

Episode **627**

THE
**SKEPTIC
ZONE**
PODCAST

www.skepticzone.tv

18 October 2020

Heidi Robertson
speaks to author
Brian Deer - Part #3

The Book of Tim

Logical Fallacies
With Michelle Bijkersma
"Weasel Words"

TROVE
E.S.P.



1
00:00:08,470 --> 00:00:06,630
[Music]

2
00:00:11,270 --> 00:00:08,480
welcome to the skeptic zone

3
00:00:16,840 --> 00:00:11,280
the podcast from australia for science

4
00:00:23,429 --> 00:00:16,850
and reason

5
00:00:25,830 --> 00:00:23,439
[Music]

6
00:00:27,750 --> 00:00:25,840
yes it's the skeptics on podcast episode

7
00:00:31,109 --> 00:00:27,760
number 627

8
00:00:31,830 --> 00:00:31,119
for the 18th of october 2020 richard

9
00:00:34,870 --> 00:00:31,840
saunders

10
00:00:37,830 --> 00:00:34,880
coming to you from sydney australia

11
00:00:40,630 --> 00:00:37,840
hmm a little bit overcast a bit of rain

12
00:00:42,630 --> 00:00:40,640
last night but not a bad sort of a day

13
00:00:45,110 --> 00:00:42,640

coming up on this week's episode we have

14

00:00:47,270 --> 00:00:45,120

part three of heidi robertson's

15

00:00:48,950 --> 00:00:47,280

interview with brian dear

16

00:00:52,310 --> 00:00:48,960

brian dear the man who wrote the book

17

00:00:55,430 --> 00:00:52,320

the doctor who fooled the world

18

00:00:56,150 --> 00:00:55,440

about andrew wakefield and the mmr

19

00:00:59,430 --> 00:00:56,160

vaccine

20

00:01:01,430 --> 00:00:59,440

slash autism controversy which really

21

00:01:04,310 --> 00:01:01,440

wasn't a controversy in the

22

00:01:05,750 --> 00:01:04,320

end and amongst other things we find out

23

00:01:08,950 --> 00:01:05,760

the link to uh

24

00:01:09,990 --> 00:01:08,960

I macpherson the australian model and

25

00:01:11,910 --> 00:01:10,000

following that it's

26

00:01:13,510 --> 00:01:11,920

logical fallacies with michelle

27

00:01:15,830 --> 00:01:13,520

bickersma

28

00:01:16,870 --> 00:01:15,840

and this week michelle looks at weasel

29

00:01:18,630 --> 00:01:16,880

words

30

00:01:20,149 --> 00:01:18,640

that might be interesting no that's not

31

00:01:22,149 --> 00:01:20,159

a weasel what's a good example of a

32

00:01:24,070 --> 00:01:22,159

weasel word find out

33

00:01:25,429 --> 00:01:24,080

find out with michelle's segment later

34

00:01:27,429 --> 00:01:25,439

on in the show

35

00:01:28,870 --> 00:01:27,439

any politicians listening can get some

36

00:01:30,789 --> 00:01:28,880

tips and then we have another

37

00:01:33,670 --> 00:01:30,799

installment of the book of tim

38

00:01:34,630 --> 00:01:33,680

with tim menden and this week tim will

39

00:01:38,950 --> 00:01:34,640

be looking at

40

00:01:41,590 --> 00:01:38,960

wishful thinking risky business gambling

41

00:01:44,149 --> 00:01:41,600

and more then to round off the show we

42

00:01:46,630 --> 00:01:44,159

continue in our series looking into the

43

00:01:47,910 --> 00:01:46,640

archive of australian newspapers and

44

00:01:51,670 --> 00:01:47,920

reports so on

45

00:01:54,230 --> 00:01:51,680

magazines a dive into the trove we go

46

00:01:55,870 --> 00:01:54,240

and uh look for references over the

47

00:01:59,429 --> 00:01:55,880

decades to the term

48

00:02:01,270 --> 00:01:59,439

esp yes it's an old-fashioned term you

49

00:02:04,389 --> 00:02:01,280

really don't hear it anymore

50

00:02:06,630 --> 00:02:04,399

extra sensory perception

51
00:02:08,550 --> 00:02:06,640
now before we really start the show it's

52
00:02:10,070 --> 00:02:08,560
less than a week

53
00:02:12,790 --> 00:02:10,080
and by the time you're hearing this it

54
00:02:14,470 --> 00:02:12,800
might be very much less than a week

55
00:02:17,190 --> 00:02:14,480
until the Australian Skeptics National

56
00:02:19,270 --> 00:02:17,200
Convention Scepticon 2020.

57
00:02:20,550 --> 00:02:19,280
we've been telling you lots about it in

58
00:02:22,949 --> 00:02:20,560
the lead up

59
00:02:25,190 --> 00:02:22,959
with mentioning some of the fabulous

60
00:02:28,070 --> 00:02:25,200
international and local

61
00:02:28,869 --> 00:02:28,080
speakers lined up and no matter where

62
00:02:31,190 --> 00:02:28,879
you are

63
00:02:34,949 --> 00:02:31,200

around the world you can join us this

64

00:02:36,790 --> 00:02:34,959
year for skeptic on 2020.

65

00:02:41,270 --> 00:02:36,800
if you haven't got your tickets yet

66

00:02:46,229 --> 00:02:41,280
now's the time go to skepticon.org

67

00:02:48,150 --> 00:02:46,239
skepticon.org oig.au

68

00:02:49,670 --> 00:02:48,160
or you can google [australian skeptics](http://australian.skeptics.org) or

69

00:02:50,710 --> 00:02:49,680
you'll find it easily enough on the show

70

00:02:53,350 --> 00:02:50,720
notes

71

00:02:57,990 --> 00:02:53,360
for the last several months in fact

72

00:02:59,750 --> 00:02:58,000
there is a link to skepticon.org.au

73

00:03:01,910 --> 00:02:59,760
i'm very much looking forward to talks

74

00:03:04,390 --> 00:03:01,920
by michael marshall and alice howarth

75

00:03:04,949 --> 00:03:04,400
and people like dr karl kuzelnisky and

76

00:03:07,509 --> 00:03:04,959

the list

77

00:03:09,589 --> 00:03:07,519

just goes on and i'll be playing my part

78

00:03:12,630 --> 00:03:09,599

i'm announcing

79

00:03:15,350 --> 00:03:12,640

the bench spoon award this year

80

00:03:16,630 --> 00:03:15,360

and my colleagues tim mendenham and

81

00:03:18,309 --> 00:03:16,640

jessica singer

82

00:03:21,270 --> 00:03:18,319

here in sydney will be announcing some

83

00:03:22,309 --> 00:03:21,280

of our other awards like the media award

84

00:03:23,830 --> 00:03:22,319

or the

85

00:03:26,550 --> 00:03:23,840

uh the skeptic of the year and things

86

00:03:28,070 --> 00:03:26,560

like that it'll be so nice to take part

87

00:03:30,309 --> 00:03:28,080

in a skeptical event

88

00:03:31,270 --> 00:03:30,319

again i've been missing that a lot this

89

00:03:33,910 --> 00:03:31,280

year

90

00:03:35,350 --> 00:03:33,920

i think honestly i think the last uh

91

00:03:38,710 --> 00:03:35,360

event i

92

00:03:39,589 --> 00:03:38,720

i was at and gave a talk was a skept

93

00:03:43,670 --> 00:03:39,599

camp

94

00:03:45,670 --> 00:03:43,680

in victoria at the beautiful aries inlet

95

00:03:47,830 --> 00:03:45,680

and what a wonderful time i had what a

96

00:03:48,949 --> 00:03:47,840

what a really nice couple of days that

97

00:03:51,509 --> 00:03:48,959

was folks

98

00:03:52,949 --> 00:03:51,519

i stayed in anglesey with my friend

99

00:03:56,390 --> 00:03:52,959

michelle biggesmar

100

00:03:58,470 --> 00:03:56,400

and our colleague steve roberts

101
00:03:59,589 --> 00:03:58,480
the ufo expert was there too and some

102
00:04:01,910 --> 00:03:59,599
other people

103
00:04:04,470 --> 00:04:01,920
we had japanese pancakes we had some

104
00:04:07,030 --> 00:04:04,480
nice wine we looked at the stars

105
00:04:09,190 --> 00:04:07,040
yeah i do miss all that lovely social

106
00:04:11,589 --> 00:04:09,200
aspect of being a skeptic

107
00:04:12,949 --> 00:04:11,599
well i'm sure those days will return but

108
00:04:15,750 --> 00:04:12,959
at least we can enjoy

109
00:04:17,909 --> 00:04:15,760
being together online but now it's time

110
00:04:19,830 --> 00:04:17,919
for me to run downstairs tiptoe over the

111
00:04:21,349 --> 00:04:19,840
cats in fact i won't do that because i

112
00:04:25,030 --> 00:04:21,359
must admit there's one right

113
00:04:28,469 --> 00:04:25,040

right over there aren't you oh yes

114

00:04:31,189 --> 00:04:28,479

what do you want who who's she's had her

115

00:04:33,110 --> 00:04:31,199

breakfast that's moored hello maude

116

00:04:34,550 --> 00:04:33,120

yeah she's a bit she's a bit confused

117

00:04:35,749 --> 00:04:34,560

because i've done a lot of vacuuming

118

00:04:37,749 --> 00:04:35,759

cleaning lately

119

00:04:38,950 --> 00:04:37,759

and suddenly things are not where

120

00:04:40,790 --> 00:04:38,960

they're supposed to be

121

00:04:43,670 --> 00:04:40,800

well i'm gonna run downstairs anyway get

122

00:04:46,790 --> 00:04:43,680

myself a nice fresh cup of coffee

123

00:04:49,030 --> 00:04:46,800

and some vegemite toast as ever

124

00:04:49,909 --> 00:04:49,040

the old favorite while i do that i hope

125

00:04:59,110 --> 00:04:49,919

you enjoy

126
00:04:59,120 --> 00:05:10,950
[Applause]

127
00:05:15,760 --> 00:05:14,230
it's the raw skeptic report with heidi

128
00:05:21,909 --> 00:05:15,770
robinson

129
00:05:25,510 --> 00:05:21,919
[Music]

