



**Show 101**  
**24.Sept.2010**

[www.skepticzone.tv](http://www.skepticzone.tv)

1  
00:00:20,410 --> 00:00:09,500  
welcome to the skeptic zone the podcast

2  
00:00:27,730 --> 00:00:23,140  
welcome to the skeptic zone episode

3  
00:00:30,850 --> 00:00:27,740  
number 101 for the 24th of sep tember

4  
00:00:33,040 --> 00:00:30,860  
2010 Richard Saunders here with you once

5  
00:00:35,979 --> 00:00:33,050  
again back in Sydney on today's episode

6  
00:00:38,439 --> 00:00:35,989  
we have two interviews for you the first

7  
00:00:41,310 --> 00:00:38,449  
one is with Fraser Cain from astronomy

8  
00:00:44,830 --> 00:00:41,320  
cast I caught up with Fraser at

9  
00:00:47,350 --> 00:00:44,840  
dragoncon in Atlanta Georgia that's

10  
00:00:50,160 --> 00:00:47,360  
followed by another interview from Tam 8

11  
00:00:53,560 --> 00:00:50,170  
in Las Vegas this time with massimo

12  
00:00:56,259 --> 00:00:53,570  
pallucci about his book nonsense on

13  
00:00:58,840 --> 00:00:56,269

stilts and after that we have the think

14

00:01:01,329 --> 00:00:58,850

tank with special guests Maynard and a

15

00:01:03,219 --> 00:01:01,339

good friend of ours Meg who by the time

16

00:01:05,860 --> 00:01:03,229

this show comes out is on her way to

17

00:01:07,480 --> 00:01:05,870

Germany that's enough from me it's nice

18

00:01:08,890 --> 00:01:07,490

to be back in Sydney with my cats

19

00:01:11,770 --> 00:01:08,900

playing in the background they're

20

00:01:14,080 --> 00:01:11,780

teasing each other at well let's just

21

00:01:27,640 --> 00:01:14,090

get on with this episode of the skeptic

22

00:01:32,030 --> 00:01:29,719

listeners to the skeptics are no

23

00:01:33,800 --> 00:01:32,040

probably also fans I hope your fans of

24

00:01:37,609 --> 00:01:33,810

astronomy cast and we're lucky enough

25

00:01:39,499 --> 00:01:37,619

here at the lovely evening dinner on the

26

00:01:42,050 --> 00:01:39,509

last day of dragoncon to have one of the

27

00:01:45,950 --> 00:01:42,060

hosts of astronomy cast Fraser Cain

28

00:01:47,780 --> 00:01:45,960

hello hello as the auditor I'm doing

29

00:01:50,600 --> 00:01:47,790

well it's Kylie Sturgis is here with us

30

00:01:52,670 --> 00:01:50,610

Brian Dunning Daniel looks and people

31

00:01:57,820 --> 00:01:52,680

are just pouring in as we speak well one

32

00:01:59,740 --> 00:01:57,830

of them anyway n dr. Rachel ER now

33

00:02:03,260 --> 00:01:59,750

astronomy classes of course a

34

00:02:06,919 --> 00:02:03,270

wonderfully popular podcast all about

35

00:02:10,190 --> 00:02:06,929

astronomy with you and Pamela gay I what

36

00:02:12,110 --> 00:02:10,200

motivated you to to start that off well

37

00:02:15,440 --> 00:02:12,120

I'd uh I'd been doing a podcast on

38

00:02:17,300 --> 00:02:15,450

university day for about a year and I I

39

00:02:20,090 --> 00:02:17,310

enjoy the sort of random interviews with

40

00:02:22,220 --> 00:02:20,100

me with various astronomy professionals

41

00:02:23,360 --> 00:02:22,230

and I got I realized that I wanted to

42

00:02:27,170 --> 00:02:23,370

kind of take things to the next level

43

00:02:29,900 --> 00:02:27,180

and have a bit more of a almost an

44

00:02:31,340 --> 00:02:29,910

encyclopedia of an educational for my

45

00:02:35,390 --> 00:02:31,350

where we would instead of it being

46

00:02:38,930 --> 00:02:35,400

interviews on a news orientation more

47

00:02:40,460 --> 00:02:38,940

like we would we would explain topics

48

00:02:41,660 --> 00:02:40,470

from top to bottom and really give

49

00:02:43,670 --> 00:02:41,670

something that would stand the test of

50

00:02:45,020 --> 00:02:43,680

time it wouldn't be you know what's

51  
00:02:46,069 --> 00:02:45,030  
happening this week in space but

52  
00:02:47,509 --> 00:02:46,079  
something that you know you could come

53  
00:02:49,819 --> 00:02:47,519  
back three years five years ten years

54  
00:02:52,880 --> 00:02:49,829  
later and the podcast would still be as

55  
00:02:56,599 --> 00:02:52,890  
valuable as as it was when we recorded

56  
00:03:00,710 --> 00:02:56,609  
it so I I pitched the idea to this Phil

57  
00:03:03,259 --> 00:03:00,720  
Plait guy oh my god is my big idea and

58  
00:03:04,460 --> 00:03:03,269  
and Phil said no no I'm just I'm book

59  
00:03:07,520 --> 00:03:04,470  
too haven't you know I've got all this

60  
00:03:10,009 --> 00:03:07,530  
blog and I'm writing and I'm just too

61  
00:03:14,270 --> 00:03:10,019  
busy so and but he said you know but

62  
00:03:17,180 --> 00:03:14,280  
Pamela has just come up she was working

63  
00:03:20,300 --> 00:03:17,190

on slacker astronomy she's great really

64

00:03:23,390 --> 00:03:20,310

knows her stuff and so I am I gave her a

65

00:03:26,240 --> 00:03:23,400

call and within

66

00:03:28,670 --> 00:03:26,250

three days we recorded the first episode

67

00:03:30,710 --> 00:03:28,680

of astronomy castle who just you know is

68

00:03:33,979 --> 00:03:30,720

just it was click right away I explained

69

00:03:35,630 --> 00:03:33,989

it she got it we ran a couple of ideas

70

00:03:39,170 --> 00:03:35,640

and one of what a short for nuts would

71

00:03:41,509 --> 00:03:39,180

be and and and started recording you

72

00:03:43,940 --> 00:03:41,519

know within within days and and and I

73

00:03:45,979 --> 00:03:43,950

actually announced that we were going to

74

00:03:48,380 --> 00:03:45,989

be doing it here at DragonCon what four

75

00:03:49,699 --> 00:03:48,390

years ago and so now we've just wrapped

76  
00:03:52,670 --> 00:03:49,709  
up her fourth year starting our fifth

77  
00:03:53,960 --> 00:03:52,680  
year yeah fifth year fifth year yeah

78  
00:03:55,330 --> 00:03:53,970  
we're starting the fifth year now so we

79  
00:03:58,309 --> 00:03:55,340  
have done for years of astronomy casa

80  
00:04:00,580 --> 00:03:58,319  
197 episodes of the show with the live

81  
00:04:03,680 --> 00:04:00,590  
show that we did just yesterday and

82  
00:04:05,240 --> 00:04:03,690  
we've done move 30 or 40 question shows

83  
00:04:07,490 --> 00:04:05,250  
as well so yeah we've got a lot yeah

84  
00:04:10,220 --> 00:04:07,500  
that's a very important part of your

85  
00:04:12,470 --> 00:04:10,230  
show of course other questions and I

86  
00:04:14,059 --> 00:04:12,480  
think you'll show thrives on questions

87  
00:04:16,370 --> 00:04:14,069  
doesn't it from this missing yeah the

88  
00:04:18,319 --> 00:04:16,380

question shows are are you know just

89

00:04:20,330 --> 00:04:18,329

between you and me the question shows

90

00:04:22,249 --> 00:04:20,340

are my are my favorite part you and me

91

00:04:25,010 --> 00:04:22,259

and thousands died anyway yeah yeah if

92

00:04:26,990 --> 00:04:25,020

they won't tell anyone no no I love the

93

00:04:28,909 --> 00:04:27,000

question shows because you know with the

94

00:04:32,600 --> 00:04:28,919

with the regular topics you know we've

95

00:04:34,909 --> 00:04:32,610

got some preparation and and and we've

96

00:04:36,589 --> 00:04:34,919

got sort of a plan that we want to do

97

00:04:38,629 --> 00:04:36,599

but with the question shows it's just

98

00:04:39,800 --> 00:04:38,639

these the most amazing questions that

99

00:04:43,010 --> 00:04:39,810

come in from the listeners and we have

100

00:04:44,300 --> 00:04:43,020

no you know and you never even thought

101  
00:04:46,730 --> 00:04:44,310  
of that you know like someone asked me

102  
00:04:49,040 --> 00:04:46,740  
like what happens if a black hole

103  
00:04:51,200 --> 00:04:49,050  
collides with an antimatter black hole

104  
00:04:52,820 --> 00:04:51,210  
it had even occurred to us like I would

105  
00:04:55,010 --> 00:04:52,830  
have thought of that you know and then

106  
00:04:56,839 --> 00:04:55,020  
you're like well into Pamela's figuring

107  
00:04:59,510 --> 00:04:56,849  
out the what would happen and what would

108  
00:05:01,339 --> 00:04:59,520  
happen is nothing I mean it would be it

109  
00:05:03,290 --> 00:05:01,349  
would become a black hole with double

110  
00:05:04,670 --> 00:05:03,300  
the mass that it had before but it

111  
00:05:07,460 --> 00:05:04,680  
wouldn't be an explosion because nothing

112  
00:05:09,740 --> 00:05:07,470  
can leave the black hole so right so

113  
00:05:11,839 --> 00:05:09,750

even if there was an explosion inside

114

00:05:13,550 --> 00:05:11,849

this newly forming thing it couldn't

115

00:05:14,899 --> 00:05:13,560

leave the black hole so you'd end up

116

00:05:16,339 --> 00:05:14,909

with just double the mess it doesn't

117

00:05:18,649 --> 00:05:16,349

matter to energy mass doesn't matter

118

00:05:20,750 --> 00:05:18,659

it's all just black hole so but and and

119

00:05:22,070 --> 00:05:20,760

that's just one example and some great

120

00:05:23,899 --> 00:05:22,080

questions and the kind the kinds of

121

00:05:25,370 --> 00:05:23,909

questions that you know that four year

122

00:05:28,100 --> 00:05:25,380

olds will ask you know like why is there

123

00:05:30,129 --> 00:05:28,110

something and not nothing and what is

124

00:05:31,959 --> 00:05:30,139

time and and in

125

00:05:33,879 --> 00:05:31,969

and those are the best questions and

126

00:05:36,999 --> 00:05:33,889

will and will take will take them all on

127

00:05:38,739 --> 00:05:37,009

we'll take the questions that are that

128

00:05:42,100 --> 00:05:38,749

even you know we feel like it's not a

129

00:05:44,499 --> 00:05:42,110

very good question but we'll try to take

130

00:05:46,119 --> 00:05:44,509

it on we'll try and upgrade the question

131

00:05:48,159 --> 00:05:46,129

you know we're going to get a sense of

132

00:05:49,749 --> 00:05:48,169

what they were going after and then try

133

00:05:51,670 --> 00:05:49,759

and really take a run at it no matter

134

00:05:53,140 --> 00:05:51,680

almost what the question is so I really

135

00:05:54,459 --> 00:05:53,150

look forward to you know we've kind of

136

00:05:56,649 --> 00:05:54,469

fell behind the question shows with

137

00:05:58,600 --> 00:05:56,659

Pamela's crazy travel but we're gonna

138

00:06:02,830 --> 00:05:58,610

try and get back to that now I've been

139

00:06:04,749 --> 00:06:02,840

running little ad spots for astronomy

140

00:06:07,269 --> 00:06:04,759

cast ever since the skeptic zone started

141

00:06:10,119 --> 00:06:07,279

and so I hope a lot of our listeners

142

00:06:12,339 --> 00:06:10,129

have decided to give it a try and I'm

143

00:06:14,110 --> 00:06:12,349

sure they're even more inspired now so I

144

00:06:15,909 --> 00:06:14,120

encourage our listeners if you have a

145

00:06:18,939 --> 00:06:15,919

question about the one was my mysteries

146

00:06:20,439 --> 00:06:18,949

of space like Cheryl does down there

147

00:06:23,589 --> 00:06:20,449

laughing at something Brian done is

148

00:06:28,659 --> 00:06:23,599

doing must be something to do with

149

00:06:30,429 --> 00:06:28,669

Vegemite they can write in and if not

150

00:06:33,309 --> 00:06:30,439

have their question is answered at least

151  
00:06:34,749 --> 00:06:33,319  
a decent attempt yeah I mean it's the

152  
00:06:36,550 --> 00:06:34,759  
number of questions we get it's pretty

153  
00:06:37,959 --> 00:06:36,560  
overwhelming but we you know we were

154  
00:06:39,939 --> 00:06:37,969  
doing and we're going to get back to his

155  
00:06:41,709 --> 00:06:39,949  
promise promise is a question show a

156  
00:06:44,110 --> 00:06:41,719  
week we try and get through 10 15

157  
00:06:46,269 --> 00:06:44,120  
questions every week so so we do you

158  
00:06:48,490 --> 00:06:46,279  
know we do take on as much of that stuff

159  
00:06:50,350 --> 00:06:48,500  
as we can and and that just you know

160  
00:06:52,510 --> 00:06:50,360  
that's it coming around we're we're

161  
00:06:55,170 --> 00:06:52,520  
we're explaining so much about space

162  
00:06:57,459 --> 00:06:55,180  
that are that the listeners are now

