research

1179

00:45:37,270 --> 00:45:36,400

there's a real risk so i think in my

1180

00:45:38,950 --> 00:45:37,280

view

1181

00:45:42,230 --> 00:45:38,960

i wouldn't characterize it as a

1182

00:45:43,990 --> 00:45:42,240

conspiracy theory more of a kind of way

1183

00:45:45,750 --> 00:45:44,000

that um

1184

00:45:47,430 --> 00:45:45,760

that the way that

1185

00:45:49,589 --> 00:45:47,440

unfortunately the university

1186

00:45:53,190 --> 00:45:49,599

universities have a tendency to depend

1187

00:45:54,950 --> 00:45:53,200

too strongly on a kind of vision of

1188

00:45:57,109 --> 00:45:54,960

science and what science is and what

1189

00:45:59,589 --> 00:45:57,119

it's not being done and if the world

1190

00:46:00,390 --> 00:45:59,599

doesn't really fit into those boxes

1191

00:46:02,230 --> 00:46:00,400

um

1192

00:46:05,030 --> 00:46:02,240

then you know it's it's there's there's

1193

00:46:07,030 --> 00:46:05,040

a lot of resistance um so anyway that's

1194

00:46:09,109 --> 00:46:07,040

that's my own conjecture

1195

00:46:11,030 --> 00:46:09,119

um you know i certainly welcome other

1196

00:46:13,430 --> 00:46:11,040

people's opinions as well

1197

00:46:15,190 --> 00:46:13,440

but might just add just a couple of

1198

00:46:17,670 --> 00:46:15,200

garments so thank you very much for your

1199

00:46:19,589 --> 00:46:17,680

answer i would just want to add and i

1200

00:46:22,470 --> 00:46:19,599

don't know if you'll agree or not but in

1201

00:46:24,230 --> 00:46:22,480

addition to everything you said i

1202

00:46:25,829 --> 00:46:24,240

so that you know they have this box in

1203

00:46:28,550 --> 00:46:25,839

which they fit science and the world and

1204

00:46:30,870 --> 00:46:28,560

so forth i think in this particular case

1205

00:46:33,349 --> 00:46:30,880

it also threatens the box into which

1206

00:46:35,109 --> 00:46:33,359

they fit religion so they put religion

1207

00:46:37,109 --> 00:46:35,119

in a box where it's you know it's just

1208

00:46:39,589 --> 00:46:37,119

in your mind and there's a god in your

1209

00:46:42,430 --> 00:46:39,599

mind and you talk to the god but this

1210

00:46:45,990 --> 00:46:42,440

would tend to give a different

1211

00:46:47,910 --> 00:46:46,000

explanation for to spirituality so that

1212

00:46:50,550 --> 00:46:47,920

even the box in which they want to keep

1213

00:46:52,870 --> 00:46:50,560

religion is threatened and the people

1214

00:46:55,670 --> 00:46:52,880

who religious people you know like some

1215

00:46:58,630 --> 00:46:55,680

huge big catholic university or whatever

1216

00:47:01,670 --> 00:46:58,640

would not want to invest in this kind of

1217

00:47:03,910 --> 00:47:01,680

research because again it shakes where

1218

00:47:06,710 --> 00:47:03,920

they want religion to be as opposed to

1219

00:47:08,230 --> 00:47:06,720

this newer view so anyway just

1220

00:47:10,630 --> 00:47:08,240

yeah you know

1221

00:47:12,390 --> 00:47:10,640

i've heard other parapsychologists who

1222

00:47:14,309 --> 00:47:12,400

who talk about this problem and they

1223

00:47:16,630 --> 00:47:14,319

probably would would maybe agree with

1224

00:47:17,349 --> 00:47:16,640

you more than me i think they they feel

1225

00:47:19,430 --> 00:47:17,359

that

1226  
00:47:20,390 --> 00:47:19,440  
this sort of research does in some ways

1227  
00:47:22,470 --> 00:47:20,400  
threaten

1228  
00:47:25,109 --> 00:47:22,480  
people with strong religious convictions

1229  
00:47:27,270 --> 00:47:25,119  
and some of those are large donors or

1230  
00:47:29,589 --> 00:47:27,280  
they're very influential politically you

1231  
00:47:32,630 --> 00:47:29,599  
know so for i think that there are some

1232  
00:47:34,710 --> 00:47:32,640  
say uh um side researchers who believe

1233  
00:47:35,750 --> 00:47:34,720  
that the government funding of remote

1234  
00:47:37,990 --> 00:47:35,760  
viewing

1235  
00:47:39,829 --> 00:47:38,000  
was in some ways cut off because some of

1236  
00:47:42,309 --> 00:47:39,839  
the people in the military were

1237  
00:47:44,230 --> 00:47:42,319  
sensitive to were actually kind of had

1238  
00:47:47,430 --> 00:47:44,240

certain religious beliefs or they were

1239

00:47:48,870 --> 00:47:47,440

sensitive to senators who had um strong

1240

00:47:50,150 --> 00:47:48,880

religious beliefs so i think that the

1241

00:47:53,750 --> 00:47:50,160

religion

1242

00:47:55,670 --> 00:47:53,760

aspect of it is also a major factor um i

1243

00:47:57,829 --> 00:47:55,680

tend to lean more toward the other but i

1244

00:48:00,230 --> 00:47:57,839

but other i think parapsychologists

1245

00:48:01,990 --> 00:48:00,240

probably would say maybe the religion

1246

00:48:04,549 --> 00:48:02,000

plays that plays a very strong if not

1247

00:48:06,549 --> 00:48:04,559

the strongest role

1248

00:48:08,390 --> 00:48:06,559

okay uh thank you for your your

1249

00:48:10,710 --> 00:48:08,400

questions and comments newsie um we're

1250

00:48:12,390 --> 00:48:10,720

gonna end with um a question from york i

1251  
00:48:13,910 --> 00:48:12,400  
think this is a good closer uh and the

1252  
00:48:15,750 --> 00:48:13,920  
question is does this talk have a

1253  
00:48:17,589 --> 00:48:15,760  
bibliography or reference list that

1254  
00:48:19,670 --> 00:48:17,599  
could be sent out by mail to interested

1255  
00:48:21,910 --> 00:48:19,680  
parties

1256  
00:48:24,069 --> 00:48:21,920  
i don't have it right now but i have but

1257  
00:48:26,790 --> 00:48:24,079  
i am working on a paper and so i'll be

1258  
00:48:29,829 --> 00:48:26,800  
happy to send you um the paper version

1259  
00:48:31,510 --> 00:48:29,839  
or just the uh the list of uh references

1260  
00:48:33,270 --> 00:48:31,520  
when that's done and i should i should

1261  
00:48:35,030 --> 00:48:33,280  
have something like that done in about

1262  
00:48:37,430 --> 00:48:35,040  
you know a week or two so it won't be

1263  
00:48:39,270 --> 00:48:37,440

very long so i'd be happy to send

1264

00:48:41,589 --> 00:48:39,280

um either the paper or just the