130
00:05:27,909 --> 00:05:25,520
hello everyone today i present part

131
00:05:29,029 --> 00:05:27,919
three of my three-part interview with

132
00:05:31,510 --> 00:05:29,039
brian dear

133
00:05:33,029 --> 00:05:31,520
the man who wrote the book the doctor

134
00:05:35,990 --> 00:05:33,039
who fooled the world

135
00:05:36,870 --> 00:05:36,000
about mr andrew wakefield and the

136
00:05:40,790 --> 00:05:36,880
so-called

137
00:05:43,510 --> 00:05:40,800
link between vaccinations and autism

138
00:05:46,230 --> 00:05:43,520

today brian tells us about the impact of

139

00:05:48,070 --> 00:05:46,240

wakefield's work on vaccination rates

140

00:05:49,670 --> 00:05:48,080

the other authors involved in the

141

00:05:53,130 --> 00:05:49,680

original paper

142

00:05:57,990 --> 00:05:53,140

and the link to supermodel I macpherson

143

00:06:03,189 --> 00:06:00,309

mr brian dear welcome to the skeptic

144

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

zone hello heidi good to be here

145

00:06:07,350 --> 00:06:06,479

what was the impact of the landsat paper

146

00:06:10,870 --> 00:06:07,360

on

147

00:06:14,070 --> 00:06:10,880

even

148

00:06:15,830 --> 00:06:14,080

abroad oh in the uk the vaccination

149

00:06:16,150 --> 00:06:15,840

rates dropped like a stone wakeful had

150

00:06:17,990 --> 00:06:16,160

us

151

00:06:19,029 --> 00:06:18,000

an earlier paper slightly earlier than

152

00:06:21,590 --> 00:06:19,039

the one we'd be talking about from

153

00:06:23,909 --> 00:06:21,600

february 1990 i had one in 1995

154

00:06:26,070 --> 00:06:23,919

where he tried to pin bowel disease on

155

00:06:27,510 --> 00:06:26,080

the mmr vaccine and from that point and

156

00:06:30,390 --> 00:06:27,520

then accelerating with the

157

00:06:30,950 --> 00:06:30,400

1998 paper and then other stuff vaccine

158

00:06:33,749 --> 00:06:30,960

rates

159

00:06:34,469 --> 00:06:33,759

drop like a brick down a well as parents

160

00:06:37,189 --> 00:06:34,479

become

161

00:06:38,950 --> 00:06:37,199

became more and more concerned and by

162

00:06:40,550 --> 00:06:38,960

the time i came to this story because i

163

00:06:41,110 --> 00:06:40,560

didn't begin my investigation until the

164

00:06:45,189 --> 00:06:41,120

autumn

165

00:06:46,870 --> 00:06:45,199

of 2003 by that time vaccination rates

166

00:06:48,710 --> 00:06:46,880

were down in the 70s in

167

00:06:51,110 --> 00:06:48,720

in much of the country we were starting

168

00:06:53,430 --> 00:06:51,120

to see the first outbreaks of measles

169

00:06:54,710 --> 00:06:53,440

parents were agonizing over whether to

170

00:06:56,230 --> 00:06:54,720

vaccinate their children

171

00:06:58,309 --> 00:06:56,240

parents of children with developmental

172

00:07:00,790 --> 00:06:58,319

issues were blaming themselves suffering

173

00:07:02,070 --> 00:07:00,800

the agony of guilt of believing it was

174

00:07:03,670 --> 00:07:02,080

their own fault for vaccinating their

175

00:07:05,749 --> 00:07:03,680

child that their child had autism

176

00:07:07,430 --> 00:07:05,759

we had all of that and then that rolled

177

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

out from the uk to the rest of the world

178

00:07:09,830 --> 00:07:08,000

so

179

00:07:11,589 --> 00:07:09,840

with what fake foods campaigning and

180

00:07:13,909 --> 00:07:11,599

then he moved to the united states the

181

00:07:17,189 --> 00:07:13,919

that story that was really paid for by

182

00:07:19,830 --> 00:07:17,199

this 100 million us dollar lawsuit

183

00:07:20,469 --> 00:07:19,840

uh all of the work behind that the

184

00:07:22,790 --> 00:07:20,479

parental

185

00:07:25,270 --> 00:07:22,800

anxiety the campaign groups and all that

186

00:07:27,350 --> 00:07:25,280

was then exported to the united states

187

00:07:29,029 --> 00:07:27,360

and set off the chain of events that

188

00:07:31,029 --> 00:07:29,039

leads us to where we are today with the

189

00:07:33,430 --> 00:07:31,039

anti-vaccine movement

190

00:07:34,070 --> 00:07:33,440

yeah yeah and what about the other

191

00:07:36,710 --> 00:07:34,080

authors

192

00:07:38,230 --> 00:07:36,720

on the paper because uh wakefield wasn't

193

00:07:39,189 --> 00:07:38,240

the only author on the paper there were

194

00:07:40,790 --> 00:07:39,199

several others

195

00:07:42,950 --> 00:07:40,800

tell us about the other authors and the

196

00:07:44,550 --> 00:07:42,960

fallout and what happened with them

197

00:07:46,869 --> 00:07:44,560

yeah well obviously what wakefield does

198

00:07:48,869 --> 00:07:46,879

and he's got a pal called big tree in

199

00:07:51,830 --> 00:07:48,879

the states who set himself up as a

200

00:07:55,189 --> 00:07:51,840

autism guru a former tabloid television

201
00:07:57,029 --> 00:07:55,199
um field producer um saying oh look

202
00:07:59,189 --> 00:07:57,039
there were all these other authors

203
00:08:00,150 --> 00:07:59,199
it wasn't just wakefield so me my

204
00:08:03,909 --> 00:08:00,160
colleagues and i

205
00:08:04,309 --> 00:08:03,919
what he done was get a whole bunch of

206
00:08:06,629 --> 00:08:04,319
people

207
00:08:08,150 --> 00:08:06,639
everybody who who well all my well

208
00:08:10,629 --> 00:08:08,160
everybody in the hospital

209
00:08:12,390 --> 00:08:10,639
who'd even pretty much seen one of these

210
00:08:14,950 --> 00:08:12,400
children he put on the paper

211
00:08:17,110 --> 00:08:14,960
there were another 12 authors there were

212
00:08:18,629 --> 00:08:17,120
pathologists there was a neurologist

213
00:08:22,189 --> 00:08:18,639

there was a

214

00:08:24,950 --> 00:08:22,199

pediatric psychiatrist and uh several

215

00:08:25,990 --> 00:08:24,960

gastroenterologists these other authors

216

00:08:29,029 --> 00:08:26,000

actually

217

00:08:30,869 --> 00:08:29,039

didn't satisfy the criteria for

218

00:08:33,269 --> 00:08:30,879

authorship of that paper

219

00:08:35,269 --> 00:08:33,279

because to be accepted as an author of

220

00:08:37,670 --> 00:08:35,279

paper under the standard terms for

221

00:08:39,509 --> 00:08:37,680

biomedical publishing you have to have

222

00:08:40,949 --> 00:08:39,519

an involvement in multiple aspects of

223

00:08:41,670 --> 00:08:40,959

the trial these other these other

224

00:08:43,589 --> 00:08:41,680

authors

225

00:08:45,190 --> 00:08:43,599

some of whom were juniors none of whom

226

00:08:46,870 --> 00:08:45,200

were eminent in any way

227

00:08:48,310 --> 00:08:46,880

one was a professor of pediatric

228

00:08:51,269 --> 00:08:48,320

gastroenterology a very

229

00:08:52,389 --> 00:08:51,279

a very small very small size specialty

230

00:08:54,470 --> 00:08:52,399

not an eminent man

231

00:08:55,670 --> 00:08:54,480

significant within his with his thing

232

00:08:58,790 --> 00:08:55,680

even he

233

00:09:00,150 --> 00:08:58,800

never knew which child was which in the

234

00:09:02,550 --> 00:09:00,160

paper and he said well

235

00:09:03,829 --> 00:09:02,560

the data in this paper were presented to

236

00:09:06,070 --> 00:09:03,839

me by wakefield

237

00:09:07,590 --> 00:09:06,080

in a sort of master chart and then when

238

00:09:09,269 --> 00:09:07,600

he was questioned about this at the

239

00:09:12,230 --> 00:09:09,279

general medical council hearing

240

00:09:12,630 --> 00:09:12,240

he said well i trusted dr wakefield and

241

00:09:14,630 --> 00:09:12,640

that's

242

00:09:16,230 --> 00:09:14,640

true of them all they were just happy to

243

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

have their names on a paper in the

244

00:09:20,070 --> 00:09:17,279

lancet

245

00:09:22,470 --> 00:09:20,080

and um the the the juniors were in no

246

00:09:24,550 --> 00:09:22,480

position to to question it the other

247

00:09:25,829 --> 00:09:24,560

authors were in no position to identify

248

00:09:28,150 --> 00:09:25,839

which child was which

249

00:09:29,430 --> 00:09:28,160

that paper was written by wakefield and

250

00:09:31,350 --> 00:09:29,440

even when other authors

251
00:09:33,430 --> 00:09:31,360
made suggestions when some of them saw

252
00:09:35,269 --> 00:09:33,440
the drafts of the paper

253
00:09:37,110 --> 00:09:35,279
it was up to him whether he took any

254
00:09:39,590 --> 00:09:37,120
notice of what they said so

255
00:09:41,829 --> 00:09:39,600
the the idea that there were all these

256
00:09:44,070 --> 00:09:41,839
other authors that were endorsing what

257
00:09:44,870 --> 00:09:44,080
wakeford said is extremely misleading

258
00:09:47,509 --> 00:09:44,880
and then

259
00:09:49,110 --> 00:09:47,519
after my first story the the authors

260
00:09:50,070 --> 00:09:49,120
came together and retracted the

261
00:09:51,430 --> 00:09:50,080
interpretation

262
00:09:53,110 --> 00:09:51,440
section the inter there's a section of

263
00:09:55,670 --> 00:09:53,120

the paper called the interpretation

264

00:09:57,350 --> 00:09:55,680

and it was within that that they claimed

265

00:09:59,430 --> 00:09:57,360

a potential link a possible link an

266

00:10:00,310 --> 00:09:59,440

association between the mmr vaccine and

267

00:10:02,230 --> 00:10:00,320

autism

268

00:10:04,150 --> 00:10:02,240

and they retracted that in a partial

269

00:10:05,750 --> 00:10:04,160

retraction of the paper and then the

270

00:10:07,350 --> 00:10:05,760

paper was fully retracted

271

00:10:09,430 --> 00:10:07,360

after the general medical council

272

00:10:11,030 --> 00:10:09,440

hearing retracted by the journal who

273

00:10:12,550 --> 00:10:11,040

opposed the general medical council

274

00:10:15,750 --> 00:10:12,560

hearing in the first place

275

00:10:16,150 --> 00:10:15,760

now there's a very uh important aspect

276

00:10:19,990 --> 00:10:16,160

of

277

00:10:23,430 --> 00:10:20,000

this story that uh that we have to cover

278

00:10:25,590 --> 00:10:23,440

and that is that andrew wakefield is now

279

00:10:26,470 --> 00:10:25,600

linked with former supermodel l

280

00:10:29,590 --> 00:10:26,480

macpherson

281

00:10:30,630 --> 00:10:29,600

how on earth did that happen brian well

282

00:10:33,269 --> 00:10:30,640

they met at say

283

00:10:34,870 --> 00:10:33,279

an anti-vaccine conference what she was

284

00:10:36,949 --> 00:10:34,880

doing there i don't know she's big in

285

00:10:39,430 --> 00:10:36,959

the wellness industry i know that and

286

00:10:40,949 --> 00:10:39,440

they are seated together at a table and

287

00:10:42,870 --> 00:10:40,959

obviously he would be tremendously

288

00:10:45,030 --> 00:10:42,880

interested in her because not only

289

00:10:47,110 --> 00:10:45,040