163  
00:06:59,019 --> 00:06:57,469

understanding it so well that they've

164

00:07:00,939 --> 00:06:59,029

been then it's unlocking new questions

165

00:07:03,339 --> 00:07:00,949

for them and now I absolutely love it

166

00:07:06,040 --> 00:07:03,349

now it's interesting to note that the

167

00:07:08,909 --> 00:07:06,050

show's done in two locations you're in

168

00:07:11,999 --> 00:07:08,919

canada and of course pamela gays in

169

00:07:15,070 --> 00:07:12,009

edwardsville that's right yeah so I live

170

00:07:17,139 --> 00:07:15,080

halfway up vancouver island in a little

171

00:07:19,329 --> 00:07:17,149

town called Courtney for anyone who

172

00:07:22,589 --> 00:07:19,339

knows where that is and Pamela lives in

173

00:07:26,619 --> 00:07:22,599

illinois and so we do the whole show

174

00:07:28,719 --> 00:07:26,629

remotely we connect on skype i record my

175

00:07:30,969 --> 00:07:28,729

half a conversation she records her half

176  
00:07:32,150 --> 00:07:30,979  
of the conversation and then we we both

177  
00:07:34,220 --> 00:07:32,160  
ftp we

178  
00:07:37,700 --> 00:07:34,230  
both transmit our halves of the show

179  
00:07:39,500 --> 00:07:37,710  
into our engineer and he mixes it and

180  
00:07:40,970 --> 00:07:39,510  
adjust the levels and makes it sound

181  
00:07:44,900 --> 00:07:40,980  
like we're in the same room and in fact

182  
00:07:47,510 --> 00:07:44,910  
we had never met for the first 18 months

183  
00:07:48,800 --> 00:07:47,520  
of doing the show no yeah yeah and

184  
00:07:49,940 --> 00:07:48,810  
nobody had no one there they go we

185  
00:07:51,380 --> 00:07:49,950  
thought you couldn't believe that we

186  
00:07:52,910 --> 00:07:51,390  
weren't in the same room it's just you

187  
00:07:55,220 --> 00:07:52,920  
know once again like I said just the

188  
00:07:56,090 --> 00:07:55,230

chemistry right away really worked well

189

00:07:58,310 --> 00:07:56,100

and so we were able to have that

190

00:08:00,050 --> 00:07:58,320

conversation and now you know now we've

191

00:08:01,880 --> 00:08:00,060

met a bunch of times and in fact here at

192

00:08:04,340 --> 00:08:01,890

the Dragon Con we did our first live

193

00:08:05,810 --> 00:08:04,350

show together you know Pamela is usually

194

00:08:07,130 --> 00:08:05,820

able to do all the live shows and this

195

00:08:08,900 --> 00:08:07,140

is the first time I thought I was able

196

00:08:12,080 --> 00:08:08,910

to able to you know get me off of the

197

00:08:18,080 --> 00:08:12,090

island in to do the show which is great

198

00:08:21,230 --> 00:08:18,090

is that any way need Gibson um yes yeah

199

00:08:24,530 --> 00:08:21,240

I'm sure the Australian listeners of my

200

00:08:27,320 --> 00:08:24,540

vintage would know Gibson from the beach

201  
00:08:30,230 --> 00:08:27,330  
connoisseurs of course yeah yeah so we

202  
00:08:33,890 --> 00:08:30,240  
are the island i live on is is is sort

203  
00:08:35,600 --> 00:08:33,900  
of across the strait of georgia from

204  
00:08:37,580 --> 00:08:35,610  
gibson where the Beachcomber sir so

205  
00:08:39,050 --> 00:08:37,590  
that's a real profession in that part of

206  
00:08:43,490 --> 00:08:39,060  
the world is beachcombing like they were

207  
00:08:45,320 --> 00:08:43,500  
on the TV ah not sure how much you

208  
00:08:47,810 --> 00:08:45,330  
losers want to hear about this um i

209  
00:08:49,370 --> 00:08:47,820  
want.i there's a ton of logging in

210  
00:08:54,140 --> 00:08:49,380  
british columbia up and down vancouver

211  
00:08:57,470 --> 00:08:54,150  
island and they have these huge barges

212  
00:09:00,260 --> 00:08:57,480  
filled with with logs and the logs will

213  
00:09:01,610 --> 00:09:00,270

will will disconnect from the barge and

214

00:09:02,690 --> 00:09:01,620

just float free and end up on the

215

00:09:06,050 --> 00:09:02,700

beaches

216

00:09:07,550 --> 00:09:06,060

and so but all of the logs will all have

217

00:09:10,970 --> 00:09:07,560

a stamp on them and they're all owned by

218

00:09:14,810 --> 00:09:10,980

the timber companies and so people will

219

00:09:16,640 --> 00:09:14,820

go and they will hook up a line and

220

00:09:19,610 --> 00:09:16,650

they'll pull these logs back off of the

221

00:09:20,510 --> 00:09:19,620

beaches and sell them either either you

222

00:09:21,650 --> 00:09:20,520

know they'll sell them back to the

223

00:09:23,330 --> 00:09:21,660

logging companies or sell them on the

224

00:09:26,210 --> 00:09:23,340

roulade I don't know any beach cover

225

00:09:28,310 --> 00:09:26,220

these doesn't happen you know very often

226

00:09:29,750 --> 00:09:28,320

but that's but there's there's a lot of

227

00:09:31,730 --> 00:09:29,760

you know driftwood and stuff that comes

228

00:09:34,760 --> 00:09:31,740

up soon well I use do you remember that

229

00:09:39,170 --> 00:09:34,770

that show reishi the beachcombers no I'm

230

00:09:42,290 --> 00:09:39,180

home nice chicken but what if Thomas I

231

00:09:47,660 --> 00:09:42,300

was sorry but I never saw you do do do

232

00:09:50,420 --> 00:09:47,670

do did it and relegate young guy who's

233

00:09:52,310 --> 00:09:50,430

there and now what was that Nick adana

234

00:09:53,930 --> 00:09:52,320

des or something like that Molly's reach

235

00:09:55,280 --> 00:09:53,940

yeah I know we used to watch that as

236

00:09:58,070 --> 00:09:55,290

well I mean there's you know we only had

237

00:09:59,330 --> 00:09:58,080

with CBC and in a couple of the channels

238

00:10:00,860 --> 00:09:59,340

and that was one of these you watched on

239

00:10:06,610 --> 00:10:00,870

like sunday night you know right before

240

00:10:09,410 --> 00:10:06,620

it before Fraggie Rock The Muppets yeah

241

00:10:11,060 --> 00:10:09,420

oh that's fantastic so listeners I

242

00:10:13,430 --> 00:10:11,070

sincerely encourage you if you haven't

243

00:10:16,670 --> 00:10:13,440

tried a astronomy cast with Fraser and

244

00:10:19,520 --> 00:10:16,680

Pamela it's such a wonderful show they

245

00:10:22,580 --> 00:10:19,530

do it so well and i do i love the

246

00:10:23,870 --> 00:10:22,590

questions but people send you in and

247

00:10:25,220 --> 00:10:23,880

they're not really trying to stump you

248

00:10:26,870 --> 00:10:25,230

but they're just trying to find out the

249

00:10:29,240 --> 00:10:26,880

answer to these these interesting things

250

00:10:32,150 --> 00:10:29,250

so thank you for your time tonight over

251  
00:10:33,680 --> 00:10:32,160  
your dinner and good luck in the future

252  
00:10:35,390 --> 00:10:33,690  
well thanks a lot Richard it's great to

253  
00:10:50,340 --> 00:10:35,400  
see you again and we'll talk to you

254  
00:10:54,760 --> 00:10:52,690  
astronomy cast who takes a fact space

255  
00:10:56,470 --> 00:10:54,770  
journey through the cosmos as it offers

256  
00:10:59,170 --> 00:10:56,480  
listeners weekly discussions on

257  
00:11:02,079 --> 00:10:59,180  
astronomical topics ranging from planets

258  
00:11:04,360 --> 00:11:02,089  
to cosmology hosted by Fraser Cain of

259  
00:11:05,380 --> 00:11:04,370  
Universe Today and myself dr. Pamela

260  
00:11:08,050 --> 00:11:05,390  
gave southern illinois university

261  
00:11:09,910 --> 00:11:08,060  
edwardsville this show brings the

262  
00:11:12,370 --> 00:11:09,920  
questions of an avid astronomy lover

263  
00:11:14,440 --> 00:11:12,380

directly to an astronomer together

264

00:11:16,000 --> 00:11:14,450

Fraser and I explore what is known and

265

00:11:18,760 --> 00:11:16,010

being discovered about the universe

266

00:11:20,829 --> 00:11:18,770

around us join us each week as we take a

267

00:11:33,870 --> 00:11:20,839

fact space journey through the cosmos at

268

00:11:39,640 --> 00:11:36,250

Massimo pallucci is a professor of

269

00:11:41,890 --> 00:11:39,650

psychology in New York City his research

270

00:11:43,810 --> 00:11:41,900

is concerned with philosophy of science

271

00:11:45,850 --> 00:11:43,820

the relationship between science and

272

00:11:48,550 --> 00:11:45,860

philosophy and the relationship between

273

00:11:51,010 --> 00:11:48,560

science and religion his latest book is

274

00:11:53,260 --> 00:11:51,020

nonsense on stilts how to tell science

275

00:11:55,690 --> 00:11:53,270

from bunk and guest speaker at the

276

00:12:02,260 --> 00:11:55,700

amazing meeting eight he took time out

277

00:12:04,060 --> 00:12:02,270

to have a chat with me and now I'm

278

00:12:06,640 --> 00:12:04,070

delighted to be talking with her Massimo

279

00:12:08,110 --> 00:12:06,650

pallucci hello hi it's a very nice of

280

00:12:10,480 --> 00:12:08,120

you to give me some time here at the

281

00:12:12,490 --> 00:12:10,490

amazing meeting aid it's a pleasure and

282

00:12:14,260 --> 00:12:12,500

I noticed you was scheduled to talk this

283

00:12:16,780 --> 00:12:14,270

morning but I think they've juggled the

284

00:12:18,490 --> 00:12:16,790

yeah my friend Michael Shermer asked me

285

00:12:19,960 --> 00:12:18,500

to switch because he's giving another

286

00:12:22,060 --> 00:12:19,970

talk tomorrow at a libertarian meeting

287

00:12:23,560 --> 00:12:22,070

of all things oh really in town yes ok

288

00:12:26,740 --> 00:12:23,570

well it's nice of you to do that

289

00:12:28,030 --> 00:12:26,750

although I was very keen to to do he you

290

00:12:31,150 --> 00:12:28,040

speak i'll have to wait till tomorrow a

291

00:12:33,040 --> 00:12:31,160

few hours yes if you more now your

292

00:12:36,010 --> 00:12:33,050

publishers very kindly sent me a copy of

293

00:12:38,410 --> 00:12:36,020

your book nonsense on stilts which has a

294

00:12:40,870 --> 00:12:38,420

great cover of course with the the fit

295

00:12:42,970 --> 00:12:40,880

why do we have fish walking on stilts

296

00:12:44,050 --> 00:12:42,980

because that's so ridiculous it is good

297

00:12:46,960 --> 00:12:44,060

that's right so ridiculous that's

298

00:12:48,910 --> 00:12:46,970

actually an illustration from a book on

299

00:12:51,640 --> 00:12:48,920

nonsense that was published in the 19th

300

00:12:53,260 --> 00:12:51,650

century and and that's that we got these

301  
00:12:55,450 --> 00:12:53,270  
idea that it's really represented

302  
00:12:57,550 --> 00:12:55,460  
captures you know the absurdity of some

303  
00:12:59,230 --> 00:12:57,560  
pseudo scientific notions it's just like

304  
00:13:03,550 --> 00:12:59,240  
having a really really tall order of

305  
00:13:05,830 --> 00:13:03,560  
nonsense so as crazy as it looks a fish

306  
00:13:08,770 --> 00:13:05,840  
on land walking on stairs right with

307  
00:13:10,870 --> 00:13:08,780  
little boots on that's right and how

308  
00:13:13,660 --> 00:13:10,880  
long is this book been out now I just

309  
00:13:15,790 --> 00:13:13,670  
came out a few weeks ago and you know

310  
00:13:18,040 --> 00:13:15,800  
I'm very pleased with it it's been doing

311  
00:13:19,540 --> 00:13:18,050  
very well it's more important track I

312  
00:13:21,850 --> 00:13:19,550  
think it was a lot of fun to write them

313  
00:13:25,000 --> 00:13:21,860

oh that's so good that's important now

314

00:13:27,070 --> 00:13:25,010

really who you aiming this book at is is

315

00:13:28,390 --> 00:13:27,080

it aimed at the general skeptical

316

00:13:30,730 --> 00:13:28,400

audience or is it aimed at people who

317

00:13:33,550 --> 00:13:30,740

are very interested in the skeptical and

318

00:13:36,760 --> 00:13:33,560

critical thinking the idea is to write

319

00:13:37,810 --> 00:13:36,770

for the general public for the what one

320

00:13:39,820 --> 00:13:37,820

might refer to as the average

321

00:13:42,670 --> 00:13:39,830

intelligent reader meaning somebody who

322

00:13:43,720 --> 00:13:42,680

has you know a college background that

323

00:13:46,240 --> 00:13:43,730

is enough

324

00:13:47,560 --> 00:13:46,250

to understand appreciate basic issues in

325