has she been on the front of sports

290

00:10:49,110 --> 00:10:47,120

illustrated i think it was five times

291

00:10:51,190 --> 00:10:49,120

uh but she also was the recently

292

00:10:54,790 --> 00:10:51,200

divorced wife of a billionaire

293

00:10:57,590 --> 00:10:54,800

um so he obviously was happy to see her

294

00:10:59,509 --> 00:10:57,600

and she she bought in to all this stuff

295

00:11:01,590 --> 00:10:59,519

about how he'd been persecuted and none

296

00:11:02,870 --> 00:11:01,600

of it's true it's all a pack of lies and

297

00:11:04,870 --> 00:11:02,880

he was an innocent man

298

00:11:06,550 --> 00:11:04,880

and he'd given his life for the sake of

299

00:11:09,110 --> 00:11:06,560

the children and all that stuff

300

00:11:10,790 --> 00:11:09,120

she bought into that but as i understand

301

00:11:12,550 --> 00:11:10,800

it i mean i spoke to somebody

302

00:11:14,470 --> 00:11:12,560

one of his business associates just a

303

00:11:16,069 --> 00:11:14,480

few months ago who told me that the

304

00:11:18,870 --> 00:11:16,079

relationship with um

305

00:11:20,710 --> 00:11:18,880

I macpherson was really in some sense

306

00:11:22,470 --> 00:11:20,720

possibly on the back burner now

307

00:11:24,150 --> 00:11:22,480

she's made an announcement saying she's

308

00:11:26,310 --> 00:11:24,160

not engaged to him after there's been

309

00:11:28,949 --> 00:11:26,320

speculation in the press that they were

310

00:11:29,910 --> 00:11:28,959

engaged so it doesn't look as though

311

00:11:32,550 --> 00:11:29,920

it's um

312

00:11:33,350 --> 00:11:32,560

it's quite as um solid as people are

313

00:11:35,829 --> 00:11:33,360

making out

314

00:11:36,470 --> 00:11:35,839

but i just imagine it would be it would

315

00:11:39,350 --> 00:11:36,480

be

316

00:11:39,750 --> 00:11:39,360

a wonderful scene to witness of her and

317

00:11:42,230 --> 00:11:39,760

him

318

00:11:44,069 --> 00:11:42,240

sitting by the swimming pool in miami at

319

00:11:46,550 --> 00:11:44,079

one of her homes in miami

320

00:11:48,550 --> 00:11:46,560

and her saying reading my book the

321

00:11:50,230 --> 00:11:48,560

doctor who fooled the world which anyone

322

00:11:52,310 --> 00:11:50,240

can get from um

323

00:11:53,350 --> 00:11:52,320

from amazon's the easiest way to get it

324

00:11:55,509 --> 00:11:53,360

is from amazon

325

00:11:57,110 --> 00:11:55,519

or from ask at your local bookshop and

326

00:11:58,550 --> 00:11:57,120

get it from amazon would be even better

327

00:12:01,269 --> 00:11:58,560

because then the bookshop might

328

00:12:01,990 --> 00:12:01,279

get more in stock but so she's sitting

329

00:12:04,310 --> 00:12:02,000

by the pool

330

00:12:06,150 --> 00:12:04,320

reading the doctor who fooled the world

331

00:12:09,190 --> 00:12:06,160

and she says well

332

00:12:11,910 --> 00:12:09,200

andy you said to me blah blah blah blah

333

00:12:13,910 --> 00:12:11,920

and it says here blah blah blah blah and

334

00:12:15,030 --> 00:12:13,920

he says it's all lies it's all lies all

335

00:12:18,710 --> 00:12:15,040

the fabrication

336

00:12:20,710 --> 00:12:18,720

and uh she says well um that k

337

00:12:22,150 --> 00:12:20,720

is see you're saying it's all it's all

338

00:12:23,509 --> 00:12:22,160

this is malicious liable and he'll say

339

00:12:24,790 --> 00:12:23,519

yes it's malicious libel

340

00:12:26,870 --> 00:12:24,800

and she'll probably say well you need to

341

00:12:30,230 --> 00:12:26,880

go and see see my lawyer

342

00:12:33,350 --> 00:12:30,240

and um and uh indeed he's he's already

343

00:12:35,269 --> 00:12:33,360

sort of raising the specter of um of

344

00:12:35,829 --> 00:12:35,279

litigation over my book but all i can

345

00:12:37,590 --> 00:12:35,839

say is i

346

00:12:39,110 --> 00:12:37,600

i don't want litigation nobody in their

347

00:12:40,150 --> 00:12:39,120

right mind wants to spend their time in

348

00:12:43,030 --> 00:12:40,160

lawsuits but

349

00:12:44,310 --> 00:12:43,040

if he sues he'll lose yeah absolutely

350

00:12:47,030 --> 00:12:44,320

you've got everything

351
00:12:49,110 --> 00:12:47,040
well documented and and backed up and

352
00:12:51,509 --> 00:12:49,120
referenced in the book now

353
00:12:52,230 --> 00:12:51,519
so you mentioned people can get your

354
00:12:54,790 --> 00:12:52,240
book on

355
00:12:56,069 --> 00:12:54,800
amazon or i guess in every good

356
00:12:57,910 --> 00:12:56,079
bookstore

357
00:12:59,110 --> 00:12:57,920
yep amazon's probably the easiest way

358
00:13:01,350 --> 00:12:59,120
much of australia but

359
00:13:02,790 --> 00:13:01,360
um save you a bit of driving and the

360
00:13:04,389 --> 00:13:02,800
lockdown issues but

361
00:13:06,550 --> 00:13:04,399
yes it's out there and it's in the

362
00:13:08,550 --> 00:13:06,560
bookshops and um

363
00:13:10,389 --> 00:13:08,560

it's now actually just gone on sale in

364

00:13:12,389 --> 00:13:10,399

north america so it's um

365

00:13:13,670 --> 00:13:12,399

it's now getting a bit of publicity it's

366

00:13:15,670 --> 00:13:13,680

had a lot of press in

367

00:13:17,990 --> 00:13:15,680

the australian press which has been nice

368

00:13:19,590 --> 00:13:18,000

oh it's fantastic and i tell you what i

369

00:13:20,069 --> 00:13:19,600

got my hands on a copy as soon as i

370

00:13:22,790 --> 00:13:20,079

possibly

371

00:13:23,269 --> 00:13:22,800

could and i couldn't put it down it was

372

00:13:27,190 --> 00:13:23,279

um

373

00:13:31,190 --> 00:13:27,200

it was absolutely enthralling disturbing

374

00:13:31,670 --> 00:13:31,200

and uh it had me on the edge of my seat

375

00:13:35,590 --> 00:13:31,680

the whole

376

00:13:39,110 --> 00:13:35,600

much for

377

00:13:40,069 --> 00:13:39,120

both writing the book and for joining us

378

00:13:41,750 --> 00:13:40,079

today

379

00:13:44,069 --> 00:13:41,760

on the skeptic zone we've really enjoyed

380

00:13:48,949 --> 00:13:44,079

having you my pleasure heidi thank you

381

00:13:51,430 --> 00:13:48,959

very much

382

00:13:53,670 --> 00:13:51,440

thank you to briandear for taking time

383

00:13:54,230 --> 00:13:53,680

to appear on the skeptic zone over the

384

00:13:56,949 --> 00:13:54,240

past

385

00:13:58,150 --> 00:13:56,959

three weeks you can find a link to

386

00:14:01,030 --> 00:13:58,160

brian's book

387

00:14:02,069 --> 00:14:01,040

in this week's show notes this has been

388

00:14:04,629 --> 00:14:02,079

heidi robertson

389

00:14:06,310 --> 00:14:04,639

from the northern rivers vaccination

390

00:14:12,790 --> 00:14:06,320

supporters

391

00:14:15,030 --> 00:14:12,800

you can find us at www.nrvs.info

392

00:14:17,750 --> 00:14:15,040

or just look for us on facebook at the

393

00:14:18,550 --> 00:14:17,760

northern rivers vaccination supporters

394

00:14:27,269 --> 00:14:18,560

bye for now

395

00:14:32,790 --> 00:14:30,310

oh hi maynard oh hi heidi

396

00:14:34,310 --> 00:14:32,800

great day in this park yeah if you like

397

00:14:37,670 --> 00:14:34,320

that sort of thing

398

00:14:40,629 --> 00:14:37,680

look over there a yowie

399

00:14:42,150 --> 00:14:40,639

there are no such things as yowie silly

400

00:14:45,750 --> 00:14:42,160

hmm

401
00:14:46,310 --> 00:14:45,760
might be just a dog a big dog i think

402
00:14:49,350 --> 00:14:46,320
it's a

403
00:14:52,870 --> 00:14:49,360
king charles spaniel thing no no

404
00:14:55,189 --> 00:14:52,880
no no no it's a yowie maynard

405
00:14:56,389 --> 00:14:55,199
if it's a choice between it being a dog

406
00:14:59,990 --> 00:14:56,399
or a yowie

407
00:15:02,870 --> 00:15:00,000
no no no it's a yowie yeah we yeah

408
00:15:03,829 --> 00:15:02,880
yeah we argument from authority it's a

409
00:15:07,269 --> 00:15:03,839
yowie

410
00:15:09,350 --> 00:15:07,279
hey you two what are you arguing about

411
00:15:11,269 --> 00:15:09,360
maynard thinks that dog looking thing

412
00:15:14,470 --> 00:15:11,279
over there is a yowie

413
00:15:18,069 --> 00:15:14,480

a yowie or maybe

414

00:15:20,470 --> 00:15:18,079

chewbacca the wookie

415

00:15:21,910 --> 00:15:20,480

i see okay we better look this up in the

416

00:15:26,150 --> 00:15:21,920

skeptics dictionary

417

00:15:28,230 --> 00:15:26,160

online the skeptic's dictionary online

418

00:15:31,030 --> 00:15:28,240

features definitions arguments and

419

00:15:32,790 --> 00:15:31,040

essays on hundreds of strange beliefs

420

00:15:35,749 --> 00:15:32,800

amusing descriptions and

421

00:15:38,550 --> 00:15:35,759

dangerous delusions it also features

422

00:15:41,910 --> 00:15:38,560

dozens of entries on logical fallacies

423

00:15:51,790 --> 00:15:41,920

cognitive biases perception science

424

00:15:56,710 --> 00:15:53,509

www.skpdic.com

425

00:16:00,230 --> 00:15:56,720

right heidi prepared to be

426

00:16:04,230 --> 00:16:00,240

amazed okay yeah we ah

427

00:16:07,030 --> 00:16:04,240

here it is it's under bigfoot it says

428

00:16:07,990 --> 00:16:07,040

most scientists discount the evidence of

429

00:16:09,910 --> 00:16:08,000

bigfoot because

430

00:16:11,189 --> 00:16:09,920

the evidence supporting belief in the

431

00:16:14,230 --> 00:16:11,199

survival of the

432

00:16:17,430 --> 00:16:14,240

prehistoric biped ape-like creature

433

00:16:19,670 --> 00:16:17,440

of such dimensions is scant

434

00:16:25,910 --> 00:16:19,680

you know maybe that is just chewbacca

435

00:16:48,829 --> 00:16:35,940

thank you skeptics dictionary online

436

00:16:48,839 --> 00:16:53,430

do

437

00:16:58,550 --> 00:16:55,020

logical fallacies

438

00:17:01,350 --> 00:16:58,560

[Music]

439

00:17:03,189 --> 00:17:01,360

what are logical fallacies and why is it

440

00:17:05,829 --> 00:17:03,199

important that critical thinkers should

441

00:17:08,150 --> 00:17:05,839

know about them

442

00:17:09,829 --> 00:17:08,160

a logical fallacy is an error we can

443

00:17:11,750 --> 00:17:09,839

make in reasoning

444

00:17:16,150 --> 00:17:11,760

but it usually crops up when we are

445

00:17:20,549 --> 00:17:18,230

some people might even knowingly use

446

00:17:21,429 --> 00:17:20,559

them to try and score cheap points in an

447

00:17:24,710 --> 00:17:21,439

argument

448

00:17:27,270 --> 00:17:24,720

due to intellectual laziness

449

00:17:29,110 --> 00:17:27,280

they are traps we can fall into but if

450

00:17:31,190 --> 00:17:29,120

we know what to look out for

451
00:17:34,750 --> 00:17:31,200
we can spot them when they occur and

452
00:17:36,070 --> 00:17:34,760
stop ourselves from using them

453
00:17:39,830 --> 00:17:36,080
[Music]