00:13:50,290 --> 00:13:47,570

science there's no requirement for

326

00:13:52,060 --> 00:13:50,300

actual background in science or in

327

00:13:53,560 --> 00:13:52,070

philosophy for that matter although the

328

00:13:55,240 --> 00:13:53,570

book does touch on a lot of

329

00:13:57,220 --> 00:13:55,250

philosophical issues philosophy of

330

00:13:58,689 --> 00:13:57,230

science issues but the idea is to reach

331

00:14:00,370 --> 00:13:58,699

as broad an audience as possible because

332

00:14:01,629 --> 00:14:00,380

as you know you know it's easy enough to

333

00:14:03,069 --> 00:14:01,639

talk to skeptics I mean we have a

334

00:14:04,990 --> 00:14:03,079

wonderful meeting here at twelve

335

00:14:06,400 --> 00:14:05,000

thirteen hundred people yeah but in some

336

00:14:08,590 --> 00:14:06,410

sense that isn't fat talking to the

337

00:14:11,350 --> 00:14:08,600

converts of course and the idea is to

338

00:14:14,230 --> 00:14:11,360

try to stretch a little bit what we can

339

00:14:17,590 --> 00:14:14,240

reach and in who we can get interested

340

00:14:18,759 --> 00:14:17,600

in a basic understanding of science and

341

00:14:22,090 --> 00:14:18,769

the difference between it and

342

00:14:23,530 --> 00:14:22,100

pseudoscience right right and I know

343

00:14:25,780 --> 00:14:23,540

it's only been out for short time then

344

00:14:28,960 --> 00:14:25,790

but have you had some good feedback from

345

00:14:30,189 --> 00:14:28,970

it already yes you know the I get of

346

00:14:32,500 --> 00:14:30,199

course feedback through all sorts of

347

00:14:35,350 --> 00:14:32,510

means these days you know Facebook and

348

00:14:38,829 --> 00:14:35,360

nah i love the social networking on my

349

00:14:40,329 --> 00:14:38,839

blog and and of course on the amazon

350

00:14:41,860 --> 00:14:40,339

rankings you know people start writing

351

00:14:43,360 --> 00:14:41,870

reviews and all that sort stuff so it's

352

00:14:46,540 --> 00:14:43,370

very actually it's very very interesting

353

00:14:50,160 --> 00:14:46,550

to get that kind of feedback as an

354

00:14:52,420 --> 00:14:50,170

author because you really get a sense of

355

00:14:53,980 --> 00:14:52,430

how you know how many different ways

356

00:14:56,230 --> 00:14:53,990

what you write can actually be

357

00:14:58,090 --> 00:14:56,240

understood or interpreted or what is it

358

00:15:00,790 --> 00:14:58,100

yeah what is it that made some people

359

00:15:02,980 --> 00:15:00,800

take for instance one of the positive

360

00:15:05,949 --> 00:15:02,990

reviews that came out early on for the

361

00:15:08,680 --> 00:15:05,959

book was in the independent i believe

362

00:15:11,470 --> 00:15:08,690

british paper and they focused entirely

363

00:15:12,819 --> 00:15:11,480

on the chapter on global warming and you

364

00:15:14,290 --> 00:15:12,829

know that's because that was their issue

365

00:15:16,870 --> 00:15:14,300

at that at that point i'm not surprised

366

00:15:20,230 --> 00:15:16,880

yes yes I noticed there was a chapter

367

00:15:23,500 --> 00:15:20,240

dealing with that um now we on the

368

00:15:25,300 --> 00:15:23,510

skeptic zone podcasts weird sort of

369

00:15:29,949 --> 00:15:25,310

steer clear of that issue a little bit

370

00:15:32,559 --> 00:15:29,959

wisely sorry because I it's it's unlike

371

00:15:36,309 --> 00:15:32,569

any other topic I've seen in my years of

372

00:15:39,400 --> 00:15:36,319

being in the skeptical movement it's it's

373

00:15:41,680 --> 00:15:39,410

such passion yes from both sides both

374

00:15:43,269 --> 00:15:41,690

sides and if I did this is what we'll be

375

00:15:45,280 --> 00:15:43,279

talking about tomorrow in my

376

00:15:48,250 --> 00:15:45,290

presentation here the question that

377

00:15:51,189 --> 00:15:48,260

fascinating fascinates me is what

378

00:15:53,710 --> 00:15:51,199

exactly is the role of skeptics in terms

379

00:15:55,389 --> 00:15:53,720

of mediating between science and the

380

00:15:56,820 --> 00:15:55,399

general public the way I always

381

00:15:59,710 --> 00:15:56,830

understood the skeptical moment

382

00:16:01,840 --> 00:15:59,720

was on two levels on the one hand we're

383

00:16:04,450 --> 00:16:01,850

very good at doing debunking of things

384

00:16:07,300 --> 00:16:04,460

that are obviously well known to be buck

385

00:16:09,520 --> 00:16:07,310

you know so astrology parapsychology you

386

00:16:11,440 --> 00:16:09,530

followed you all these other things we

387

00:16:12,640 --> 00:16:11,450

know how to do it we are probably the

388

00:16:14,590 --> 00:16:12,650

best people to do it better than

389

00:16:15,850 --> 00:16:14,600

scientists because scientists don't have

390

00:16:17,230 --> 00:16:15,860

the time that I've the background and

391

00:16:19,060 --> 00:16:17,240

enter training don't have the training

392

00:16:20,860 --> 00:16:19,070

exactly that's why James Randi so good

393

00:16:22,540 --> 00:16:20,870

yeah what it does for Penn & Teller you

394

00:16:25,390 --> 00:16:22,550

know that because they know where the

395

00:16:27,580 --> 00:16:25,400

tricks are in how to uncover them so

396

00:16:29,230 --> 00:16:27,590

that's 11 11 the second thing that I

397

00:16:32,620 --> 00:16:29,240

thought always thought the skeptic

398

00:16:35,500 --> 00:16:32,630

moment was about was to promote critical

399

00:16:37,630 --> 00:16:35,510

thinking and understanding of science in

400

00:16:39,610 --> 00:16:37,640

other words as skeptics as mediators

401  
00:16:41,500 --> 00:16:39,620  
between the professional scientists who

402  
00:16:44,110 --> 00:16:41,510  
often either don't have the time or the

403  
00:16:46,750 --> 00:16:44,120  
inclination or the incentive to write

404  
00:16:48,220 --> 00:16:46,760  
for general public and the public but

405  
00:16:49,660 --> 00:16:48,230  
when it comes to thing issues like

406  
00:16:50,740 --> 00:16:49,670  
global warming that's an interesting

407  
00:16:52,930 --> 00:16:50,750  
there's an interesting situation because

408  
00:16:55,150 --> 00:16:52,940  
that's an area where skeptics do not

409  
00:16:57,700 --> 00:16:55,160  
have expertise you know most kept

410  
00:16:59,650 --> 00:16:57,710  
exogenous climate climate change you

411  
00:17:02,350 --> 00:16:59,660  
know change a scientist yeah they

412  
00:17:03,760 --> 00:17:02,360  
literally do not know what goes into the

413  
00:17:05,350 --> 00:17:03,770

climate change models they don't

414

00:17:07,720 --> 00:17:05,360

understand the data they understand the

415

00:17:09,610 --> 00:17:07,730

science behind it nor we should really

416

00:17:11,410 --> 00:17:09,620

expect them to because it's not there

417

00:17:14,200 --> 00:17:11,420

there I really well it's it's like

418

00:17:15,940 --> 00:17:14,210

asking the general public to have our

419

00:17:18,310 --> 00:17:15,950

expertise when it comes to spotting the

420

00:17:20,980 --> 00:17:18,320

critical thinking recently they don't

421

00:17:23,170 --> 00:17:20,990

and why should they exactly so but then

422

00:17:25,270 --> 00:17:23,180

what makes it puzzling then is that you

423

00:17:28,570 --> 00:17:25,280

would expect therefore that skeptics

424

00:17:30,550 --> 00:17:28,580

would take about climate change the same

425

00:17:34,210 --> 00:17:30,560

exact latitude that they take about say

426  
00:17:35,590 --> 00:17:34,220  
evolution or the connection between HIV

427  
00:17:37,390 --> 00:17:35,600  
and AIDS or the connection between

428  
00:17:38,680 --> 00:17:37,400  
vaccines and audit and all those kind of

429  
00:17:40,300 --> 00:17:38,690  
things in other words they will look at

430  
00:17:41,740 --> 00:17:40,310  
the scientific literature what the

431  
00:17:43,030 --> 00:17:41,750  
scientific consensus is and they will

432  
00:17:44,620 --> 00:17:43,040  
say and then we're trying to explain to

433  
00:17:46,570 --> 00:17:44,630  
the public look here is the best

434  
00:17:48,340 --> 00:17:46,580  
understanding that we have course

435  
00:17:50,590 --> 00:17:48,350  
science is always fallible of course our

436  
00:17:51,790 --> 00:17:50,600  
understanding can always change but at

437  
00:17:54,160 --> 00:17:51,800  
the moment this is the best

438  
00:17:57,070 --> 00:17:54,170

understanding well we do that with

439

00:17:59,080 --> 00:17:57,080

evolution we do that with with HIV we do

440

00:18:01,000 --> 00:17:59,090

that with vaccines but we don't do it or

441

00:18:02,530 --> 00:18:01,010

some of us the good climate change

442

00:18:05,800 --> 00:18:02,540

that's right and it's very interesting

443

00:18:07,660 --> 00:18:05,810

to ask why and I think you know what I

444

00:18:09,660 --> 00:18:07,670

suggest in the book is that the reason

445

00:18:12,360 --> 00:18:09,670

for that is because there is a

446

00:18:14,610 --> 00:18:12,370

the number of skeptics who are committed

447

00:18:16,020 --> 00:18:14,620

libertarians who are you essentially

448

00:18:18,330 --> 00:18:16,030

committed to a particular political

449

00:18:21,120 --> 00:18:18,340

world view now we all are I mean I have

450

00:18:22,590 --> 00:18:21,130

my own political views obviously if you

451  
00:18:23,910 --> 00:18:22,600  
did not have your political views that

452  
00:18:26,760 --> 00:18:23,920  
would make you a very strange and

453  
00:18:28,890 --> 00:18:26,770  
unconnected individual in society right

454  
00:18:33,840 --> 00:18:28,900  
but but the libertarian worldview is

455  
00:18:35,970 --> 00:18:33,850  
such that it easily gravitates toward a

456  
00:18:39,300 --> 00:18:35,980  
rejection of certain aspect of science

457  
00:18:41,310 --> 00:18:39,310  
because they seem to understand that a

458  
00:18:42,810 --> 00:18:41,320  
particularly acceptance for instance of

459  
00:18:45,510 --> 00:18:42,820  
the notion of climate change then

460  
00:18:47,580 --> 00:18:45,520  
automatically leads to certain kinds of

461  
00:18:49,260 --> 00:18:47,590  
measures that are heavily you know

462  
00:18:50,520 --> 00:18:49,270  
involved with government intervention

463  
00:18:52,140 --> 00:18:50,530

and that sort of thing and since they do

464

00:18:55,110 --> 00:18:52,150

not like the idea of government

465

00:18:56,850 --> 00:18:55,120

invention then they reject the science I

466

00:18:59,130 --> 00:18:56,860

think that's not a rational approach

467

00:19:01,950 --> 00:18:59,140

there is a distinction between the

468

00:19:03,870 --> 00:19:01,960

science itself and what you do about it

469

00:19:05,820 --> 00:19:03,880

if you agree that there is a problem so

470

00:19:07,260 --> 00:19:05,830

the policy in other words now as far as

471

00:19:09,450 --> 00:19:07,270

the science I think there is very little

472

00:19:11,580 --> 00:19:09,460

discussion that skeptics can it can

473

00:19:13,230 --> 00:19:11,590

participate to simply because they don't

474

00:19:14,340 --> 00:19:13,240

have the technical know-how they just

475

00:19:16,110 --> 00:19:14,350

don't know literally they don't know

476

00:19:18,390 --> 00:19:16,120

what you're talking about yeah yeah now

477

00:19:20,190 --> 00:19:18,400

the scientist again you know you can

478

00:19:22,620 --> 00:19:20,200

always find of course scientists who

479

00:19:24,000 --> 00:19:22,630

disagree on whatever consensus general

480

00:19:25,320 --> 00:19:24,010

consensus there is within the community

481

00:19:27,030 --> 00:19:25,330

you can find biologists we don't believe

482

00:19:28,740 --> 00:19:27,040

in evolution and so I'm sure you can

483

00:19:31,140 --> 00:19:28,750

find climate scientists who don't think

484

00:19:32,670 --> 00:19:31,150

that climate change is happening but my

485

00:19:34,350 --> 00:19:32,680

understanding of the literature is that

486

00:19:35,580 --> 00:19:34,360

in fact you would want a majority of the

487

00:19:39,150 --> 00:19:35,590