454
00:17:42,470 --> 00:17:39,840
this time we'll look at weasel words

455
00:17:43,830 --> 00:17:42,480
these are words or phrases that seem to

456
00:17:45,990 --> 00:17:43,840
point in one direction

457
00:17:48,310 --> 00:17:46,000
or give a certain impression but in

458
00:17:51,669 --> 00:17:48,320
reality are often meaningless

459
00:17:54,710 --> 00:17:51,679
or even misleading it can be

460
00:17:57,590 --> 00:17:54,720
hard bordering on impossible to get

461
00:17:59,590 --> 00:17:57,600
some people to use straightforward

462
00:17:59,990 --> 00:17:59,600
no-nonsense language when putting

463
00:18:03,110 --> 00:18:00,000

forward

464

00:18:05,110 --> 00:18:03,120

their point of view we see this so many

465

00:18:06,230 --> 00:18:05,120

times in the world of politics for

466

00:18:08,870 --> 00:18:06,240

example

467

00:18:10,070 --> 00:18:08,880

when so-called spin doctors advise

468

00:18:13,110 --> 00:18:10,080

politicians

469

00:18:15,990 --> 00:18:13,120

on how to not answer questions

470

00:18:18,390 --> 00:18:16,000

but weasel words also pop up in many

471

00:18:21,270 --> 00:18:18,400

other situations

472

00:18:22,150 --> 00:18:21,280

this amazing and all-natural supplement

473

00:18:24,789 --> 00:18:22,160

has been used

474

00:18:26,870 --> 00:18:24,799

traditionally by thousands of people all

475

00:18:30,070 --> 00:18:26,880

over the world for years

476
00:18:31,830 --> 00:18:30,080
it may assist in reducing the length and

477
00:18:35,590 --> 00:18:31,840
severity of a cold

478
00:18:39,029 --> 00:18:35,600
or the flu here the word traditionally

479
00:18:41,029 --> 00:18:39,039
and the word may are the weasel words

480
00:18:42,470 --> 00:18:41,039
it doesn't matter if something has a

481
00:18:45,669 --> 00:18:42,480
long tradition

482
00:18:48,789 --> 00:18:45,679
it still might not work as claimed

483
00:18:52,070 --> 00:18:48,799
but using the word traditionally does

484
00:18:53,990 --> 00:18:52,080
seem to give the claim merit we've

485
00:18:57,270 --> 00:18:54,000
looked at the logical fallacy of

486
00:19:00,310 --> 00:18:57,280
the appeal to tradition before

487
00:19:02,390 --> 00:19:00,320
also using the word may

488
00:19:04,230 --> 00:19:02,400

gives the impression that the claim is

489

00:19:07,590 --> 00:19:04,240

true or at least

490

00:19:11,190 --> 00:19:07,600

could be true but we could also say

491

00:19:12,230 --> 00:19:11,200

may not if the claim is ever proven to

492

00:19:16,789 --> 00:19:12,240

be true

493

00:19:20,310 --> 00:19:16,799

then the words will assist could be used

494

00:19:21,669 --> 00:19:20,320

you think the earth is really billions

495

00:19:25,270 --> 00:19:21,679

of years old and

496

00:19:27,750 --> 00:19:25,280

evolution is real not so fast

497

00:19:29,750 --> 00:19:27,760

there is a growing body of evidence that

498

00:19:33,190 --> 00:19:29,760

creationism is true

499

00:19:35,750 --> 00:19:33,200

as more and more scientists accept

500

00:19:37,029 --> 00:19:35,760

the account given in the bible in this

501
00:19:40,310 --> 00:19:37,039

example

502
00:19:41,029 --> 00:19:40,320

the terms are growing body and more and

503
00:19:44,390 --> 00:19:41,039

more

504
00:19:45,430 --> 00:19:44,400

are the weasel words they sound grand

505
00:19:48,630 --> 00:19:45,440

enough

506
00:19:50,830 --> 00:19:48,640

but where is the raw data from has there

507
00:19:52,230 --> 00:19:50,840

been a proper survey of the relevant

508
00:19:55,190 --> 00:19:52,240

scientists

509
00:19:56,150 --> 00:19:55,200

are these results published without

510
00:19:59,270 --> 00:19:56,160

providing this

511
00:19:59,909 --> 00:19:59,280

extra information the veracity of the

512
00:20:03,350 --> 00:19:59,919

claim

513
00:20:05,190 --> 00:20:03,360

is in doubt i know i can get passionate

514

00:20:06,390 --> 00:20:05,200

from time to time when expressing my

515

00:20:09,430 --> 00:20:06,400

point of view

516

00:20:12,630 --> 00:20:09,440

i would like to say i'm sorry if

517

00:20:16,630 --> 00:20:12,640

anyone took offense to what i said

518

00:20:19,190 --> 00:20:16,640

this is known as the non-apology apology

519

00:20:21,029 --> 00:20:19,200

it gives the impression that someone is

520

00:20:24,710 --> 00:20:21,039

acknowledging a wrongdoing

521

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

and trying to make amends but in reality

522

00:20:30,710 --> 00:20:27,360

it's putting the focus on others and

523

00:20:33,830 --> 00:20:30,720

somehow making them at fault

524

00:20:34,310 --> 00:20:33,840

if a real apology was offered it would

525

00:20:37,669 --> 00:20:34,320

sound

526

00:20:43,990 --> 00:20:37,679

something like i would like to say

527

00:20:48,390 --> 00:20:47,110

from advertising to answers given by

528

00:20:51,909 --> 00:20:48,400

politicians

529

00:20:54,789 --> 00:20:51,919

to even everyday conversations

530

00:20:55,510 --> 00:20:54,799

weasel words are a way to use language

531

00:20:58,789 --> 00:20:55,520

itself

532

00:21:00,549 --> 00:20:58,799

as a distraction if you are unsure about

533

00:21:03,909 --> 00:21:00,559

what someone is saying

534

00:21:05,350 --> 00:21:03,919

you have the right to ask them to put it

535

00:21:10,810 --> 00:21:05,360

another way

536

00:21:15,750 --> 00:21:13,669

[Music]

537

00:21:16,710 --> 00:21:15,760

knowing a logical fallacy when you hear

538

00:21:19,510 --> 00:21:16,720

one and

539

00:21:21,990 --> 00:21:19,520

even knowing its name is important when

540

00:21:25,430 --> 00:21:22,000

arguing your point of view

541

00:21:27,830 --> 00:21:25,440

however you may come across as arrogant

542

00:21:28,630 --> 00:21:27,840

and not get very far if you call it out

543

00:21:30,950 --> 00:21:28,640

by name

544

00:21:33,029 --> 00:21:30,960

to your opponent when you hear it being

545

00:21:35,590 --> 00:21:33,039

used

546

00:21:36,390 --> 00:21:35,600

if your opponent calls you out for using

547

00:21:38,630 --> 00:21:36,400

one

548

00:21:41,669 --> 00:21:38,640

it's time to stop and think about how

549

00:21:43,830 --> 00:21:41,679

you are making your case

550

00:21:45,029 --> 00:21:43,840

use your knowledge of logical fallacies

551
00:21:47,750 --> 00:21:45,039
wisely

552
00:21:49,029 --> 00:21:47,760
and remember that even if your point of

553
00:21:51,350 --> 00:21:49,039
view is right

554
00:21:52,630 --> 00:21:51,360
and you know all the pitfalls in arguing

555
00:21:55,110 --> 00:21:52,640
your case

556
00:21:56,310 --> 00:21:55,120
it doesn't always mean you'll win on the

557
00:21:59,590 --> 00:21:56,320
day

558
00:22:02,150 --> 00:21:59,600
and as skeptics we must also remember

559
00:22:05,190 --> 00:22:02,160
that we too can be wrong at times

560
00:22:06,950 --> 00:22:05,200
[Music]

561
00:22:20,070 --> 00:22:06,960
i'm michelle bickersma from the vic

562
00:22:28,670 --> 00:22:24,830
you told me that aliens really

563
00:22:33,350 --> 00:22:31,510

[Music]

564

00:22:36,390 --> 00:22:33,360

did you know the european continent is

565

00:22:38,149 --> 00:22:36,400

home to almost 750 million people living

566

00:22:40,149 --> 00:22:38,159

in 50 different countries

567

00:22:42,230 --> 00:22:40,159

belonging to an even greater number of

568

00:22:44,310 --> 00:22:42,240

ethnicities and believe it or not

569

00:22:45,750 --> 00:22:44,320

only a handful of them list english as

570

00:22:46,950 --> 00:22:45,760

the first or at least one of the

571

00:22:48,390 --> 00:22:46,960

official languages

572

00:22:50,230 --> 00:22:48,400

and there's an amazing amount of

573

00:22:51,990 --> 00:22:50,240

skeptical activism going on out there

574

00:22:53,029 --> 00:22:52,000

that you are not aware of because it's

575

00:22:54,950 --> 00:22:53,039

not in english

576
00:22:56,390 --> 00:22:54,960
yeah because you know pseudoscience

577
00:22:58,310 --> 00:22:56,400
quackery and fake news

578
00:22:59,990 --> 00:22:58,320
do not stop at borders they get

579
00:23:01,990 --> 00:23:00,000
translated to other languages

580
00:23:03,990 --> 00:23:02,000
and transferred across the whole world

581
00:23:05,830 --> 00:23:04,000
so if you're interested in weekly

582
00:23:07,909 --> 00:23:05,840
updates on what's going on

583
00:23:10,070 --> 00:23:07,919
in some of the countries here providing

584
00:23:12,149 --> 00:23:10,080
you with all the interesting facts news

585
00:23:14,070 --> 00:23:12,159
and even some skeptical history

586
00:23:15,750 --> 00:23:14,080
or if you want to hear interviews in

587
00:23:17,510 --> 00:23:15,760
english with brilliant people you

588
00:23:19,669 --> 00:23:17,520

sometimes haven't even heard about

589

00:23:20,870 --> 00:23:19,679

then what you need is to subscribe to

590

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

the esp

591

00:23:24,230 --> 00:23:23,200

extra sensory perception you must be

592

00:23:27,669 --> 00:23:24,240

really wrong

593

00:23:28,470 --> 00:23:27,679

no the espn the european skeptics

594

00:23:30,390 --> 00:23:28,480

podcast

595

00:23:31,830 --> 00:23:30,400

that's right and if you're wondering how

596

00:23:35,190 --> 00:23:31,840

you can find us online

597

00:23:36,149 --> 00:23:35,200

go to thesp.edu and you can also find us

598

00:23:38,789 --> 00:23:36,159

on twitter at

599

00:23:39,990 --> 00:23:38,799

eas podcast underscore eu or you can

600

00:23:42,070 --> 00:23:40,000

like us on facebook

601
00:23:43,750 --> 00:23:42,080
and if you want to subscribe do a quick

602
00:23:45,590 --> 00:23:43,760
search on all the intertubes for the

603
00:23:47,909 --> 00:23:45,600
european skeptics podcast

604
00:23:48,630 --> 00:23:47,919
you'll find us on soundcloud itunes

605
00:23:51,029 --> 00:23:48,640
stitcher

606
00:23:52,470 --> 00:23:51,039
spotify and all the rest the european

607
00:24:05,720 --> 00:23:52,480
skeptics podcast

608
00:24:09,029 --> 00:24:05,730
the real esp experience

609
00:24:12,520 --> 00:24:09,039
[Music]

610
00:24:15,269 --> 00:24:12,530
and now a reading from the book of tim

611
00:24:18,050 --> 00:24:15,279
[Music]

612
00:24:23,990 --> 00:24:18,060
with tim mendham

613
00:24:26,470 --> 00:24:24,000

[Music]