people who know what they're talking

488

00:19:40,110 --> 00:19:39,160

about agrees that the best conclusion at

489

00:19:42,690 --> 00:19:40,120

the moment is that it is in fact

490

00:19:45,420 --> 00:19:42,700

happening in and it is at least in part

491

00:19:47,400 --> 00:19:45,430

human cost given that that's what we

492

00:19:49,140 --> 00:19:47,410

skeptics should accept because we do not

493

00:19:51,540 --> 00:19:49,150

have the expertise to challenge that

494

00:19:53,790 --> 00:19:51,550

particular conclusion when it comes to

495

00:19:55,560 --> 00:19:53,800

policies to okay well what we're going

496

00:19:56,850 --> 00:19:55,570

to do about at this point that's a

497

00:19:58,620 --> 00:19:56,860

different matter because then it's a

498

00:20:00,120 --> 00:19:58,630

question of not only expertise I mean

499

00:20:02,070 --> 00:20:00,130

there to you do need expertise because

500

00:20:05,160 --> 00:20:02,080

what to do about it it's also impart the

501  
00:20:07,200 --> 00:20:05,170  
technical question but how you're going

502  
00:20:08,640 --> 00:20:07,210  
to go about deploying certain measures

503  
00:20:10,320 --> 00:20:08,650  
or others that becomes a matter of

504  
00:20:12,060 --> 00:20:10,330  
policy make it and it does become a

505  
00:20:15,000 --> 00:20:12,070  
matter of politics so there I can't

506  
00:20:16,710 --> 00:20:15,010  
understand how there can be a reasonable

507  
00:20:18,150 --> 00:20:16,720  
discussion about well how much

508  
00:20:19,620 --> 00:20:18,160  
government of engine you want to do and

509  
00:20:21,870 --> 00:20:19,630  
under what constrains and so on and so

510  
00:20:23,220 --> 00:20:21,880  
forth but the two aspects are separate

511  
00:20:25,980 --> 00:20:23,230  
and it's interesting to me too

512  
00:20:28,049 --> 00:20:25,990  
see a group of you know critical

513  
00:20:29,640 --> 00:20:28,059

thinkers people who otherwise like you

514

00:20:32,190 --> 00:20:29,650

know my colleague span and Teller or

515

00:20:33,600 --> 00:20:32,200

James R and himself or Michael Shermer

516

00:20:37,200 --> 00:20:33,610

until a few years ago he changed his

517

00:20:38,730 --> 00:20:37,210

mine recently to his credit he looked at

518

00:20:40,350 --> 00:20:38,740

the data i looked at the publications in

519

00:20:42,120 --> 00:20:40,360

the technical literature in said yeah

520

00:20:44,490 --> 00:20:42,130

guys that it doesn't make any sense to

521

00:20:46,200 --> 00:20:44,500

deny that there's no change so you came

522

00:20:47,640 --> 00:20:46,210

around but it's interesting to see these

523

00:20:49,500 --> 00:20:47,650

people who are obviously intelligent

524

00:20:50,970 --> 00:20:49,510

people who are obviously critically in

525

00:20:54,000 --> 00:20:50,980

your trained in critical thinking and

526

00:20:56,340 --> 00:20:54,010

yet they make what I think are fairly

527

00:20:58,080 --> 00:20:56,350

major blunders because of a particular

528

00:20:59,789 --> 00:20:58,090

ideological position that it's so

529

00:21:03,150 --> 00:20:59,799

important to them in terms of politics

530

00:21:06,210 --> 00:21:03,160

Paula because as our saying it's it's

531

00:21:08,940 --> 00:21:06,220

it's a topic which brings the passion so

532

00:21:11,400 --> 00:21:08,950

I've rarely seen and it's very

533

00:21:15,120 --> 00:21:11,410

interesting when someone will come to to

534

00:21:17,430 --> 00:21:15,130

me as a skeptic the media in Australia

535

00:21:20,340 --> 00:21:17,440

for example and they will expect me to

536

00:21:22,770 --> 00:21:20,350

be a global warming skeptic grow desire

537

00:21:25,260 --> 00:21:22,780

or whatever the case may be and when I

538

00:21:27,060 --> 00:21:25,270

put it to some journalists basically

539

00:21:29,250 --> 00:21:27,070

what you said to me no I'm not an expert

540

00:21:32,159 --> 00:21:29,260

and I must go with a consensus of

541

00:21:35,010 --> 00:21:32,169

scientific opinion they were really

542

00:21:37,860 --> 00:21:35,020

disappointed right that's in part if I

543

00:21:39,419 --> 00:21:37,870

think I think is a result of the use of

544

00:21:41,610 --> 00:21:39,429

the word skeptic I mean I love the word

545

00:21:44,190 --> 00:21:41,620

scale yeah I guess I'm proud to be a

546

00:21:45,330 --> 00:21:44,200

skeptic and and to me there isn't you

547

00:21:47,370 --> 00:21:45,340

know interesting connection of course

548

00:21:50,610 --> 00:21:47,380

with the history of skepticism both in

549

00:21:52,020 --> 00:21:50,620

the sense that we of the word that we

550

00:21:53,310 --> 00:21:52,030

mean today and of course in the in the

551

00:21:55,260 --> 00:21:53,320

classical sense of you know the

552

00:21:56,909 --> 00:21:55,270

skeptical philosophers it's all very

553

00:21:58,860 --> 00:21:56,919

interesting and it's a great word and we

554

00:22:00,510 --> 00:21:58,870

should retain it unfortunately wherever

555

00:22:02,669 --> 00:22:00,520

it does have a couple of connotations

556

00:22:04,260 --> 00:22:02,679

that are difficult to get the general

557

00:22:05,850 --> 00:22:04,270

public away from one of them is that

558

00:22:07,409 --> 00:22:05,860

you're a skeptic you must be all so

559

00:22:09,630 --> 00:22:07,419

cynical somehow cynically you know

560

00:22:11,370 --> 00:22:09,640

you're not you're not fun usually always

561

00:22:14,100 --> 00:22:11,380

that they say you're kind of thing and

562

00:22:15,960 --> 00:22:14,110

boy if you were at the drinking

563

00:22:17,310 --> 00:22:15,970

skeptically last night for its that you

564

00:22:19,740 --> 00:22:17,320

will definitely understand it that is

565

00:22:21,450 --> 00:22:19,750

not the case that that's one thing but

566

00:22:23,970 --> 00:22:21,460

the other thing as you pointed out is

567

00:22:26,340 --> 00:22:23,980

that then people expect you to basically

568

00:22:27,930 --> 00:22:26,350

take a no position negative position on

569

00:22:29,700 --> 00:22:27,940

pretty much anything yeah that's of

570

00:22:33,090 --> 00:22:29,710

course not what skepticism eats this

571

00:22:35,240 --> 00:22:33,100

skepticism is about a reasoned analysis

572

00:22:36,820 --> 00:22:35,250

of a situation and in about

573

00:22:38,860 --> 00:22:36,830

proportioning your belief

574

00:22:40,450 --> 00:22:38,870

to the evidence so if the evidence is

575

00:22:41,799 --> 00:22:40,460

overwhelming of course you're going to

576

00:22:43,299 --> 00:22:41,809

accept a certain notion at least

577

00:22:45,279 --> 00:22:43,309

provisionally I mean I'm perfectly

578

00:22:46,389 --> 00:22:45,289

convinced that it is the earth that goes

579

00:22:48,070 --> 00:22:46,399

around the Sun and not the other way

580

00:22:50,649 --> 00:22:48,080

around I thinking I'm not a skeptic in

581

00:22:53,259 --> 00:22:50,659

that sense i think that the evidence is

582

00:22:55,480 --> 00:22:53,269

overwhelming yes yes that's right and we

583

00:22:57,730 --> 00:22:55,490

are speaking of the things in space

584

00:23:00,519 --> 00:22:57,740

another not so much anymore

585

00:23:03,580 --> 00:23:00,529

interestingly enough but over the last

586

00:23:05,860 --> 00:23:03,590

few years people would expect us to be a

587

00:23:09,519 --> 00:23:05,870

moon landing skip oh yes of course right

588

00:23:11,950 --> 00:23:09,529

right and 911 skeptics yes the 911 to

589

00:23:15,070 --> 00:23:11,960

through the movements yeah yeah and

590

00:23:17,080 --> 00:23:15,080

again it's the idea is not that you're

591

00:23:18,700 --> 00:23:17,090

supposed to deny anything because you're

592

00:23:21,070 --> 00:23:18,710

a skeptic unfed Michael Sherman today

593

00:23:23,350 --> 00:23:21,080

made that point very well in in stock he

594

00:23:25,899 --> 00:23:23,360

said that for all effective purposes you

595

00:23:27,850 --> 00:23:25,909

can make one of two opposite mistakes

596

00:23:29,680 --> 00:23:27,860

right you can you can be too skeptical

597

00:23:31,180 --> 00:23:29,690

and therefore miss out on things that

598

00:23:32,950 --> 00:23:31,190

actually true and you're rejecting the

599

00:23:35,889 --> 00:23:32,960

truth this is what in statistical

600

00:23:37,240 --> 00:23:35,899

analysis called a type 2 error and or

601  
00:23:39,700 --> 00:23:37,250  
you can do the other way around and

602  
00:23:42,039 --> 00:23:39,710  
accept pretty much everything including

603  
00:23:43,509 --> 00:23:42,049  
things that notions are clearly not not

604  
00:23:44,830 --> 00:23:43,519  
the case that clearly not true in which

605  
00:23:48,310 --> 00:23:44,840  
case you would be making what's the

606  
00:23:49,840 --> 00:23:48,320  
decisions call a type one error and his

607  
00:23:52,120 --> 00:23:49,850  
point was that well it is actually very

608  
00:23:53,769 --> 00:23:52,130  
difficult to balance between these two

609  
00:23:55,269 --> 00:23:53,779  
there is always a risk no matter what

610  
00:23:56,560 --> 00:23:55,279  
position you take there is always a risk

611  
00:23:58,480 --> 00:23:56,570  
that you're rejecting something that is

612  
00:24:01,149 --> 00:23:58,490  
true or the EurAsEC accepting something

613  
00:24:05,110 --> 00:24:01,159

is bunk to me being a critical thinker

614

00:24:07,149 --> 00:24:05,120

means that you try to minimize both both

615

00:24:09,279 --> 00:24:07,159

types of errors and it's interesting you

616

00:24:10,870 --> 00:24:09,289

know I my previous career before

617

00:24:12,279 --> 00:24:10,880

becoming a philosopher I was I was a

618

00:24:15,070 --> 00:24:12,289

biologist and I was trained action in

619

00:24:19,090 --> 00:24:15,080

statistical analysis and you're told

620

00:24:21,730 --> 00:24:19,100

your thought in statistics 101 that if

621

00:24:23,049 --> 00:24:21,740

you want to minimize both that the

622

00:24:25,539 --> 00:24:23,059

typical there is an inverse relationship

623

00:24:27,940 --> 00:24:25,549

between type 1 and type 2 error if you

624

00:24:29,769 --> 00:24:27,950

are more conservative because you don't

625

00:24:32,139 --> 00:24:29,779

want to believe in things that are not

626  
00:24:34,180 --> 00:24:32,149  
true you're bound also to these believe

627  
00:24:35,680 --> 00:24:34,190  
things that are in fact true and vice

628  
00:24:37,240 --> 00:24:35,690  
versa if you're not conservative enough

629  
00:24:38,769 --> 00:24:37,250  
because you don't want to miss out on

630  
00:24:41,440 --> 00:24:38,779  
things that are true you're bound to

631  
00:24:43,240 --> 00:24:41,450  
accept some bunk or some nonsense and so

632  
00:24:44,980 --> 00:24:43,250  
when I asked my you know teachers as

633  
00:24:47,529 --> 00:24:44,990  
well so how do you minimize both type 1

634  
00:24:49,899 --> 00:24:47,539  
and type 2 errors the answer was you get

635  
00:24:50,720 --> 00:24:49,909  
more data you get more information it's

636  
00:24:52,520 --> 00:24:50,730  
all about

637  
00:24:55,520 --> 00:24:52,530  
getting more reliable that are getting

638  
00:24:57,049 --> 00:24:55,530

more information and that way eventually

639

00:24:58,909 --> 00:24:57,059

your you're going to be able to clearly

640

00:25:02,210 --> 00:24:58,919

make a distinction between two notions

641

00:25:03,470 --> 00:25:02,220

in the book I try to get that across by

642

00:25:05,720 --> 00:25:03,480

explaining that the difference between

643

00:25:08,419 --> 00:25:05,730

science and pseudoscience is not a sharp

644

00:25:10,130 --> 00:25:08,429

bandar there is there's not a very clear

645

00:25:11,390 --> 00:25:10,140

demarcation line in philosophy of

646

00:25:13,370 --> 00:25:11,400

science this used to be called the

647

00:25:14,900 --> 00:25:13,380

demarcation problem how do you tell

648

00:25:16,310 --> 00:25:14,910

science from to pseudoscience and some

649

00:25:17,780 --> 00:25:16,320

early philosophers early 20th century