614

00:24:28,470 --> 00:24:26,480

hi my name is tim menden i'm the

615

00:24:29,190 --> 00:24:28,480

executive officer of australian skeptics

616

00:24:31,190 --> 00:24:29,200

inc

617

00:24:32,870 --> 00:24:31,200

and i'm the editor of our magazine the

618

00:24:34,710 --> 00:24:32,880

skeptic

619

00:24:37,750 --> 00:24:34,720

and today i'll be taking a reading from

620

00:24:41,110 --> 00:24:37,760

the skeptic march 2019

621

00:24:42,549 --> 00:24:41,120

which is volume 39 number one

622

00:24:44,310 --> 00:24:42,559

i'll be looking at a regular column

623

00:24:46,630 --> 00:24:44,320

called what goes around

624

00:24:47,590 --> 00:24:46,640

which starts off with a fact or a set of

625

00:24:49,590 --> 00:24:47,600

facts and

626
00:24:50,630 --> 00:24:49,600
through association works its way around

627
00:24:51,430 --> 00:24:50,640
through a whole lot of different things

628
00:24:53,830 --> 00:24:51,440
until you end up

629
00:24:55,430 --> 00:24:53,840
where you started from which shows that

630
00:24:57,909 --> 00:24:55,440
all knowledge is connected

631
00:24:59,110 --> 00:24:57,919
and connectable and this one i'll be

632
00:25:02,230 --> 00:24:59,120
looking at wishing

633
00:25:03,029 --> 00:25:02,240
gambling and calculating we start off

634
00:25:04,950 --> 00:25:03,039
with

635
00:25:10,870 --> 00:25:04,960
that well-known phenomenon called

636
00:25:14,070 --> 00:25:12,710
a confirmation bias is a tendency to

637
00:25:15,909 --> 00:25:14,080
interpret new evidence

638
00:25:17,909 --> 00:25:15,919

as confirmation of one's existing

639

00:25:21,029 --> 00:25:17,919

beliefs or theories

640

00:25:22,390 --> 00:25:21,039

a variation of this is apophenia the

641

00:25:24,230 --> 00:25:22,400

tendency to perceive

642

00:25:26,390 --> 00:25:24,240

connections and meaning between

643

00:25:28,390 --> 00:25:26,400

unrelated things

644

00:25:29,830 --> 00:25:28,400

that term was coined by psychiatrist

645

00:25:33,029 --> 00:25:29,840

claus conrad

646

00:25:35,350 --> 00:25:33,039

in his 1958 publication on the beginning

647

00:25:38,549 --> 00:25:35,360

stages of schizophrenia

648

00:25:39,990 --> 00:25:38,559

he defined it as unmotivated seeing of

649

00:25:42,470 --> 00:25:40,000

connections

650

00:25:43,510 --> 00:25:42,480

accompanied by a specific feeling of

651
00:25:46,390 --> 00:25:43,520
abnormal

652
00:25:48,310 --> 00:25:46,400
meaningfulness he described the early

653
00:25:51,590 --> 00:25:48,320
stages of delusional thought

654
00:25:53,669 --> 00:25:51,600
as self-referential over-interpretations

655
00:25:56,789 --> 00:25:53,679
of actual sensory perceptions

656
00:25:57,590 --> 00:25:56,799
as opposed to hallucinations apophenia

657
00:25:59,990 --> 00:25:57,600
has come to mean

658
00:26:01,909 --> 00:26:00,000
a universal human tendency to seek

659
00:26:06,070 --> 00:26:01,919
patterns in random information

660
00:26:08,789 --> 00:26:06,080
such as gambling the gambler's fallacy

661
00:26:11,669 --> 00:26:08,799
also known as the monte carlo fallacy or

662
00:26:13,590 --> 00:26:11,679
the fallacy of the maturity of chances

663
00:26:15,510 --> 00:26:13,600

is the mistaken belief that if something

664

00:26:17,430 --> 00:26:15,520

happens more frequently than normal

665

00:26:18,789 --> 00:26:17,440

during a given period it will happen

666

00:26:21,430 --> 00:26:18,799

less frequently

667

00:26:22,230 --> 00:26:21,440

in the future it may also be stated as

668

00:26:24,710 --> 00:26:22,240

the belief that

669

00:26:26,149 --> 00:26:24,720

if something happens less frequently

670

00:26:27,510 --> 00:26:26,159

than normal during a given period it

671

00:26:28,630 --> 00:26:27,520

will happen more frequently in the

672

00:26:30,390 --> 00:26:28,640

future

673

00:26:32,470 --> 00:26:30,400

in situations where the outcome being

674

00:26:34,470 --> 00:26:32,480

observed is truly random

675

00:26:35,909 --> 00:26:34,480

and consists of independent trials of a

676
00:26:39,350 --> 00:26:35,919
random process

677
00:26:41,590 --> 00:26:39,360
this belief is false it is a fallacy

678
00:26:43,590 --> 00:26:41,600
that a sequence of trials carries a

679
00:26:46,549 --> 00:26:43,600
memory of past results

680
00:26:47,990 --> 00:26:46,559
which tend to favor or disfavor future

681
00:26:50,789 --> 00:26:48,000
outcomes

682
00:26:52,390 --> 00:26:50,799
the fallacy can arise in many situations

683
00:26:53,510 --> 00:26:52,400
but is most strongly associated with

684
00:26:56,630 --> 00:26:53,520
gambling

685
00:26:57,190 --> 00:26:56,640
where it is common among players the

686
00:26:59,590 --> 00:26:57,200
term

687
00:27:00,710 --> 00:26:59,600
monte carlo fallacy originates from the

688
00:27:02,710 --> 00:27:00,720

best known example

689

00:27:05,510 --> 00:27:02,720

of the phenomenon which occurred in the

690

00:27:08,630 --> 00:27:05,520

monte carlo casino in 1913

691

00:27:10,149 --> 00:27:08,640

during a game of roulette roulette is

692

00:27:11,350 --> 00:27:10,159

named after the french word meaning

693

00:27:13,269 --> 00:27:11,360

little wheel

694

00:27:14,789 --> 00:27:13,279

and players may choose to place bets on

695

00:27:16,950 --> 00:27:14,799

either a single number

696

00:27:18,310 --> 00:27:16,960

various groupings of numbers red or

697

00:27:21,750 --> 00:27:18,320

black odd or even

698

00:27:22,470 --> 00:27:21,760

high or low on august 18 the ball fell

699

00:27:26,310 --> 00:27:22,480

on black

700

00:27:28,789 --> 00:27:26,320

26 times in a row this was an extremely

701
00:27:29,510 --> 00:27:28,799
uncommon occurrence with a probability

702
00:27:33,430 --> 00:27:29,520
about one

703
00:27:34,149 --> 00:27:33,440
in 33 million gamblers lost millions of

704
00:27:36,310 --> 00:27:34,159
francs

705
00:27:37,430 --> 00:27:36,320
betting against black reasoning

706
00:27:39,990 --> 00:27:37,440
incorrectly

707
00:27:41,830 --> 00:27:40,000
that the streak was causing an imbalance

708
00:27:43,830 --> 00:27:41,840
in the randomness of the wheel

709
00:27:46,230 --> 00:27:43,840
that it had to be followed by a long

710
00:27:49,750 --> 00:27:46,240
streak of red

711
00:27:52,310 --> 00:27:49,760
it didn't well eventually they had read

712
00:27:53,950 --> 00:27:52,320
on after a long time roulette has been

713
00:27:56,230 --> 00:27:53,960

played in its present form as early as

714

00:27:57,830 --> 00:27:56,240

1796 in paris

715

00:27:59,350 --> 00:27:57,840

an early description of the roulette

716

00:28:01,909 --> 00:27:59,360

game in its current form

717

00:28:04,070 --> 00:28:01,919

is found in a french novel la roulette

718

00:28:06,710 --> 00:28:04,080

uh

719

00:28:07,669 --> 00:28:06,720

it's a history of a player by jacques

720

00:28:09,430 --> 00:28:07,679

leblais

721

00:28:11,029 --> 00:28:09,440

which describes a roulette wheel in the

722

00:28:14,870 --> 00:28:11,039

palais royal in paris

723

00:28:17,590 --> 00:28:14,880

in 1796. the first form of roulette

724

00:28:18,950 --> 00:28:17,600

was devised in 18th century france the

725

00:28:21,029 --> 00:28:18,960

roulette mechanism

726
00:28:22,549 --> 00:28:21,039
is a hybrid of a gaming wheel invented

727
00:28:25,750 --> 00:28:22,559
in 1720

728
00:28:28,389 --> 00:28:25,760
and the italian game beribe

729
00:28:30,389 --> 00:28:28,399
this wheel has places number one to 36

730
00:28:32,789 --> 00:28:30,399
and in the european version one

731
00:28:33,669 --> 00:28:32,799
zero though in the american version

732
00:28:36,230 --> 00:28:33,679
there is a zero

733
00:28:37,909 --> 00:28:36,240
and a double zero which gives the house

734
00:28:41,350 --> 00:28:37,919
better odds

735
00:28:43,669 --> 00:28:41,360
many historians believe blaise pascal

736
00:28:45,830 --> 00:28:43,679
introduced a primitive form of roulette

737
00:28:48,549 --> 00:28:45,840
in the 17th century in his search for a

738
00:28:52,230 --> 00:28:48,559

perpetual motion machine

739

00:28:54,950 --> 00:28:52,240

pascal who lived from 1623 to 1662

740

00:28:55,669 --> 00:28:54,960

was a french child prodigy mathematician

741

00:28:59,350 --> 00:28:55,679

physicist

742

00:29:02,070 --> 00:28:59,360

inventor writer and catholic theologian

743

00:29:03,750 --> 00:29:02,080

his early work was in the natural and

744

00:29:05,590 --> 00:29:03,760

applied sciences where he made

745

00:29:08,149 --> 00:29:05,600

important contributions to the study of

746

00:29:09,190 --> 00:29:08,159

fluids and the concepts of pressure and

747

00:29:11,750 --> 00:29:09,200

vacuum

748

00:29:13,510 --> 00:29:11,760

by generalizing the work of evangelistic

749

00:29:15,110 --> 00:29:13,520

torticelli

750

00:29:16,549 --> 00:29:15,120

pascal also wrote in defense of the

751

00:29:19,350 --> 00:29:16,559

scientific method

752

00:29:20,230 --> 00:29:19,360

in 1642 while still a teenager he

753

00:29:23,110 --> 00:29:20,240

started some

754

00:29:24,710 --> 00:29:23,120

pioneering work on calculating machines

755

00:29:26,070 --> 00:29:24,720

after three years of effort and 50

756

00:29:27,990 --> 00:29:26,080

prototypes he built 20

757

00:29:29,430 --> 00:29:28,000

finnish machines called pascal's

758

00:29:31,110 --> 00:29:29,440

calculators

759

00:29:34,310 --> 00:29:31,120

establishing him as one of the first

760

00:29:36,549 --> 00:29:34,320

inventors of the mechanical calculator

761

00:29:39,110 --> 00:29:36,559

pascal and his sister were influenced by

762

00:29:41,669 --> 00:29:39,120

doctors treating his father's broken hip

763

00:29:43,590 --> 00:29:41,679

who were followers of jansenism a

764

00:29:47,430 --> 00:29:43,600

splinter group from the catholic church

765

00:29:49,510 --> 00:29:47,440

that espoused moral rigor and asceticism

766

00:29:51,269 --> 00:29:49,520

unlike his sister he fell out with the

767

00:29:51,830 --> 00:29:51,279

movement and followed what some have

768

00:29:56,230 --> 00:29:51,840

called

769

00:29:58,389 --> 00:29:56,240

his worldly period 1648-54

770

00:30:01,590 --> 00:29:58,399

however following an intense religious

771

00:30:03,350 --> 00:30:01,600

vision he reconverted to catholicism

772

00:30:04,630 --> 00:30:03,360

it was during this period that he wrote

773

00:30:07,909 --> 00:30:04,640

two of his most famous

774

00:30:08,950 --> 00:30:07,919

epithets the first goes the heart has

775

00:30:11,990 --> 00:30:08,960

its reasons

776

00:30:12,950 --> 00:30:12,000

of which reason knows nothing and the

777

00:30:15,029 --> 00:30:12,960

second is

778

00:30:17,590 --> 00:30:15,039

we almost invariably arrive at our

779

00:30:19,669 --> 00:30:17,600

beliefs not on the basis of proof

780

00:30:21,029 --> 00:30:19,679

but on the basis of what we find

781

00:30:23,750 --> 00:30:21,039

attractive

782

00:30:25,029 --> 00:30:23,760

that latter statement in particular is a

783

00:30:27,909 --> 00:30:25,039

classic description

784

00:30:29,490 --> 00:30:27,919

of confirmation bias which brings us

785

00:30:33,350 --> 00:30:29,500

back to where we started from

786

00:30:36,590 --> 00:30:35,430

so that what goes around from the

787

00:30:39,830 --> 00:30:36,600

skeptic march

788

00:30:42,310 --> 00:30:39,840

2019 and you can read that issue

789

00:30:43,630 --> 00:30:42,320
and 39 years worth of other ones on our

790

00:30:46,149 --> 00:30:43,640
website

791

00:30:53,030 --> 00:30:46,159
skeptics.com.eu free to download

792

00:31:01,990 --> 00:30:59,350
[Music]

793

00:31:02,870 --> 00:31:02,000
greetings listeners it's me captain

794

00:31:05,190 --> 00:31:02,880
disillusion

795

00:31:06,149 --> 00:31:05,200
on my youtube channel called captain

796

00:31:10,710 --> 00:31:06,159
disillusion

797

00:31:12,630 --> 00:31:10,720
videos of the strange and unbelievable

798

00:31:14,549 --> 00:31:12,640
i explain how inter-frame video

799

00:31:17,110 --> 00:31:14,559
compression 3d motion tracking

800

00:31:19,509 --> 00:31:17,120
and stock vfx elements prove that justin

801

00:31:21,669 --> 00:31:19,519

bieber is not a secret reptilian alien

802

00:31:23,509 --> 00:31:21,679

that those videos of ghost cars are just

803

00:31:25,350 --> 00:31:23,519

unintentional optical illusions

804

00:31:26,789 --> 00:31:25,360

and that lightning did not strike a few

805

00:31:27,909 --> 00:31:26,799

feet away from a girl on a beach as we

806

00:31:30,549 --> 00:31:27,919

saw on the news

807

00:31:33,110 --> 00:31:30,559

i'm real fun at parties my best friend

808

00:31:35,110 --> 00:31:33,120

is a lens flare eat a dimmer switch

809

00:31:37,110 --> 00:31:35,120

disillusioned i do know other people

810

00:31:39,590 --> 00:31:37,120

sometimes they even show up in my videos

811

00:31:40,149 --> 00:31:39,600

people like skepticism's grandpa james

812

00:31:42,710 --> 00:31:40,159

randy

813

00:31:44,549 --> 00:31:42,720

serg de soleil acrobat erica linz weight

814

00:31:46,630 --> 00:31:44,559

loss enthusiast pen gillette

815

00:31:48,389 --> 00:31:46,640

and the actual beekman from beekman's

816

00:31:49,110 --> 00:31:48,399

world i hope you'll check out my

817

00:31:51,269 --> 00:31:49,120

adventures

818

00:31:52,630 --> 00:31:51,279

interact with me in a platonic way and

819

00:31:55,350 --> 00:31:52,640

even consider becoming

820

00:31:56,070 --> 00:31:55,360

a patron of my work you can do all that

821

00:32:03,610 --> 00:31:56,080

and more

822

00:32:03,620 --> 00:32:13,350

[Music]