650

00:25:19,940 --> 00:25:17,790

philosophers of science particularly

651  
00:25:22,520 --> 00:25:19,950  
called popper thought that there was a

652  
00:25:24,680 --> 00:25:22,530  
very clear answer that if a notion is

653  
00:25:26,180 --> 00:25:24,690  
potentially falsifiable it is scientific

654  
00:25:27,710 --> 00:25:26,190  
if it is not even potentially

655  
00:25:30,049 --> 00:25:27,720  
falsifiable if there's no way in theory

656  
00:25:32,210 --> 00:25:30,059  
in principle to tell that it's that it's

657  
00:25:34,400 --> 00:25:32,220  
wrong than in pseudoscience well that

658  
00:25:35,870 --> 00:25:34,410  
was a good beginning but as it turns out

659  
00:25:38,150 --> 00:25:35,880  
things are much more complicated than

660  
00:25:41,960 --> 00:25:38,160  
that anyone in the book I try to do is I

661  
00:25:44,570 --> 00:25:41,970  
try to map these complex space that goes

662  
00:25:46,760 --> 00:25:44,580  
from clearly solid science you know

663  
00:25:48,320 --> 00:25:46,770

fundamental physics evolutionary biology

664

00:25:50,810 --> 00:25:48,330

and chemistry all this all these things

665

00:25:53,180 --> 00:25:50,820

to at the opposite extreme clearly

666

00:25:54,919 --> 00:25:53,190

pseudo scientific notions astrology you

667

00:25:56,690 --> 00:25:54,929

know like with ian you know clairvoyance

668

00:25:59,060 --> 00:25:56,700

and all that source and then there's a

669

00:26:00,650 --> 00:25:59,070

lot of stuff in between which tomatoes

670

00:26:02,480 --> 00:26:00,660

them was interesting one those are

671

00:26:03,680 --> 00:26:02,490

things like so-called soft sciences for

672

00:26:06,350 --> 00:26:03,690

instance you know psychology sociology

673

00:26:11,360 --> 00:26:06,360

but that's those are clearly sciences

674

00:26:13,549 --> 00:26:11,370

yes but they do get to producing output

675

00:26:15,650 --> 00:26:13,559

in terms of research that is much more

676  
00:26:17,750 --> 00:26:15,660  
debatable it's you know the experiments

677  
00:26:19,070 --> 00:26:17,760  
are replicated but but it's not clear

678  
00:26:20,270 --> 00:26:19,080  
what the replication actually means and

679  
00:26:23,870 --> 00:26:20,280  
so on so there's much more discussion

680  
00:26:25,070 --> 00:26:23,880  
and then there are notions such as for

681  
00:26:26,780 --> 00:26:25,080  
instance in a search for us at the

682  
00:26:28,730 --> 00:26:26,790  
restaurant intelligence is that science

683  
00:26:30,230 --> 00:26:28,740  
or is that not science well it's done by

684  
00:26:32,120 --> 00:26:30,240  
scientists it's but it's done by

685  
00:26:33,950 --> 00:26:32,130  
astronomers tip it typically it is

686  
00:26:35,480 --> 00:26:33,960  
certainly based on sound scientific

687  
00:26:37,970 --> 00:26:35,490  
principles I mean we're using radio

688  
00:26:39,680 --> 00:26:37,980

telescopes to do that and and it's based

689

00:26:41,470 --> 00:26:39,690

on a reasonable assumption that given

690

00:26:43,880 --> 00:26:41,480

you we know that there is one civilized

691

00:26:46,850 --> 00:26:43,890

technological so-called civilized

692

00:26:48,440 --> 00:26:46,860

somewhat civilized technological society

693

00:26:50,780 --> 00:26:48,450

out there then they might be more than

694

00:26:53,060 --> 00:26:50,790

mine right on the other hand it's also

695

00:26:56,030 --> 00:26:53,070

true that the notion that there are

696

00:26:57,799 --> 00:26:56,040

other civilizations are there may not be

697

00:26:59,870 --> 00:26:57,809

falsifiable because it doesn't matter

698

00:27:01,850 --> 00:26:59,880

how much time you spent listening and

699

00:27:02,710 --> 00:27:01,860

not getting any response you can never

700

00:27:04,720 --> 00:27:02,720

conclude

701

00:27:06,850 --> 00:27:04,730

that your hypothesis was wrong so

702

00:27:09,850 --> 00:27:06,860

technically sadie is based on a non

703

00:27:12,039 --> 00:27:09,860

falsifiable exception right and yet it

704

00:27:14,110 --> 00:27:12,049

is it is worth doing it is because it's

705

00:27:15,370 --> 00:27:14,120

because unless you know as long as

706

00:27:17,440 --> 00:27:15,380

you're not paying too much money and

707

00:27:19,630 --> 00:27:17,450

spending too much energy on that kind of

708

00:27:22,299 --> 00:27:19,640

effort the payoff the potential payout

709

00:27:24,100 --> 00:27:22,309

potential is huge yes absolutely and

710

00:27:27,549 --> 00:27:24,110

it's interesting you should be talking

711

00:27:29,230 --> 00:27:27,559

about the way with space again and the

712

00:27:32,500 --> 00:27:29,240

way science is communicated you speak

713

00:27:34,210 --> 00:27:32,510

about Stephen Jay Gould and Carl Sagan

714

00:27:36,970 --> 00:27:34,220

right one of the chapters of your book

715

00:27:38,950 --> 00:27:36,980

who both of them especially in in my

716

00:27:41,470 --> 00:27:38,960

case Carl Sagan was the great science

717

00:27:44,529 --> 00:27:41,480

communicator and you talk about the

718

00:27:46,419 --> 00:27:44,539

media what what in your opinion what

719

00:27:49,930 --> 00:27:46,429

could the media do better I mean it's

720

00:27:52,240 --> 00:27:49,940

not easy to to represent our way of

721

00:27:54,130 --> 00:27:52,250

thinking to the general public no it is

722

00:27:57,039 --> 00:27:54,140

really isn't no it isn't and and I know

723

00:27:59,200 --> 00:27:57,049

you know have friends or journalists who

724

00:28:00,909 --> 00:27:59,210

are very sensitive to this matter

725

00:28:04,510 --> 00:28:00,919

because you know journalists by and

726

00:28:06,130 --> 00:28:04,520

large really want to do a good job at

727

00:28:08,490 --> 00:28:06,140

educating the public they want to do a

728

00:28:12,190 --> 00:28:08,500

good job of communicating complex issues

729

00:28:14,080 --> 00:28:12,200

but of course they run against a number

730

00:28:16,330 --> 00:28:14,090

of serious problems first of all they

731

00:28:17,710 --> 00:28:16,340

typically are not trained in the

732

00:28:19,419 --> 00:28:17,720

specific discipline I mean their general

733

00:28:20,500 --> 00:28:19,429

sort of general thinkers right you're

734

00:28:21,760 --> 00:28:20,510

not they're not scientists they're not

735

00:28:23,440 --> 00:28:21,770

they don't have training there are some

736

00:28:26,110 --> 00:28:23,450

science journalists to do have specific

737

00:28:28,510 --> 00:28:26,120

training in science but by and large a

738

00:28:30,250 --> 00:28:28,520

journalist is somebody who just happens

739

00:28:32,620 --> 00:28:30,260

to be good at asking questions in

740

00:28:33,850 --> 00:28:32,630

writing about certain things and in our

741

00:28:35,529 --> 00:28:33,860

typical journal nation i have a friend

742

00:28:38,080 --> 00:28:35,539

of mine for instance who started her

743

00:28:40,690 --> 00:28:38,090

career as a political journalist and

744

00:28:42,640 --> 00:28:40,700

then now writes about education well

745

00:28:44,980 --> 00:28:42,650

it's not that she has any particular

746

00:28:47,110 --> 00:28:44,990

degree or background in either politics

747

00:28:48,899 --> 00:28:47,120

or education she just is a intelligent

748

00:28:50,740 --> 00:28:48,909

person who is capable of listening in

749

00:28:52,659 --> 00:28:50,750

researching certain questions and

750

00:28:54,899 --> 00:28:52,669

running about it that's the kind of

751  
00:28:58,779 --> 00:28:54,909  
person we need to communicate to as

752  
00:29:01,270 --> 00:28:58,789  
scientists or as skeptics the others the

753  
00:29:03,669 --> 00:29:01,280  
other side of the problem with

754  
00:29:06,220 --> 00:29:03,679  
journalists of course is that they have

755  
00:29:08,200 --> 00:29:06,230  
to do deal with their own internal

756  
00:29:10,299 --> 00:29:08,210  
pressures in their own business very

757  
00:29:12,850 --> 00:29:10,309  
good play it's I mean they have most

758  
00:29:15,100 --> 00:29:12,860  
most media outlets that are corporate

759  
00:29:17,139 --> 00:29:15,110  
owned owned they have sell their product

760  
00:29:19,240 --> 00:29:17,149  
to sell their products especially these

761  
00:29:21,940 --> 00:29:19,250  
days were with the demise of magazines

762  
00:29:23,830 --> 00:29:21,950  
and newspapers yes there is the rise of

763  
00:29:25,899 --> 00:29:23,840

the internet for sure but on the other

764

00:29:28,090 --> 00:29:25,909

hand the internet is still too large to

765

00:29:30,310 --> 00:29:28,100

a large extent a wild place I mean you

766

00:29:31,630 --> 00:29:30,320

know you can go to my blog and with what

767

00:29:33,279 --> 00:29:31,640

I think it's really interesting stuff

768

00:29:35,409 --> 00:29:33,289

but on the other hand if you pick a blog

769

00:29:37,510 --> 00:29:35,419

at random if you pick a random web page

770

00:29:38,980 --> 00:29:37,520

out of a google search but there is

771

00:29:40,510 --> 00:29:38,990

absolutely no guarantee that you're

772

00:29:42,669 --> 00:29:40,520

getting anything that is reliable people

773

00:29:45,610 --> 00:29:42,679

can make stuff up and put it out there

774

00:29:47,049 --> 00:29:45,620

so how do you tell you know what is

775

00:29:50,260 --> 00:29:47,059

reliable what is from what is not well

776

00:29:52,659 --> 00:29:50,270

it turns out that the best way to do

777

00:29:55,029 --> 00:29:52,669

that is to go to new sources on the

778

00:29:56,919 --> 00:29:55,039

internet which are actually sponsored by

779

00:29:59,440 --> 00:29:56,929

standard classical well-established

780

00:30:01,260 --> 00:29:59,450

outlets like you know if I get my news I

781

00:30:03,460 --> 00:30:01,270

get them from the New York Times the BBC

782

00:30:05,680 --> 00:30:03,470

national public radio in the united

783

00:30:07,770 --> 00:30:05,690

states the kind of sources that I know

784

00:30:10,210 --> 00:30:07,780

they're not infallible because nobody is

785

00:30:12,010 --> 00:30:10,220

but they have a certain degree of

786

00:30:13,480 --> 00:30:12,020

reliability they you know they have a

787

00:30:15,279 --> 00:30:13,490

certain kind of audience insert the kind

788

00:30:16,750 --> 00:30:15,289

of standards I don't just read randomly

789

00:30:19,630 --> 00:30:16,760

because there's too much stuff out there

790

00:30:20,919 --> 00:30:19,640

so as skeptics when we talk to the two

791

00:30:22,659 --> 00:30:20,929

journalists we have to keep in mind

792

00:30:24,700 --> 00:30:22,669

first of all that these are people were

793

00:30:26,799 --> 00:30:24,710

not specifically trained in science or

794

00:30:30,310 --> 00:30:26,809

critical thinking and second that they

795

00:30:32,169 --> 00:30:30,320

have a set of pressures there it's not

796

00:30:35,200 --> 00:30:32,179

the only have one agenda their agenda is

797

00:30:38,919 --> 00:30:35,210

not just to educate the public is also

798

00:30:40,990 --> 00:30:38,929

to sell their product now that may be

799

00:30:42,430 --> 00:30:41,000

something we don't like as a general

800

00:30:44,649 --> 00:30:42,440

idea i mean i would like for information

801  
00:30:46,840 --> 00:30:44,659  
to be free available to everybody

802  
00:30:48,700 --> 00:30:46,850  
researched and well-researched right but

803  
00:30:50,200 --> 00:30:48,710  
unfortunately with you know the fact

804  
00:30:52,750 --> 00:30:50,210  
that the matter is that if you want to

805  
00:30:54,520 --> 00:30:52,760  
do well informed research well you have

806  
00:30:56,139 --> 00:30:54,530  
to spend time and and somebody has to

807  
00:30:58,630 --> 00:30:56,149  
pay for it that's right that's right and

808  
00:31:01,270 --> 00:30:58,640  
so you we need to come to terms to do

809  
00:31:03,669 --> 00:31:01,280  
with the idea that yes we need to sell

810  
00:31:05,529 --> 00:31:03,679  
our message to journalist to the media

811  
00:31:06,970 --> 00:31:05,539  