823

00:32:16,710 --> 00:32:15,269

now it's time once again to look through

824

00:32:19,110 --> 00:32:16,720

the archive

825

00:32:20,389 --> 00:32:19,120

dive into the trove that is trove at

826

00:32:23,350 --> 00:32:20,399

trove

827

00:32:26,070 --> 00:32:23,360

not nla.gov dot eu the online resource

828

00:32:28,149 --> 00:32:26,080

from the national library of australia

829

00:32:31,029 --> 00:32:28,159

gazette's magazine's periodicals

830

00:32:33,909 --> 00:32:31,039

newspapers articles items reports

831

00:32:40,830 --> 00:32:33,919

all digitized and searchable going back

832

00:32:45,750 --> 00:32:42,310

decades

833

00:32:48,870 --> 00:32:45,760

and in keeping with our series

834

00:32:52,950 --> 00:32:48,880

on trove where we look for the more uh

835

00:32:55,909 --> 00:32:52,960

classical forms of skepticism ufos

836

00:32:59,029 --> 00:32:55,919

yowies yetis that sort of thing this

837

00:33:03,110 --> 00:32:59,039

week i'm going to look for references

838

00:33:04,549 --> 00:33:03,120

to the term esp

839

00:33:06,389 --> 00:33:04,559

now that's an old-fashioned term you

840

00:33:11,190 --> 00:33:06,399

really don't hear it much anymore

841

00:33:14,789 --> 00:33:11,200

esp extra sensory perception

842

00:33:18,190 --> 00:33:14,799

and i will read out two

843

00:33:20,070 --> 00:33:18,200

returns on the search both from the year

844

00:33:23,430 --> 00:33:20,080

1938

845

00:33:24,900 --> 00:33:23,440

and both involving a certain uh

846

00:33:31,750 --> 00:33:24,910

dr ryan

847

00:33:35,990 --> 00:33:33,830

now the first result comes from the

848

00:33:37,269 --> 00:33:36,000

shepparton advertiser in the state of

849

00:33:39,909 --> 00:33:37,279

victoria

850

00:33:41,830 --> 00:33:39,919

and according to this it says from 1914

851
00:33:46,070 --> 00:33:41,840
to 1953

852
00:33:47,750 --> 00:33:46,080
on friday the 22nd of april 1938 on page

853
00:33:51,990 --> 00:33:47,760
19 we read

854
00:33:55,029 --> 00:33:52,000
sixth sense english search for esp

855
00:33:55,430 --> 00:33:55,039
air mail our special service london

856
00:34:00,710 --> 00:33:55,440
march

857
00:34:03,110 --> 00:34:00,720
19. english people appear to be lacking

858
00:34:04,789 --> 00:34:03,120
in the sixth sense claimed to have been

859
00:34:07,669 --> 00:34:04,799
found in america

860
00:34:08,550 --> 00:34:07,679
scientists have failed to discover the

861
00:34:11,190 --> 00:34:08,560
existence of

862
00:34:12,629 --> 00:34:11,200
extra sensory perception known

863
00:34:16,149 --> 00:34:12,639

familiarly in the

864

00:34:16,550 --> 00:34:16,159

states as esp during the past three

865

00:34:19,750 --> 00:34:16,560

years

866

00:34:22,149 --> 00:34:19,760

dr ryan a psychologist at duke

867

00:34:24,310 --> 00:34:22,159

university north carolina

868

00:34:27,270 --> 00:34:24,320

has been experimenting with a special

869

00:34:30,069 --> 00:34:27,280

set of 25 cards by means of which

870

00:34:31,829 --> 00:34:30,079

he declares he has proved the existence

871

00:34:34,470 --> 00:34:31,839

of a sixth sense

872

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

in the same period professor thalus

873

00:34:37,909 --> 00:34:36,560

professor of psychology at glasgow

874

00:34:40,470 --> 00:34:37,919

university and mr

875

00:34:41,589 --> 00:34:40,480

s g soul mathematician of london

876
00:34:44,069 --> 00:34:41,599
university

877
00:34:44,710 --> 00:34:44,079
have experimented with the same type of

878
00:34:48,470 --> 00:34:44,720
cards

879
00:34:51,190 --> 00:34:48,480
without finding a vestige of esp

880
00:34:52,950 --> 00:34:51,200
dr ryan's theories have been so widely

881
00:34:56,710 --> 00:34:52,960
accepted in america that his

882
00:34:59,829 --> 00:34:56,720
cards are used in a fireside game

883
00:35:00,790 --> 00:34:59,839
and are sold on all bookstalls each five

884
00:35:04,310 --> 00:35:00,800
in a pack

885
00:35:08,870 --> 00:35:04,320
of 25 is marked with one of five symbols

886
00:35:11,990 --> 00:35:08,880
star cross oblong circle or wave

887
00:35:14,069 --> 00:35:12,000
the test is to call each card without

888
00:35:15,910 --> 00:35:14,079

seeing its face

889

00:35:18,870 --> 00:35:15,920

and of course these days those cards are

890

00:35:21,910 --> 00:35:18,880

known as xena cards or zener cards

891

00:35:22,710 --> 00:35:21,920

according to dr ryan mr sol said this

892

00:35:25,510 --> 00:35:22,720

week

893

00:35:28,310 --> 00:35:25,520

people tested by him were able to call

894

00:35:30,630 --> 00:35:28,320

correctly up to 18 out of 25

895

00:35:32,230 --> 00:35:30,640

or nearly four times the number allowed

896

00:35:35,190 --> 00:35:32,240

by the law of chance

897

00:35:36,390 --> 00:35:35,200

but my co-workers and i performed 100

898

00:35:38,950 --> 00:35:36,400

000 tests

899

00:35:40,630 --> 00:35:38,960

on more than 120 people in the

900

00:35:41,990 --> 00:35:40,640

psychological laboratory at the

901
00:35:44,230 --> 00:35:42,000
university college

902
00:35:45,589 --> 00:35:44,240
without finding one who could beat the

903
00:35:47,430 --> 00:35:45,599
laws of chance

904
00:35:49,190 --> 00:35:47,440
the results of professor phallus at

905
00:35:52,230 --> 00:35:49,200
glasgow were equally

906
00:35:53,030 --> 00:35:52,240
negative so not off to a flying start

907
00:35:56,310 --> 00:35:53,040
there for dr

908
00:36:00,310 --> 00:35:56,320
ryan and his uh his cards

909
00:36:03,510 --> 00:36:00,320
and again that was from april 1938

910
00:36:06,870 --> 00:36:03,520
so let's skip forward a few months to

911
00:36:11,190 --> 00:36:06,880
october 1938 the 22nd of october

912
00:36:12,950 --> 00:36:11,200
in the world's news from sydney and it

913
00:36:15,390 --> 00:36:12,960

looks like whatever that was it would

914

00:36:18,470 --> 00:36:15,400

lasted from 1901 to

915

00:36:21,589 --> 00:36:18,480

1955. page three

916

00:36:25,270 --> 00:36:21,599

double page article have you

917

00:36:28,950 --> 00:36:25,280

esp powers trying out

918

00:36:31,270 --> 00:36:28,960

telepathy and there's a rather dramatic

919

00:36:34,790 --> 00:36:31,280

picture of a

920

00:36:38,069 --> 00:36:34,800

lady lying down and looking rather

921

00:36:41,109 --> 00:36:38,079

concerned telepathy and

922

00:36:43,270 --> 00:36:41,119

clairvoyance perhaps you possess one

923

00:36:45,510 --> 00:36:43,280

or the other or both of these strange

924

00:36:47,349 --> 00:36:45,520

abilities that up until the last

925

00:36:49,910 --> 00:36:47,359

few years have been associated in the

926

00:36:51,589 --> 00:36:49,920

public mind with the black arts

927

00:36:53,030 --> 00:36:51,599

possess them and don't know a thing

928

00:36:56,150 --> 00:36:53,040

about it

929

00:36:58,870 --> 00:36:56,160

one chance in five your mind is a living

930

00:37:00,230 --> 00:36:58,880

radio receiver capable of apprehending

931

00:37:03,430 --> 00:37:00,240

messages sent out by

932

00:37:06,310 --> 00:37:03,440

other minds unspoken unsingled

933

00:37:06,950 --> 00:37:06,320

inaudible messages picked up when you

934

00:37:08,870 --> 00:37:06,960

tune

935

00:37:10,230 --> 00:37:08,880

in on thoughts projected through the

936

00:37:12,790 --> 00:37:10,240

ether

937

00:37:14,550 --> 00:37:12,800

that's telepathy don't forget this comes

938

00:37:17,349 --> 00:37:14,560

from 1938

939

00:37:18,230 --> 00:37:17,359

same chance but you're a super x-ray

940

00:37:20,790 --> 00:37:18,240

machine

941

00:37:23,349 --> 00:37:20,800

that you have some astonishing power

942

00:37:26,470 --> 00:37:23,359

outside the regular recognized senses

943

00:37:27,430 --> 00:37:26,480

that enables you to see hidden objects

944

00:37:30,790 --> 00:37:27,440

that really

945

00:37:34,150 --> 00:37:30,800

you can't see or feel or smell or taste

946

00:37:36,630 --> 00:37:34,160

perceive them even through brick

947

00:37:37,589 --> 00:37:36,640

walls or from a distance of miles and

948

00:37:40,790 --> 00:37:37,599

miles

949

00:37:42,390 --> 00:37:40,800

see them without use of your eyes that's

950

00:37:44,630 --> 00:37:42,400

clairvoyance

951
00:37:46,069 --> 00:37:44,640
and the interesting part about the whole

952
00:37:47,990 --> 00:37:46,079
thing is that you can start

953
00:37:49,750 --> 00:37:48,000
right out testing yourself and your

954
00:37:52,630 --> 00:37:49,760
friends for hidden powers

955
00:37:53,270 --> 00:37:52,640
of telepathy and clairvoyance in fact it

956
00:37:56,550 --> 00:37:53,280
won't be

957
00:37:57,030 --> 00:37:56,560
at all surprising if esp parties become

958
00:37:59,670 --> 00:37:57,040
quite

959
00:38:00,630 --> 00:37:59,680
the vogue during the approaching social

960
00:38:05,190 --> 00:38:00,640
season

961
00:38:07,430 --> 00:38:05,200
pure telepathy what is esp

962
00:38:08,230 --> 00:38:07,440
it's the contraction for the inclusive

963
00:38:10,390 --> 00:38:08,240

term that

964

00:38:11,510 --> 00:38:10,400

scientists have given to these strange

965

00:38:15,030 --> 00:38:11,520

powers

966

00:38:16,790 --> 00:38:15,040

extra sensory perception perceiving by

967

00:38:18,310 --> 00:38:16,800

some power outside the regular

968

00:38:20,710 --> 00:38:18,320

recognized senses

969

00:38:21,990 --> 00:38:20,720

seeing feeling hearing tasting and

970

00:38:24,870 --> 00:38:22,000

smelling

971

00:38:26,390 --> 00:38:24,880

is there then such a thing as extra

972

00:38:29,109 --> 00:38:26,400

sensory perception

973

00:38:30,310 --> 00:38:29,119

as telepathy or clairvoyance let the

974

00:38:33,910 --> 00:38:30,320

reader judge

975

00:38:37,910 --> 00:38:33,920

we'll consider an investigation of pure

976
00:38:40,150 --> 00:38:37,920
telepathy here it is as made by dr

977
00:38:42,310 --> 00:38:40,160
jb ryan at duke university north

978
00:38:45,430 --> 00:38:42,320
carolina

979
00:38:48,470 --> 00:38:45,440
in a room at the university sits

980
00:38:51,109 --> 00:38:48,480
miss sarah ownby one of

981
00:38:53,430 --> 00:38:51,119
dr ryan's most valued assistants on the

982
00:38:56,150 --> 00:38:53,440
table before her face downward

983
00:38:57,750 --> 00:38:56,160
there is a deck of cards not playing

984
00:39:01,109 --> 00:38:57,760
cards but so-called

985
00:39:03,270 --> 00:39:01,119
esp cards the backs of the cards are not

986
00:39:06,069 --> 00:39:03,280
unlike those we use for games

987
00:39:06,870 --> 00:39:06,079
but there are only 25 of them in the

988
00:39:09,750 --> 00:39:06,880

deck

989

00:39:11,910 --> 00:39:09,760

the faces of the esp cards are nothing

990

00:39:14,630 --> 00:39:11,920

like those of playing cards

991

00:39:15,430 --> 00:39:14,640

there are five suits that is five sets

992

00:39:18,950 --> 00:39:15,440

of symbols

993

00:39:21,990 --> 00:39:18,960

a square a circle a star a maltese cross

994

00:39:25,030 --> 00:39:22,000

and a set of three wavy lines each

995

00:39:28,150 --> 00:39:25,040

appearing on five cards notice that

996

00:39:28,870 --> 00:39:28,160

these symbols are entirely different in

997

00:39:32,390 --> 00:39:28,880

outline

998

00:39:33,430 --> 00:39:32,400

from the others in another room 250

999

00:39:35,349 --> 00:39:33,440

miles away

1000

00:39:37,030 --> 00:39:35,359

sits another young woman miss may

1001
00:39:39,589 --> 00:39:37,040
francis turner

1002
00:39:40,550 --> 00:39:39,599
also an enthusiastic scientific

1003
00:39:44,069 --> 00:39:40,560
investigator

1004
00:39:46,710 --> 00:39:44,079