we need to find out way and i don't i

812  
00:31:10,120 --> 00:31:06,980  
don't mean it doesn't mean necessarily

813  
00:31:12,100 --> 00:31:10,130

that you have to become incredibly

814

00:31:14,169 --> 00:31:12,110

simplistic or go for the sensation and

815

00:31:15,850 --> 00:31:14,179

situational thing only and that sort of

816

00:31:17,049 --> 00:31:15,860

thing but you know you need to be

817

00:31:19,450 --> 00:31:17,059

creative you need to talk to these

818

00:31:21,460 --> 00:31:19,460

people having the journalists having in

819

00:31:23,560 --> 00:31:21,470

mind what it is from their perspective

820

00:31:24,620 --> 00:31:23,570

that is going to make it in print or

821

00:31:26,930 --> 00:31:24,630

it's going to make it to their

822

00:31:30,260 --> 00:31:26,940

it's also a lot easier for the

823

00:31:32,570 --> 00:31:30,270

journalists to present the story it was

824

00:31:36,890 --> 00:31:32,580

a UFO that people think they saw flying

825

00:31:38,600 --> 00:31:36,900

through the sky or these people from the

826

00:31:40,700 --> 00:31:38,610

city saw a ghost or whatever it was

827

00:31:44,120 --> 00:31:40,710

which happens a lot in Australia the

828

00:31:47,990 --> 00:31:44,130

tabloid TV show and press then go into

829

00:31:50,060 --> 00:31:48,000

an explanation of the possible what else

830

00:31:52,100 --> 00:31:50,070

it could be and a lot of the times their

831

00:31:55,430 --> 00:31:52,110

readership or the people viewing just

832

00:31:57,800 --> 00:31:55,440

wanted to be reassured that yes psychics

833

00:31:59,390 --> 00:31:57,810

can tell you a future or the UFO is

834

00:32:02,660 --> 00:31:59,400

coming or something like that there's an

835

00:32:04,880 --> 00:32:02,670

enormous emotional potential data that

836

00:32:08,120 --> 00:32:04,890

unfortunately skeptics have a hard time

837

00:32:09,890 --> 00:32:08,130

tapping in because you know frankly most

838

00:32:11,930 --> 00:32:09,900

of what we do is about bursting bubbles

839

00:32:13,970 --> 00:32:11,940

it's not an people don't like to have

840

00:32:15,710 --> 00:32:13,980

the other words nobody I'm skeptics not

841

00:32:18,020 --> 00:32:15,720

even skeptics that's exactly right now

842

00:32:20,810 --> 00:32:18,030

you mentioned Cal taken and the reason I

843

00:32:22,580 --> 00:32:20,820

talk about Sagan out in my book other

844

00:32:26,240 --> 00:32:22,590

than because he was a huge influence on

845

00:32:29,000 --> 00:32:26,250

me when I when I was a younger it's

846

00:32:32,330 --> 00:32:29,010

because he got it exactly right in terms

847

00:32:34,010 --> 00:32:32,340

of realizing that being a skeptic being

848

00:32:36,650 --> 00:32:34,020

a scientist being you know a critical

849

00:32:38,720 --> 00:32:36,660

thinker it's never going to be a popular

850

00:32:40,970 --> 00:32:38,730

position it's always going to be new is

851

00:32:42,860 --> 00:32:40,980

the subtitle of these famous book the

852

00:32:45,170 --> 00:32:42,870

demon haunted world is science as a

853

00:32:47,030 --> 00:32:45,180

candle in the dark and I like that image

854

00:32:49,700 --> 00:32:47,040

science and i would say in fact more

855

00:32:51,800 --> 00:32:49,710

broadly reason right critical thinking

856

00:32:54,170 --> 00:32:51,810

is a candle in the dark and what

857

00:32:56,060 --> 00:32:54,180

skeptics are about is to keep that

858

00:32:57,770 --> 00:32:56,070

candle lit as much as possible and to

859

00:32:59,870 --> 00:32:57,780

spread it as much as possible but you

860

00:33:00,950 --> 00:32:59,880

have we have to come to terms that we're

861

00:33:02,870 --> 00:33:00,960

always going to be surrounded by the

862

00:33:05,270 --> 00:33:02,880

dark because the dark is easier yeah

863

00:33:10,210 --> 00:33:05,280

that's it the doc is easier yeah it's

864

00:33:12,530 --> 00:33:10,220

easier to be to simply believe the

865

00:33:14,960 --> 00:33:12,540

psychic reading when it happens to you

866

00:33:16,490 --> 00:33:14,970

than to study the psychology of what we

867

00:33:18,740 --> 00:33:16,500

know is cold reading and all the other

868

00:33:20,300 --> 00:33:18,750

aspects but we heard this morning for

869

00:33:22,160 --> 00:33:20,310

instance and a great example you know it

870

00:33:23,990 --> 00:33:22,170

what the problem is that being a skeptic

871

00:33:26,330 --> 00:33:24,000

can be depressing because you do a lot

872

00:33:28,700 --> 00:33:26,340

of work you try to convince people

873

00:33:30,260 --> 00:33:28,710

you're reason you provide data and then

874

00:33:31,490 --> 00:33:30,270

a lot of people look at you and say no I

875

00:33:33,530 --> 00:33:31,500

don't know i don't know it's really

876

00:33:35,630 --> 00:33:33,540

believe in ghosts so that can be

877

00:33:37,299 --> 00:33:35,640

depressing but there are good results

878

00:33:39,940 --> 00:33:37,309

that we do achieve one of the

879

00:33:42,659 --> 00:33:39,950

that I that I stress in the book is that

880

00:33:46,480 --> 00:33:42,669

bad science through science you know

881

00:33:48,669 --> 00:33:46,490

bunk literally can kill people if you if

882

00:33:50,619 --> 00:33:48,679

you don't believe that there is a

883

00:33:53,310 --> 00:33:50,629

connection between HIV and AIDS and

884

00:33:57,399 --> 00:33:53,320

therefore refuse to take you know anti

885

00:33:58,539 --> 00:33:57,409

retroviral drugs you can die you know if

886

00:34:00,580 --> 00:33:58,549

you're not going to vaccinate your

887

00:34:02,350 --> 00:34:00,590

children it's a big issue in Australia

888

00:34:03,700 --> 00:34:02,360

exactly because because you think that

889

00:34:05,019 --> 00:34:03,710

there is a connection with autism even

890

00:34:06,999 --> 00:34:05,029

though plenty of scientific research has

891

00:34:08,559 --> 00:34:07,009

shown there is no connection then you're

892

00:34:09,879 --> 00:34:08,569

only you're endangering your children

893

00:34:12,430 --> 00:34:09,889

but in fact you're endangering society

894

00:34:14,020 --> 00:34:12,440

at large because vaccines work only if a

895

00:34:15,399 --> 00:34:14,030

large number of people actually are bugs

896

00:34:17,319 --> 00:34:15,409

in it yeah and Storen sports so these

897

00:34:19,210 --> 00:34:17,329

things are important it's not just a

898

00:34:20,829 --> 00:34:19,220

matter of bursting people's bubbles is a

899

00:34:24,069 --> 00:34:20,839

matter of literally protecting the

900

00:34:26,680 --> 00:34:24,079

public I think of skepticism as a is a

901  
00:34:28,480 --> 00:34:26,690  
sort of a consumers advocate that's a

902  
00:34:31,569 --> 00:34:28,490  
version that's a very good Linus line we

903  
00:34:34,290 --> 00:34:31,579  
try to take in Australia and you're

904  
00:34:36,669 --> 00:34:34,300  
absolutely right because we always think

905  
00:34:40,149 --> 00:34:36,679  
we all see there are two sides to what

906  
00:34:42,700 --> 00:34:40,159  
we do for our own sanity we have we try

907  
00:34:44,649 --> 00:34:42,710  
to have fun right and to me you know UFO

908  
00:34:46,450 --> 00:34:44,659  
hunting and ghosts all right it's it's

909  
00:34:47,800 --> 00:34:46,460  
old hat to us but to a lot of the

910  
00:34:49,750 --> 00:34:47,810  
younger generation they get very

911  
00:34:52,419 --> 00:34:49,760  
interested in and I enjoy all that stuff

912  
00:34:54,550 --> 00:34:52,429  
some of it so that's where we get a our

913  
00:34:56,169 --> 00:34:54,560

interest in and fun and then yes we have

914

00:34:58,450 --> 00:34:56,179

very serious about fighting the

915

00:35:00,609 --> 00:34:58,460

anti-vaccination lobby and all these

916

00:35:03,160 --> 00:35:00,619

people in occasion we succeed it as I

917

00:35:05,230 --> 00:35:03,170

was saying earlier we heard this morning

918

00:35:06,910 --> 00:35:05,240

at the meeting and a good example of it

919

00:35:09,160 --> 00:35:06,920

where the James Randi foundation was

920

00:35:11,020 --> 00:35:09,170

instrumental in going to talk to the

921

00:35:13,150 --> 00:35:11,030

Department of Defense i believe it was

922

00:35:14,620 --> 00:35:13,160

in the united states and showing them

923

00:35:16,450 --> 00:35:14,630

that this thing that they were paying

924

00:35:17,880 --> 00:35:16,460

tens of thousands of dollars for with

925

00:35:20,920 --> 00:35:17,890

this instrument that was supposed to

926

00:35:22,900 --> 00:35:20,930

cover the bomb the salton thing in iraq

927

00:35:24,940 --> 00:35:22,910

was actually a complete bank was based

928

00:35:27,460 --> 00:35:24,950

on no signs at all it was just but you

929

00:35:31,000 --> 00:35:27,470

know in tally non-functional thing got

930

00:35:32,770 --> 00:35:31,010

put together to as a scam and it turns

931

00:35:34,300 --> 00:35:32,780

out that they were successful you know

932

00:35:36,910 --> 00:35:34,310

the prime minister of defense did did

933

00:35:38,339 --> 00:35:36,920

listen and they stopped not only they

934

00:35:40,240 --> 00:35:38,349

stopped sales but in fact the the

935

00:35:42,130 --> 00:35:40,250

president of the company was selling

936

00:35:44,140 --> 00:35:42,140

these things is now in jail now that's a

937

00:35:46,420 --> 00:35:44,150

victory it's a small victory but it is

938

00:35:49,359 --> 00:35:46,430

the kind of things that make make it

939

00:35:50,710 --> 00:35:49,369

worth it it makes will save life it's

940

00:35:52,000 --> 00:35:50,720

safe sighs really

941

00:35:53,320 --> 00:35:52,010

exactly it saves lives it makes a

942

00:35:55,690 --> 00:35:53,330

difference in people in people's lives

943

00:35:57,099 --> 00:35:55,700

and and it makes you think like okay

944

00:35:59,349 --> 00:35:57,109

well I've been spending a lot of time

945

00:36:00,640 --> 00:35:59,359

writing and talking and putting today

946

00:36:02,230 --> 00:36:00,650

are these things and it's actually

947

00:36:04,480 --> 00:36:02,240

making a difference you you do get that

948

00:36:07,300 --> 00:36:04,490

feedback from time to time and I'm very

949

00:36:09,880 --> 00:36:07,310

pleased to say that we in Australia

950

00:36:12,450 --> 00:36:09,890

every now and then the hard work we put

951  
00:36:15,730 --> 00:36:12,460  
in will get the feedback or the results

952  
00:36:17,320 --> 00:36:15,740  
and that's just recharges the batteries

953  
00:36:19,540 --> 00:36:17,330  
and makes you think yeah but all those

954  
00:36:21,040 --> 00:36:19,550  
hours you spend exactly and you also

955  
00:36:23,800 --> 00:36:21,050  
have to remember that you know probably

956  
00:36:25,089 --> 00:36:23,810  
for any any particular example feed but

957  
00:36:27,310 --> 00:36:25,099  
you get there's probably another 10 or

958  
00:36:29,349 --> 00:36:27,320  
100 out there where you did make a

959  
00:36:31,270 --> 00:36:29,359  
difference and you know by the right all

960  
00:36:32,349 --> 00:36:31,280  
right I mean in some sense it is just

961  
00:36:34,300 --> 00:36:32,359  
like being a teacher you know I've been

962  
00:36:36,730 --> 00:36:34,310  
I've been an academic for all my life

963  
00:36:38,530 --> 00:36:36,740

and it is a very rewarding experience in

964

00:36:40,300 --> 00:36:38,540

the moment you're teaching people but it

965

00:36:41,710 --> 00:36:40,310

is even more rewarding when you know ten

966

00:36:43,300 --> 00:36:41,720

years later you get an email from one of

967

00:36:44,859 --> 00:36:43,310

your former students yeah you know what

968

00:36:46,180 --> 00:36:44,869

yeah i like to one of your classes and

969

00:36:48,010 --> 00:36:46,190

really made a difference in time but

970

00:36:49,330 --> 00:36:48,020

then I start thinking okay well I get

971

00:36:51,490 --> 00:36:49,340

those only once in a while and then I

972

00:36:53,890 --> 00:36:51,500

realized yes but on the other hand it's

973

00:36:56,050 --> 00:36:53,900

probably many many more who don't bother