can own b lift off the top

1005
00:39:48,550 --> 00:39:46,720
card of her deck concentrate upon the

1006
00:39:51,670 --> 00:39:48,560
symbol she finds on it

1007
00:39:54,230 --> 00:39:51,680
send her thought waves over mountain

1008
00:39:55,910 --> 00:39:54,240
valley and stream and register that

1009
00:39:59,910 --> 00:39:55,920
image on the mind of miss

1010
00:40:01,750 --> 00:39:59,920
turner 250 miles away how many times can

1011
00:40:04,870 --> 00:40:01,760
she succeed in doing that

1012
00:40:07,589 --> 00:40:04,880
in 25 trials no

1013
00:40:10,150 --> 00:40:07,599

there's no chance of the two young women

1014

00:40:11,589 --> 00:40:10,160

having agreed upon any set order of the

1015

00:40:14,309 --> 00:40:11,599

cards in advance

1016

00:40:15,990 --> 00:40:14,319

the deck is shuffled and cut just before

1017

00:40:18,150 --> 00:40:16,000

the trial starts

1018

00:40:19,109 --> 00:40:18,160

they have set their watches have agreed

1019

00:40:21,589 --> 00:40:19,119

that the test

1020

00:40:23,589 --> 00:40:21,599

will start at a certain minute and that

1021

00:40:24,069 --> 00:40:23,599

five minutes of concentration shall be

1022

00:40:27,270 --> 00:40:24,079

used

1023

00:40:29,190 --> 00:40:27,280

for each card oh if i had a time machine

1024

00:40:32,069 --> 00:40:29,200

how i'd love to go back and

1025

00:40:33,270 --> 00:40:32,079

examine their protocols for that test we

1026
00:40:36,470 --> 00:40:33,280
read on

1027
00:40:38,630 --> 00:40:36,480
1 in 5 chance now

1028
00:40:39,750 --> 00:40:38,640
let's see how many symbols miss turner

1029
00:40:42,790 --> 00:40:39,760
should name correctly

1030
00:40:45,829 --> 00:40:42,800
if she relied upon pure guesswork

1031
00:40:46,790 --> 00:40:45,839
there are five each of the five symbols

1032
00:40:49,750 --> 00:40:46,800
in the 25

1033
00:40:50,309 --> 00:40:49,760
cards supposing there were only five

1034
00:40:52,710 --> 00:40:50,319
cards

1035
00:40:53,829 --> 00:40:52,720
each bearing a different symbol involved

1036
00:40:56,630 --> 00:40:53,839
in the test

1037
00:40:57,109 --> 00:40:56,640
it is obvious then that she would have

1038
00:40:59,190 --> 00:40:57,119

one

1039

00:41:00,230 --> 00:40:59,200

chance in five of naming correctly the

1040

00:41:03,510 --> 00:41:00,240

symbol on

1041

00:41:05,030 --> 00:41:03,520

any designated card if she relied upon

1042

00:41:08,630 --> 00:41:05,040

pure guesswork alone

1043

00:41:10,870 --> 00:41:08,640

one chance in five of scoring a hit

1044

00:41:13,510 --> 00:41:10,880

this mathematical chance is not changed

1045

00:41:16,309 --> 00:41:13,520

by making up a deck of 25 cards

1046

00:41:18,230 --> 00:41:16,319

five bearing each symbol the one two

1047

00:41:20,950 --> 00:41:18,240

five chance still holds

1048

00:41:22,630 --> 00:41:20,960

pure guesswork should make five hits in

1049

00:41:24,950 --> 00:41:22,640

running through the full deck

1050

00:41:26,390 --> 00:41:24,960

if miss turner makes more than five hits

1051
00:41:28,550 --> 00:41:26,400
out of 25

1052
00:41:30,710 --> 00:41:28,560
there is a likelihood that something

1053
00:41:34,790 --> 00:41:30,720
beyond mere chance enters

1054
00:41:35,670 --> 00:41:34,800
into her success when the minute hand of

1055
00:41:38,790 --> 00:41:35,680
her watch

1056
00:41:42,550 --> 00:41:38,800
passes the agreed upon time miss ownby

1057
00:41:45,670 --> 00:41:42,560
picks off a card holds it before her

1058
00:41:49,109 --> 00:41:45,680
concentrates upon it for five minutes

1059
00:41:51,349 --> 00:41:49,119
miss turner intense concentration

1060
00:41:52,630 --> 00:41:51,359
finds a symbol shaping itself in her

1061
00:41:55,670 --> 00:41:52,640
mind

1062
00:41:57,670 --> 00:41:55,680
whatever it is she jots it down

1063
00:41:59,750 --> 00:41:57,680

at the end of five minutes the lady at

1064

00:42:02,870 --> 00:41:59,760

duke picks up the second card

1065

00:42:06,150 --> 00:42:02,880

and goes through the same process so on

1066

00:42:06,710 --> 00:42:06,160

she goes through the entire deck of 25

1067

00:42:09,030 --> 00:42:06,720

cards

1068

00:42:10,390 --> 00:42:09,040

five minutes for each card the test

1069

00:42:12,630 --> 00:42:10,400

takes two hours

1070

00:42:14,309 --> 00:42:12,640

and five minutes immediately upon

1071

00:42:16,790 --> 00:42:14,319

finishing her scoring

1072

00:42:18,630 --> 00:42:16,800

miss turner seals the sheet in an

1073

00:42:19,750 --> 00:42:18,640

envelope addresses it to the duke

1074

00:42:23,030 --> 00:42:19,760

university

1075

00:42:26,390 --> 00:42:23,040

and mails it the envelope comes

1076
00:42:28,950 --> 00:42:26,400
into dr ryan's hands with the seals

1077
00:42:30,630 --> 00:42:28,960
untampered with neither of these young

1078
00:42:33,190 --> 00:42:30,640
women has any stake in

1079
00:42:34,309 --> 00:42:33,200
proving or disproving the possibility of

1080
00:42:36,150 --> 00:42:34,319
telepathy

1081
00:42:38,390 --> 00:42:36,160
they are serious-minded scientists

1082
00:42:41,750 --> 00:42:38,400
seeking avidly for the truth

1083
00:42:46,390 --> 00:42:41,760
in three days trials miss turner scored

1084
00:42:47,349 --> 00:42:46,400
19 16 and 16 an average of 17 hits per

1085
00:42:49,349 --> 00:42:47,359
run

1086
00:42:51,349 --> 00:42:49,359
more than three times what could be

1087
00:42:53,589 --> 00:42:51,359
expected of chance

1088
00:42:55,270 --> 00:42:53,599

the long distance trials were carried on

1089

00:42:57,510 --> 00:42:55,280

for five more days

1090

00:42:58,309 --> 00:42:57,520

after the initial three under the same

1091

00:43:00,790 --> 00:42:58,319

conditions

1092

00:43:03,109 --> 00:43:00,800

except that the period of concentration

1093

00:43:06,870 --> 00:43:03,119

upon each card was cut down

1094

00:43:10,550 --> 00:43:06,880

then miss turner did less well but she

1095

00:43:11,589 --> 00:43:10,560

kept her average up to 10 hits per 25

1096

00:43:14,630 --> 00:43:11,599

cards

1097

00:43:17,349 --> 00:43:14,640

that is only one of hundreds upon

1098

00:43:18,870 --> 00:43:17,359

hundreds of tests some of them for

1099

00:43:21,510 --> 00:43:18,880

thousands of runs

1100

00:43:22,309 --> 00:43:21,520

through the esp deck with a great many

1101

00:43:26,309 --> 00:43:22,319

subjects

1102

00:43:27,510 --> 00:43:26,319

the test led to no conclusions the hits

1103

00:43:29,910 --> 00:43:27,520

were just about

1104

00:43:31,030 --> 00:43:29,920

the chance average but with other

1105

00:43:34,230 --> 00:43:31,040

subjects the average

1106

00:43:37,430 --> 00:43:34,240

is one in five results were significant

1107

00:43:38,470 --> 00:43:37,440

often amazing the probabilities are that

1108

00:43:41,589 --> 00:43:38,480

most of us

1109

00:43:43,910 --> 00:43:41,599

admit the possibility of telepathy

1110

00:43:45,510 --> 00:43:43,920

the transmission of ideas from one mind

1111

00:43:47,829 --> 00:43:45,520

to another without using

1112

00:43:48,870 --> 00:43:47,839

any of the recognized senses but

1113

00:43:50,550 --> 00:43:48,880

clairvoyance

1114

00:43:52,470 --> 00:43:50,560

actually to perceive something without

1115

00:43:54,550 --> 00:43:52,480

seeing it or having its image

1116

00:43:57,750 --> 00:43:54,560

transmitted by telepathy

1117

00:43:59,270 --> 00:43:57,760

is something else again here is one of

1118

00:44:01,829 --> 00:43:59,280

dr ryan's tests

1119

00:44:02,790 --> 00:44:01,839

he is in his laboratory in comes a

1120

00:44:06,390 --> 00:44:02,800

student named

1121

00:44:07,990 --> 00:44:06,400

pierce who has been much interested in

1122

00:44:10,390 --> 00:44:08,000

the experiments

1123

00:44:12,950 --> 00:44:10,400

he is hurrying to keep an engagement

1124

00:44:16,550 --> 00:44:12,960

doesn't even take off his coats

1125

00:44:17,750 --> 00:44:16,560

oh come on urges dr ryan let's run a

1126

00:44:20,150 --> 00:44:17,760

couple of tests

1127

00:44:21,750 --> 00:44:20,160

pierce looks at his watch and agrees if

1128

00:44:24,309 --> 00:44:21,760

they don't take too long

1129

00:44:26,230 --> 00:44:24,319

the professor takes up a deck of esp

1130

00:44:29,030 --> 00:44:26,240

cards and shuffles and cuts them

1131

00:44:31,829 --> 00:44:29,040

lays them face down on the table asks

1132

00:44:33,829 --> 00:44:31,839

piers to name the top card

1133

00:44:35,910 --> 00:44:33,839

there can be no telepathy in this dr

1134

00:44:37,030 --> 00:44:35,920

ryan doesn't know what the top card is

1135

00:44:39,910 --> 00:44:37,040

and neither does the

1136

00:44:40,470 --> 00:44:39,920

subject the latter guesses and guesses

1137

00:44:44,950 --> 00:44:40,480

wrong

1138

00:44:47,430 --> 00:44:44,960

probably he was guessing

1139

00:44:49,589 --> 00:44:47,440

come pierce if you can't do better than

1140

00:44:52,309 --> 00:44:49,599

that ben is the investigator

1141

00:44:53,589 --> 00:44:52,319

as he shuffles and cuts again i'll bet

1142

00:44:56,390 --> 00:44:53,599

you twenty dollars

1143

00:44:57,990 --> 00:44:56,400

you can't name the top card but pierce

1144

00:45:01,109 --> 00:44:58,000

taking hold of himself

1145

00:45:02,790 --> 00:45:01,119

does name it correctly on they go

1146

00:45:04,790 --> 00:45:02,800

dr ryan shuffling and cutting and

1147

00:45:08,390 --> 00:45:04,800

repeating his twenty dollar bet

1148

00:45:10,870 --> 00:45:08,400

hit after hit pierce scored

1149

00:45:12,230 --> 00:45:10,880

the attention didn't relax until he had

1150

00:45:14,470 --> 00:45:12,240

named the top card

1151
00:45:16,550 --> 00:45:14,480
which neither he nor the professor could

1152
00:45:17,589 --> 00:45:16,560
possibly know by any ordinary means of

1153
00:45:21,109 --> 00:45:17,599
perception

1154
00:45:23,829 --> 00:45:21,119
correctly 25 times in succession

1155
00:45:24,630 --> 00:45:23,839
pierce calling 25 cards in a row

1156
00:45:26,950 --> 00:45:24,640
correctly

1157
00:45:27,750 --> 00:45:26,960
was the most phenomenal thing that i

1158
00:45:30,790 --> 00:45:27,760
have ever

1159
00:45:33,030 --> 00:45:30,800
observed writes dr ryan

1160
00:45:34,230 --> 00:45:33,040
the odds against his feet having been

1161
00:45:37,750 --> 00:45:34,240
due to pure

1162
00:45:38,550 --> 00:45:37,760
unadulterated chance are 298 quad

1163
00:45:46,710 --> 00:45:38,560

trillion

1164

00:45:47,750 --> 00:45:46,720

876 million nine hundred and fifty three

1165

00:45:50,630 --> 00:45:47,760

thousand

1166

00:45:52,390 --> 00:45:50,640

one hundred and twenty five well you'll

1167

00:45:55,670 --> 00:45:52,400

never get me to do that again

1168

00:45:58,390 --> 00:45:55,680

pierce broke out when it was over why

1169

00:45:59,030 --> 00:45:58,400

dr rhine asks you seem to do it easily

1170

00:46:01,750 --> 00:45:59,040

enough

1171

00:46:03,510 --> 00:46:01,760

well i don't know why exactly but you'll

1172

00:46:06,069 --> 00:46:03,520

never get me to do it again

1173

00:46:08,150 --> 00:46:06,079

the subject held evidently such an

1174

00:46:09,990 --> 00:46:08,160

amazing display of clairvoyance takes

1175

00:46:13,589 --> 00:46:10,000

something out of this subject

1176

00:46:16,150 --> 00:46:13,599

did pierce collect his 500 no

1177

00:46:17,349 --> 00:46:16,160

the bets were all in fun it should be

1178

00:46:20,069 --> 00:46:17,359

explained that the method

1179

00:46:21,430 --> 00:46:20,079

used in this sensational test was

1180

00:46:25,190 --> 00:46:21,440

somewhat different from