974

00:36:57,430 --> 00:36:56,060

to ride don't you know but they can't

975

00:37:00,220 --> 00:36:57,440

find my email address or whatever it is

976

00:37:02,500 --> 00:37:00,230

and yet I having fat help I having fat

977

00:37:03,820 --> 00:37:02,510

touch them you know I myself have plenty

978

00:37:05,170 --> 00:37:03,830

of t-shirt I've had plenty of teachers

979

00:37:07,480 --> 00:37:05,180

who I didn't bother you know running

980

00:37:09,790 --> 00:37:07,490

back packets later and say hey thank you

981

00:37:12,670 --> 00:37:09,800

that's a really good point I mean I did

982

00:37:14,320 --> 00:37:12,680

over the years I've often related the

983

00:37:16,270 --> 00:37:14,330

story of a science teacher I had who was

984

00:37:18,329 --> 00:37:16,280

particularly good at communicating and I

985

00:37:20,589 --> 00:37:18,339

never bothered to write back and say

986

00:37:22,359 --> 00:37:20,599

thank you very much there you are

987

00:37:24,460 --> 00:37:22,369

listeners as there's your task for the

988

00:37:25,990 --> 00:37:24,470

day let your teachers know who inspired

989

00:37:28,000 --> 00:37:26,000

you that they did a good job they will

990

00:37:30,520 --> 00:37:28,010

appreciate absolutely and it's a very

991

00:37:33,520 --> 00:37:30,530

good tip now the book is called nonsense

992

00:37:35,620 --> 00:37:33,530

on stilts how to tell science from bunk

993

00:37:42,370 --> 00:37:35,630

it's produced by the University of

994

00:37:44,320 --> 00:37:42,380

Chicago Press ww-p RSU chicago edu and i

995

00:37:46,180 --> 00:37:44,330

think people can buy that hopefully in

996

00:37:47,530 --> 00:37:46,190

the book shops yes it's available in

997

00:37:48,400 --> 00:37:47,540

bookshops and of course through amazon

998

00:37:50,680 --> 00:37:48,410

and through

999

00:37:51,790 --> 00:37:50,690

less no it was an absolute like to talk

1000

00:37:53,890 --> 00:37:51,800

to you thank you for sparing you

1001  
00:38:06,250 --> 00:37:53,900  
sometime today it was my pleasure thank

1002  
00:38:09,940 --> 00:38:06,260  
you very much this is brian dunning from

1003  
00:38:12,370 --> 00:38:09,950  
skep tide calm warning avoid skeptics in

1004  
00:38:15,340 --> 00:38:12,380  
the pub in sydney on october 7th at all

1005  
00:38:18,010 --> 00:38:15,350  
costs Maynard is going to be there the

1006  
00:38:19,930 --> 00:38:18,020  
avalanche of irrationality and ill logic

1007  
00:38:22,930 --> 00:38:19,940  
that he'll no doubt unleash will be

1008  
00:38:25,270 --> 00:38:22,940  
hazardous to anyone who attends October

1009  
00:38:27,130 --> 00:38:25,280  
seventh please be as far away from

1010  
00:38:29,980 --> 00:38:27,140  
skeptics in the pub in Sydney as

1011  
00:38:35,980 --> 00:38:29,990  
possible thank you i'm brian dunning

1012  
00:38:44,400 --> 00:38:35,990  
from sceptile calm join us now for

1013  
00:38:48,730 --> 00:38:47,410

and welcome to the think tank it's good

1014

00:38:50,470 --> 00:38:48,740

to be back here in our favorite club

1015

00:38:56,620 --> 00:38:50,480

down the street dr. rate she is holding

1016

00:38:58,180 --> 00:38:56,630

up her computer to me and maybe dr. AG

1017

00:39:04,060 --> 00:38:58,190

before we get started could you explain

1018

00:39:05,680 --> 00:39:04,070

what that's all about I'll tell you you

1019

00:39:08,740 --> 00:39:05,690

have to come to skeptics in the pub on

1020

00:39:10,780 --> 00:39:08,750

octob the 7th in Sydney our special

1021

00:39:14,650 --> 00:39:10,790

guests will be Maynard and he's doing

1022

00:39:17,110 --> 00:39:14,660

lux there's a heckler here I mean he's

1023

00:39:20,500 --> 00:39:17,120

gonna be sharing his world of woo and

1024

00:39:24,240 --> 00:39:20,510

woo with us can't wait for that well

1025

00:39:29,920 --> 00:39:26,980

let's may not be music we're going whoo

1026  
00:39:31,660 --> 00:39:29,930  
whooh whooh whooh and welcome to Maynard

1027  
00:39:33,040 --> 00:39:31,670  
hello Maynard hello hello it's great to

1028  
00:39:36,160 --> 00:39:33,050  
be here and you've been around the world

1029  
00:39:38,590 --> 00:39:36,170  
and back again and our special guest Meg

1030  
00:39:40,030 --> 00:39:38,600  
hi Meg hi how are you and we're just

1031  
00:39:41,890 --> 00:39:40,040  
catching you before you're jetting off

1032  
00:39:44,310 --> 00:39:41,900  
to live in Germany that's correct i'm

1033  
00:39:47,440 --> 00:39:44,320  
moving to hamburg tomorrow morning so

1034  
00:39:50,110 --> 00:39:47,450  
really imagine you before and just to

1035  
00:39:52,450 --> 00:39:50,120  
mention that you're hoping to catch up

1036  
00:39:54,310 --> 00:39:52,460  
with the local skeptics in hamburg

1037  
00:39:56,440 --> 00:39:54,320  
that's right there's a Hamburg skeptics

1038  
00:39:59,200 --> 00:39:56,450

club which meets on the 13th of every

1039

00:40:01,420 --> 00:39:59,210

month and so I'll be going to their next

1040

00:40:03,100 --> 00:40:01,430

meeting so hello to any Hamburg skeptics

1041

00:40:05,860 --> 00:40:03,110

who happened to be listening that's

1042

00:40:08,800 --> 00:40:05,870

fantastic and I was just looking at

1043

00:40:10,360 --> 00:40:08,810

their website I can find that again well

1044

00:40:11,890 --> 00:40:10,370

you look listeners in Germany or

1045

00:40:14,140 --> 00:40:11,900

anywhere around the world just don't

1046

00:40:16,870 --> 00:40:14,150

Google Hamburg skeptics and you'll

1047

00:40:19,030 --> 00:40:16,880

certainly find their website and that'd

1048

00:40:22,630 --> 00:40:19,040

be fantastic if you could meet with them

1049

00:40:24,310 --> 00:40:22,640

and share like-minded things with

1050

00:40:26,500 --> 00:40:24,320

like-minded people exactly this is what

1051

00:40:28,300 --> 00:40:26,510

we all love to do especially when we

1052

00:40:31,480 --> 00:40:28,310

have been jet-setting around the world

1053

00:40:33,940 --> 00:40:31,490

dr. AG we have haven't we oh yes where

1054

00:40:37,000 --> 00:40:33,950

have we been oh we've been to dragoncon

1055

00:40:39,700 --> 00:40:37,010

yeah i'm about to go again Richard what

1056

00:40:42,190 --> 00:40:39,710

I'm going back to the states in about

1057

00:40:43,930 --> 00:40:42,200

two weeks where are you going

1058

00:40:46,630 --> 00:40:43,940

well I'm going to salt lake city to find

1059

00:40:48,430 --> 00:40:46,640

myself a husband because if because I

1060

00:40:52,060 --> 00:40:48,440

heard that you know they've got a few

1061

00:40:54,220 --> 00:40:52,070

they share wives in Salt Lake Tony so I

1062

00:40:56,050 --> 00:40:54,230

see in magic underwear and magic

1063

00:40:58,030 --> 00:40:56,060

underwear well no actually I'm going to

1064

00:41:00,310 --> 00:40:58,040

Wyoming I'm going for a work conference

1065

00:41:02,620 --> 00:41:00,320

but I will be stopping in Salt Lake on

1066

00:41:05,230 --> 00:41:02,630

the way back and I'm going to be doing a

1067

00:41:08,410 --> 00:41:05,240

talk on the twenty-third of October on

1068

00:41:10,210 --> 00:41:08,420

Saturday and stop making salt lake city

1069

00:41:12,310 --> 00:41:10,220

in salt lake city I've Salt Lake City

1070

00:41:15,310 --> 00:41:12,320

skeptics are organizing that and we

1071

00:41:17,200 --> 00:41:15,320

don't have any more details yet but I'll

1072

00:41:20,200 --> 00:41:17,210

keep you posted so if anyone in the area

1073

00:41:23,920 --> 00:41:20,210

around Salt Lake City Saturday 23rd of

1074

00:41:26,550 --> 00:41:23,930

October fantastic yes we've had our

1075

00:41:29,170 --> 00:41:26,560

listeners of course know we've been

1076  
00:41:31,690 --> 00:41:29,180  
traveling around the United States we

1077  
00:41:34,240 --> 00:41:31,700  
went to visit brian dunning in the

1078  
00:41:38,050 --> 00:41:34,250  
orange county then we went over all the

1079  
00:41:40,390 --> 00:41:38,060  
way to dragoncon in Atlanta after that I

1080  
00:41:43,870 --> 00:41:40,400  
briefly visited our good friend dr. Phil

1081  
00:41:46,390 --> 00:41:43,880  
Plait astronomer holy haka like what

1082  
00:41:48,520 --> 00:41:46,400  
color that's right and now we're back in

1083  
00:41:52,660 --> 00:41:48,530  
Australia and I think you and I are sort

1084  
00:41:54,730 --> 00:41:52,670  
of over our jet lagging yeah yeah but

1085  
00:41:56,500 --> 00:41:54,740  
we've got another trip coming up on

1086  
00:41:59,710 --> 00:41:56,510  
Saturday Richard did you want to talk

1087  
00:42:01,210 --> 00:41:59,720  
about that now absolutely now I may not

1088  
00:42:03,160 --> 00:42:01,220

if you fill us in about this wonderful

1089

00:42:05,410 --> 00:42:03,170

thing we're doing on the Saturday well

1090

00:42:07,030 --> 00:42:05,420

this is certainly up my alley so to

1091

00:42:09,609 --> 00:42:07,040

speak because as far as i know that has

1092

00:42:11,950 --> 00:42:09,619

not been a big atheistic atheistic

1093

00:42:13,359 --> 00:42:11,960

blowout in your castle and you guys are

1094

00:42:15,040 --> 00:42:13,369

going to be part of an atheistic blowout

1095

00:42:16,870 --> 00:42:15,050

now I know this may cause a schism

1096

00:42:19,000 --> 00:42:16,880

within the skeptics movement because

1097

00:42:20,440 --> 00:42:19,010

atheists and skeptics don't always go

1098

00:42:22,780 --> 00:42:20,450

together do they but this is the

1099

00:42:24,700 --> 00:42:22,790

skeptics event at it and put on by the

1100

00:42:26,800 --> 00:42:24,710

Atheist let's say we're there to promote

1101  
00:42:28,150 --> 00:42:26,810  
skeptical yeah you're there to give your

1102  
00:42:30,670 --> 00:42:28,160  
talks and the atheists are going to go

1103  
00:42:31,809 --> 00:42:30,680  
there and I think a few theists are

1104  
00:42:33,579 --> 00:42:31,819  
turning up and it could be a great night

1105  
00:42:35,680 --> 00:42:33,589  
I'm going to play a few tunes but I

1106  
00:42:38,140 --> 00:42:35,690  
don't know what music you play for

1107  
00:42:39,670 --> 00:42:38,150  
atheists and theists to bail it out to I

1108  
00:42:41,070 --> 00:42:39,680  
don't know I thought the Smiths will go

1109  
00:42:43,470 --> 00:42:41,080  
quite well so

1110  
00:42:45,330 --> 00:42:43,480  
good to me so listeners can certainly

1111  
00:42:46,860 --> 00:42:45,340  
find out about that since this show is

1112  
00:42:48,780 --> 00:42:46,870  
going to go out Friday we're talking

1113  
00:42:50,580 --> 00:42:48,790

saturday yeah there's enough time to get

1114

00:42:52,890 --> 00:42:50,590

also it's the bar on the hill at

1115

00:42:55,620 --> 00:42:52,900

newcastle university and i'm sure if you

1116

00:42:57,420 --> 00:42:55,630

follow any links on dr. HC site or on

1117

00:42:58,710 --> 00:42:57,430

your very own site you can find to get

1118

00:42:59,970 --> 00:42:58,720

there it's gonna be great night I'm sure

1119

00:43:01,590 --> 00:42:59,980

we'll have a lot of people and it'll be

1120

00:43:03,690 --> 00:43:01,600

a lot of fun and we don't have events

1121

00:43:05,160 --> 00:43:03,700

like this in Newcastle very often so

1122

00:43:07,020 --> 00:43:05,170

please come along and support it in fact

1123

00:43:09,930 --> 00:43:07,030

arrogance worth the drive from Sydney or

1124

00:43:11,700 --> 00:43:09,940

maybe even Melbourne or / or Burt look

1125

00:43:13,380 --> 00:43:11,710

gave up on the indian pacific and get

1126  
00:43:15,240 --> 00:43:13,390  
over here because you know may not if

1127  
00:43:18,120 --> 00:43:15,250  
they drive from perth they'll be driving

1128  
00:43:20,880 --> 00:43:18,130  
across the outback and they might they

1129  
00:43:22,740 --> 00:43:20,890  
just might encounter something in this

1130  
00:43:25,290 --> 00:43:22,750  
book that i've been reading i might see

1131  
00:43:27,870 --> 00:43:25,300  
something is out there something is out

1132  
00:43:29,700 --> 00:43:27,880  
there unlocking australia's paranormal

1133  
00:43:32,010 --> 00:43:29,710  