1181

00:46:27,750 --> 00:46:25,200

that of the usual clairvoyance trial

1182

00:46:29,589 --> 00:46:27,760

systems of all sorts too numerous to

1183

00:46:32,309 --> 00:46:29,599

detail in this short article

1184

00:46:33,030 --> 00:46:32,319

are used in dr ryan's explorations of

1185

00:46:36,309 --> 00:46:33,040

the new

1186

00:46:39,109 --> 00:46:36,319

mental frontier one of them is to lay

1187

00:46:41,349 --> 00:46:39,119

the shuffled and cut deck face down on a

1188

00:46:41,990 --> 00:46:41,359

table and have the subject call the card

1189

00:46:45,030 --> 00:46:42,000

straight

1190

00:46:46,230 --> 00:46:45,040

down through no cards being removed

1191

00:46:49,829 --> 00:46:46,240

during the test

1192

00:46:52,309 --> 00:46:49,839

the checkup being deferred until the end

1193

00:46:53,430 --> 00:46:52,319

even in this test some remarkable scores

1194

00:46:57,430 --> 00:46:53,440

have been run

1195

00:47:00,550 --> 00:46:57,440

as many as 15 to 16 hits in 25

1196

00:47:03,990 --> 00:47:00,560

three times what chance would allow

1197

00:47:06,309 --> 00:47:04,000

and this in thousands of runs the tests

1198

00:47:08,150 --> 00:47:06,319

check and recheck each other both in

1199

00:47:10,390 --> 00:47:08,160

telepathy and clairvoyance

1200

00:47:11,829 --> 00:47:10,400

they are run with all sorts of

1201
00:47:14,309 --> 00:47:11,839
safeguards

1202
00:47:16,230 --> 00:47:14,319
and that's the end of that report and

1203
00:47:17,270 --> 00:47:16,240
again that comes to us from a newspaper

1204
00:47:22,549 --> 00:47:17,280
called the world's

1205
00:47:24,309 --> 00:47:22,559
news dated the 22nd of october 1938

1206
00:47:27,190 --> 00:47:24,319
and just briefly one of the many other

1207
00:47:29,510 --> 00:47:27,200
returns for the search esp

1208
00:47:31,270 --> 00:47:29,520
lands us on the pages of the australian

1209
00:47:36,069 --> 00:47:31,280
woman's weekly

1210
00:47:38,790 --> 00:47:36,079
from the 23rd of july 1980

1211
00:47:39,750 --> 00:47:38,800
an article that's uh headlined what's

1212
00:47:44,150 --> 00:47:39,760
happening in

1213
00:47:47,270 --> 00:47:44,160

esp today question mark with the

1214

00:47:49,990 --> 00:47:47,280

sub headline psychic research was

1215

00:47:52,470 --> 00:47:50,000

long ago taken from the world of fiction

1216

00:47:53,750 --> 00:47:52,480

and is the subject of serious scientific

1217

00:47:56,309 --> 00:47:53,760

investigation

1218

00:47:57,750 --> 00:47:56,319

dr charles osborne a senior physics

1219

00:48:00,470 --> 00:47:57,760

lecturer at corefield

1220

00:48:04,150 --> 00:48:00,480

institute of technology has been delving

1221

00:48:07,270 --> 00:48:04,160

into the phenomenon of esp since 1977

1222

00:48:09,349 --> 00:48:07,280

and the first part says the world of the

1223

00:48:11,270 --> 00:48:09,359

psychic researcher is very different

1224

00:48:13,910 --> 00:48:11,280

from that depicted in the media

1225

00:48:15,589 --> 00:48:13,920

it is not a world of things that go bump

1226

00:48:17,910 --> 00:48:15,599

in the night or people with

1227

00:48:18,870 --> 00:48:17,920

superhuman powers rather most of the

1228

00:48:22,390 --> 00:48:18,880

research is

1229

00:48:25,270 --> 00:48:22,400

as routine as in other areas of science

1230

00:48:26,870 --> 00:48:25,280

so what is happening in esp now let me

1231

00:48:27,670 --> 00:48:26,880

see if i can cut to the chase this

1232

00:48:30,309 --> 00:48:27,680

article mentions

1233

00:48:31,589 --> 00:48:30,319

things like out-of-body experience

1234

00:48:34,950 --> 00:48:31,599

telepathy

1235

00:48:37,430 --> 00:48:34,960

work on esp children has produced

1236

00:48:38,390 --> 00:48:37,440

some extremely interesting results it

1237

00:48:41,390 --> 00:48:38,400

says

1238

00:48:42,790 --> 00:48:41,400

it even talks about metal bending

1239

00:48:45,910 --> 00:48:42,800

reincarnation

1240

00:48:48,549 --> 00:48:45,920

and the final paragraph says

1241

00:48:50,069 --> 00:48:48,559

what of the future in australia there is

1242

00:48:51,990 --> 00:48:50,079

a need for centralized testing

1243

00:48:52,950 --> 00:48:52,000

laboratories and more testing of

1244

00:48:55,589 --> 00:48:52,960

children

1245

00:48:57,829 --> 00:48:55,599

people who have had psychic experiences

1246

00:48:59,190 --> 00:48:57,839

should contact the corefield institute

1247

00:49:03,030 --> 00:48:59,200

of technology

1248

00:49:07,510 --> 00:49:03,040

900 dandenong road po box 197

1249

00:49:09,990 --> 00:49:07,520

crawfield east 3145

1250

00:49:11,109 --> 00:49:10,000

so there we go another trip through the

1251
00:49:13,510 --> 00:49:11,119
decades

1252
00:49:17,109 --> 00:49:13,520
of the digitized newspapers magazines

1253
00:49:19,109 --> 00:49:17,119
and so on at trove.nla.gov

1254
00:49:20,309 --> 00:49:19,119
and a bit of a nostalgia trip i must say

1255
00:49:41,910 --> 00:49:20,319
looking at

1256
00:49:45,829 --> 00:49:43,430
thank you for listening to the skeptic

1257
00:49:47,109 --> 00:49:45,839
zone now next week's show should be

1258
00:49:50,470 --> 00:49:47,119
interesting

1259
00:49:53,670 --> 00:49:50,480
uh it will be produced

1260
00:49:57,270 --> 00:49:53,680
uh well at least released

1261
00:49:58,549 --> 00:49:57,280
during skepticon 2020. hmm

1262
00:50:01,190 --> 00:49:58,559
i'll have to look at the schedule and

1263
00:50:03,109 --> 00:50:01,200

see what i can tie in for that one

1264

00:50:04,309 --> 00:50:03,119

and i think by this time next week we'll

1265

00:50:07,510 --> 00:50:04,319

know the winner

1266

00:50:09,589 --> 00:50:07,520

of the bent spoon award and if you're

1267

00:50:11,670 --> 00:50:09,599

curious to know who's in the uh

1268

00:50:13,870 --> 00:50:11,680

running for the bench spoon the award

1269

00:50:17,190 --> 00:50:13,880

nobody wants to win just go to

1270

00:50:19,190 --> 00:50:17,200

skeptics.com.edu and look at the list of

1271

00:50:20,309 --> 00:50:19,200

i would say hopeful nominees hopeless

1272

00:50:23,430 --> 00:50:20,319

nominees

1273

00:50:25,910 --> 00:50:23,440

something like that

1274

00:50:27,750 --> 00:50:25,920

and of course before i go thank you to

1275

00:50:29,670 --> 00:50:27,760

all those lovely wonderful

1276

00:50:32,030 --> 00:50:29,680

helpful people who subscribe to the

1277

00:50:33,750 --> 00:50:32,040

skeptic zone at patreon on paypal at

1278

00:50:35,910 --> 00:50:33,760

skepticzone.tv

1279

00:50:37,829 --> 00:50:35,920

there's a big link there you can't miss

1280

00:50:40,870 --> 00:50:37,839

it and during this

1281

00:50:42,630 --> 00:50:40,880

ridiculous year the support of skeptic

1282

00:50:45,109 --> 00:50:42,640

zone listeners has meant more to the

1283

00:50:47,190 --> 00:50:45,119

show than ever before

1284

00:50:48,470 --> 00:50:47,200

but for this week this is richard

1285

00:50:54,549 --> 00:50:48,480

saunders signing off

1286

00:50:56,390 --> 00:50:54,559

from sydney australia

1287

00:50:57,829 --> 00:50:56,400

you've been listening to the skeptic

1288

00:51:00,990 --> 00:50:57,839

zone podcast

1289

00:51:02,390 --> 00:51:01,000

please visit our website at

1290

00:51:05,510 --> 00:51:02,400

www.skepticzone.tv

1291

00:51:07,430 --> 00:51:05,520

for show notes contacts and to access

1292

00:51:10,950 --> 00:51:07,440

the back catalog of episodes

1293

00:51:13,030 --> 00:51:10,960

going back to 2008. you can follow the

1294

00:51:16,470 --> 00:51:13,040

skepticzone podcast on twitter

1295

00:51:20,069 --> 00:51:16,480

at skepticzone visit our facebook page

1296

00:51:21,430 --> 00:51:20,079

or leave a review on itunes you can also

1297

00:51:24,710 --> 00:51:21,440

support the skeptic zone

1298

00:51:25,430 --> 00:51:24,720

via patreon or paypal the skeptic zone

1299

00:51:28,309 --> 00:51:25,440

podcast

1300

00:51:30,150 --> 00:51:28,319

is an independent production the views

1301
00:51:30,549 --> 00:51:30,160
and opinions expressed on the skeptic

1302
00:51:32,549 --> 00:51:30,559
zone

1303
00:51:34,470 --> 00:51:32,559
are not necessarily those of australian

1304
00:51:36,050 --> 00:51:34,480
skeptics or any other

1305
00:51:49,670 --> 00:51:36,060
skeptical organization

1306
00:51:53,670 --> 00:51:51,349
hello to the people who listen after the

1307
00:51:55,190 --> 00:51:53,680
music the afterthoughts for the dice

1308
00:51:58,309 --> 00:51:55,200
game

1309
00:52:01,349 --> 00:51:58,319
wow that's my giant

1310
00:52:02,710 --> 00:52:01,359
tub of dye diced day

1311
00:52:04,470 --> 00:52:02,720
why do i always get those things

1312
00:52:05,910 --> 00:52:04,480
confused all right i'm going to do a

1313
00:52:08,710 --> 00:52:05,920

very interesting one this week

1314

00:52:09,990 --> 00:52:08,720

normally we roll a d10 10 sided or a d6

1315

00:52:12,630 --> 00:52:10,000

the classic

1316

00:52:13,990 --> 00:52:12,640

three times and you use your psychic

1317

00:52:17,430 --> 00:52:14,000

powers to predict

1318

00:52:21,430 --> 00:52:17,440

see i'll use that one i'll use this one

1319

00:52:25,109 --> 00:52:21,440

i'll use this one and i'll use

1320

00:52:26,069 --> 00:52:25,119

this one okay i've got four variations

1321

00:52:29,270 --> 00:52:26,079

this week

1322

00:52:31,270 --> 00:52:29,280

to try out i'm gonna roll one uh each

1323

00:52:34,950 --> 00:52:31,280

one once

1324

00:52:39,589 --> 00:52:34,960

starting with a d

1325

00:52:41,670 --> 00:52:39,599

four a four-sided die

1326
00:52:43,030 --> 00:52:41,680
four-sided dice so here we go sorry

1327
00:52:46,630 --> 00:52:43,040
susan gerbic this

1328
00:52:50,150 --> 00:52:46,640
diet does not go up to five

1329
00:52:52,230 --> 00:52:50,160
or six so here we go

1330
00:52:53,910 --> 00:52:52,240
a d it's a shape of a pyramid it's quite

1331
00:52:54,630 --> 00:52:53,920
interesting i think i must have picked

1332
00:52:57,030 --> 00:52:54,640
this up in

1333
00:52:57,940 --> 00:52:57,040
a dragon con okay here we go the d4

1334
00:52:59,750 --> 00:52:57,950
first number is

1335
00:53:04,950 --> 00:52:59,760
[Music]

1336
00:53:09,109 --> 00:53:08,069
two the next one is the classic of

1337
00:53:12,150 --> 00:53:09,119
course a d6

1338
00:53:13,430 --> 00:53:12,160

excited the most uh widely used die in

1339

00:53:18,069 --> 00:53:13,440

the world i suppose

1340

00:53:23,349 --> 00:53:20,790

six second number six put that aside the

1341

00:53:27,190 --> 00:53:23,359

next one is a d10

1342

00:53:29,109 --> 00:53:27,200

oh lovely sort of translucent blue

1343

00:53:30,470 --> 00:53:29,119

um it's another thing i miss about not

1344

00:53:32,069 --> 00:53:30,480

being at uh

1345

00:53:34,630 --> 00:53:32,079

conventions and so forth because i give

1346

00:53:38,549 --> 00:53:34,640

away these skeptics own d10s

1347

00:53:44,150 --> 00:53:38,559

okay here we go ten

1348

00:53:47,750 --> 00:53:46,390

you have no idea how often i've started

1349

00:53:50,950 --> 00:53:47,760

recording

1350

00:53:51,589 --> 00:53:50,960

only to have planes come over there's

1351

00:53:54,829 --> 00:53:51,599

one now

1352

00:53:57,990 --> 00:53:54,839

anyway and the last one is a d

1353

00:54:00,710 --> 00:53:58,000

20. a d20

1354

00:54:02,549 --> 00:54:00,720

whatever pale blue i think d20 here we

1355

00:54:06,549 --> 00:54:02,559

go

1356

00:54:12,069 --> 00:54:06,559

and the number is what's that

1357

00:54:19,349 --> 00:54:15,109

this week's winning numbers are