secrets by julie miller and grant

1134  
00:43:33,750 --> 00:43:32,020  
osborne now they're there believe travel

1135  
00:43:35,940 --> 00:43:33,760  
writers that will not believe as before

1136  
00:43:37,770 --> 00:43:35,950  
but after writing this book they're

1137  
00:43:39,120 --> 00:43:37,780  
believers in the paranormal secrets of

1138  
00:43:40,500 --> 00:43:39,130

australia that's quite a thick book

1139

00:43:41,490 --> 00:43:40,510

isn't it it is quite thick book well

1140

00:43:43,320 --> 00:43:41,500

they've basically gone out and

1141

00:43:45,570 --> 00:43:43,330

interviewed people and they're very much

1142

00:43:48,690 --> 00:43:45,580

on the side of these things are real and

1143

00:43:50,940 --> 00:43:48,700

it is a good read i don't think a lot of

1144

00:43:53,040 --> 00:43:50,950

skeptics would enjoy that much I kind of

1145

00:43:56,250 --> 00:43:53,050

liked it but you know but it's not

1146

00:43:58,410 --> 00:43:56,260

particularly skeptical well let me let

1147

00:44:01,230 --> 00:43:58,420

me just quickly quickly flick Lee it's

1148

00:44:04,260 --> 00:44:01,240

clicking quickly I'll quickly turn to

1149

00:44:06,990 --> 00:44:04,270

this page here or is it another page

1150

00:44:09,150 --> 00:44:07,000

with a lovely photograph of a UFO I was

1151  
00:44:11,849 --> 00:44:09,160  
looking at before and what one of the

1152  
00:44:15,079 --> 00:44:11,859  
many UFOs photographs taken by

1153  
00:44:17,700 --> 00:44:15,089  
Ferguson blah blah it's a it's an insect

1154  
00:44:19,259 --> 00:44:17,710  
are you sure that's an insane yes I mean

1155  
00:44:21,509 --> 00:44:19,269  
with the Estonian skeptics are studying

1156  
00:44:23,309 --> 00:44:21,519  
things like that before it's simply an

1157  
00:44:25,259 --> 00:44:23,319  
insect which is flying across the screen

1158  
00:44:27,479 --> 00:44:25,269  
slightly out of focus because the focus

1159  
00:44:30,390 --> 00:44:27,489  
of the cameras on the sky well that's

1160  
00:44:33,029 --> 00:44:30,400  
ripped the gusset outta here we're here

1161  
00:44:34,710 --> 00:44:33,039  
to party food yeah yeah now this is this

1162  
00:44:36,299 --> 00:44:34,720  
is exactly what happened to me when I

1163  
00:44:38,039 --> 00:44:36,309

went and saw the final version of loose

1164

00:44:39,690 --> 00:44:38,049

change the other night like that there

1165

00:44:41,519 --> 00:44:39,700

was that there was a better you than me

1166

00:44:43,440 --> 00:44:41,529

well look look I did want to go and see

1167

00:44:45,029 --> 00:44:43,450

it and you know um you know I'm

1168

00:44:46,559 --> 00:44:45,039

naturally very skeptical about the whole

1169

00:44:47,849 --> 00:44:46,569

thing they have taken some sensational

1170

00:44:50,400 --> 00:44:47,859

things out of it but I can see why

1171

00:44:51,960 --> 00:44:50,410

certain people male Americans would find

1172

00:44:53,489 --> 00:44:51,970

it quite offensive and look I went along

1173

00:44:55,170 --> 00:44:53,499

just with an open mind have a little bit

1174

00:44:56,880 --> 00:44:55,180

there and I mentioned some people that

1175

00:44:59,460 --> 00:44:56,890

you know I hang out with a skeptic

1176

00:45:02,160 --> 00:44:59,470

sometime and what they said was skeptics

1177

00:45:05,279 --> 00:45:02,170

they suck the fun out of life was the

1178

00:45:06,690 --> 00:45:05,289

exact thing I was told now and I I

1179

00:45:08,130 --> 00:45:06,700

disagree with them immediately there you

1180

00:45:10,259 --> 00:45:08,140

should come here and have a think tank

1181

00:45:11,279 --> 00:45:10,269

with it look why don't know I disagree

1182

00:45:12,749 --> 00:45:11,289

because I thought you know there's lots

1183

00:45:15,269 --> 00:45:12,759

of things in science that have fun I

1184

00:45:18,299 --> 00:45:15,279

mean I don't think that you know if you

1185

00:45:19,799 --> 00:45:18,309

have your particular whoo d but but that

1186

00:45:22,470 --> 00:45:19,809

takes a fun out of life you just find

1187

00:45:24,599 --> 00:45:22,480

some other fun don't you stuff is really

1188

00:45:28,799 --> 00:45:24,609

fun and that's science but it but it

1189

00:45:30,720 --> 00:45:28,809

adds to life I mean go merrily believing

1190

00:45:32,489 --> 00:45:30,730

a delusion I don't think that's very

1191

00:45:34,289 --> 00:45:32,499

much fun I might be fine i don't know

1192

00:45:36,299 --> 00:45:34,299

what do you think makes um i think the

1193

00:45:38,009 --> 00:45:36,309

fun is in finding out the answer yes

1194

00:45:39,180 --> 00:45:38,019

rather than believing the mystery find

1195

00:45:41,309 --> 00:45:39,190

out the answer and the reason for the

1196

00:45:42,509 --> 00:45:41,319

mystery and there's the fun well there

1197

00:45:44,579 --> 00:45:42,519

could be fun of that and and i think

1198

00:45:46,440 --> 00:45:44,589

that that's a bit of a problem the

1199

00:45:47,489 --> 00:45:46,450

skeptics movements worldwide have is

1200

00:45:49,049 --> 00:45:47,499

that there's this group of people who

1201  
00:45:50,390 --> 00:45:49,059  
think that you know you're a bunch of

1202  
00:45:53,150 --> 00:45:50,400  
party poopers

1203  
00:45:55,460 --> 00:45:53,160  
we just went to dragoncon with 55,000

1204  
00:45:57,049 --> 00:45:55,470  
other people and there was a huge amount

1205  
00:45:59,420 --> 00:45:57,059  
of fun and partying going on there

1206  
00:46:00,799 --> 00:45:59,430  
wasn't there Richard oh goodness me I

1207  
00:46:02,450 --> 00:46:00,809  
mean the way you described it made

1208  
00:46:04,940 --> 00:46:02,460  
ourselves like the Death Eaters from

1209  
00:46:07,099 --> 00:46:04,950  
Harry Potter you know we all float

1210  
00:46:09,769 --> 00:46:07,109  
around sucking the soul out of people

1211  
00:46:11,710 --> 00:46:09,779  
and I don't recall any of that happening

1212  
00:46:14,059 --> 00:46:11,720  
at DragonCon you know there was a

1213  
00:46:15,859 --> 00:46:14,069

hundreds of people hundreds of skeptics

1214

00:46:18,200 --> 00:46:15,869

they're all having a fantastically fun

1215

00:46:19,640 --> 00:46:18,210

time I must say getting stuck and lift

1216

00:46:21,980 --> 00:46:19,650

suitable keys and all sorts of it yeah

1217

00:46:23,779 --> 00:46:21,990

and of course we took a trip out to the

1218

00:46:26,000 --> 00:46:23,789

doctor Georgia Guidestones but you have

1219

00:46:28,849 --> 00:46:26,010

talked about on the show that was great

1220

00:46:30,589 --> 00:46:28,859

fun um you know to go and check out

1221

00:46:32,240 --> 00:46:30,599

these sort of mysteries and these things

1222

00:46:33,650 --> 00:46:32,250

they're real road trip to see a real

1223

00:46:35,029 --> 00:46:33,660

little mystery Manor well this is the

1224

00:46:36,680 --> 00:46:35,039

thing I think that sometimes people

1225

00:46:39,230 --> 00:46:36,690

confuse skeptics with just pure

1226  
00:46:40,880 --> 00:46:39,240  
debunking and I think that's a problem

1227  
00:46:42,620 --> 00:46:40,890  
some time and I'm here to say that you

1228  
00:46:44,720 --> 00:46:42,630  
know they can be fun bunking has its

1229  
00:46:47,059 --> 00:46:44,730  
place but normally it's we don't take

1230  
00:46:48,500 --> 00:46:47,069  
that attitude but we go and investigate

1231  
00:46:50,210 --> 00:46:48,510  
and if it happens to be bunk what are we

1232  
00:46:51,829 --> 00:46:50,220  
going to do well a great bunk you know

1233  
00:46:53,450 --> 00:46:51,839  
and can i mention that something we

1234  
00:46:55,640 --> 00:46:53,460  
mentioned a few weeks ago on the on this

1235  
00:46:57,589 --> 00:46:55,650  
very drunk tank that we were having was

1236  
00:47:01,609 --> 00:46:57,599  
remember the everything as listeners it

1237  
00:47:04,059 --> 00:47:01,619  
here this is orange juice diet coke icee

1238  
00:47:05,900 --> 00:47:04,069

says God querida I'm gonna cod cannot I

1239

00:47:07,910 --> 00:47:05,910

don't know about you but I've at a hell

1240

00:47:09,859 --> 00:47:07,920

of a week listeners but it's a few weeks

1241

00:47:13,010 --> 00:47:09,869

ago we mentioned here on this very drunk

1242

00:47:14,299 --> 00:47:13,020

tank of that if you drove fast enough in

1243

00:47:16,789 --> 00:47:14,309

certain areas of New South Wales you'd

1244

00:47:18,650 --> 00:47:16,799

see a ghost that you remember that that

1245

00:47:20,269 --> 00:47:18,660

you see him up on media watchman yes it

1246

00:47:22,069 --> 00:47:20,279

came up on media watch right here in

1247

00:47:23,870 --> 00:47:22,079

Australia and also the local police now

1248

00:47:26,059 --> 00:47:23,880

the ABC in Newcastle we didn't run this

1249

00:47:27,470 --> 00:47:26,069

story at all but the local commercial

1250

00:47:29,630 --> 00:47:27,480

radio stations went with it a bit there

1251

00:47:31,250 --> 00:47:29,640

and apparently quite a few speeding

1252

00:47:33,710 --> 00:47:31,260

drivers of in court in that area over

1253

00:47:35,089 --> 00:47:33,720

the past couple of weeks by the police

1254

00:47:36,440 --> 00:47:35,099

and well the police seem to think the

1255

00:47:37,970 --> 00:47:36,450

whole thing's died now and down now

1256

00:47:39,079 --> 00:47:37,980

because that areas become known as an

1257

00:47:41,690 --> 00:47:39,089

area where the police are looking for

1258

00:47:43,099 --> 00:47:41,700

you to speed good so I I think we've got

1259

00:47:45,500 --> 00:47:43,109

a happy result on that and no one has

1260

00:47:47,269 --> 00:47:45,510

been hurt but Media Watch which is the

1261

00:47:48,329 --> 00:47:47,279

media program here which exposes things

1262

00:47:50,099 --> 00:47:48,339

that happen in the media

1263

00:47:51,660 --> 00:47:50,109

well it basically showed that people

1264

00:47:53,130 --> 00:47:51,670

went with this without without any

1265

00:47:54,599 --> 00:47:53,140

skeptical approach and it just shows

1266

00:47:56,099 --> 00:47:54,609

that you know a skeptical approach is

1267

00:47:57,569 --> 00:47:56,109

pretty useful when it comes to something

1268

00:47:59,999 --> 00:47:57,579

like a ghost chasing you in the middle

1269

00:48:02,430 --> 00:48:00,009

of night in your car at 180 kilometers

1270

00:48:05,459 --> 00:48:02,440

an hour people have the ad visited the

1271

00:48:07,709 --> 00:48:05,469

impression that skeptics don't even like

1272

00:48:09,390 --> 00:48:07,719

to watch something like that fiction or

1273

00:48:13,109 --> 00:48:09,400

science fiction in the movies like Lord

1274

00:48:14,519 --> 00:48:13,119

of the Rings or Star Wars I mean they

1275

00:48:16,769 --> 00:48:14,529

just like to paint us like that I guess

1276

00:48:18,690 --> 00:48:16,779

yeah look I think it I think it's all of

1277

00:48:21,839 --> 00:48:18,700

this and also it's like um people get

1278

00:48:23,069 --> 00:48:21,849

atheists and anti-theists confused a lot

1279

00:48:25,019 --> 00:48:23,079

because people think that if you're Nate

1280

00:48:26,519 --> 00:48:25,029

these do part against religion but that

1281

00:48:28,680 --> 00:48:26,529

would just be doing what people claiming

1282

00:48:30,420 --> 00:48:28,690

religion does a lot so I don't think

1283

00:48:32,039 --> 00:48:30,430

it's important to explain to people what

1284

00:48:33,509 --> 00:48:32,049

you guys are up too sometimes so did you

1285

00:48:35,880 --> 00:48:33,519

get in trouble at the loose change

1286

00:48:40,319 --> 00:48:35,890

screening menus Oh Toby you wouldn't

1287

00:48:42,989 --> 00:48:40,329

bring that up listen is a curious Google

1288

00:48:44,940 --> 00:48:42,999

loose change it's all known 11 true for

1289

00:48:46,259 --> 00:48:44,950

things I'm sure that everybody everybody

1290

00:48:49,049 --> 00:48:46,269

everybody listening knows what that's

1291

00:48:50,700 --> 00:48:49,059

about but the latest version is a bit

1292

00:48:52,170 --> 00:48:50,710

more straightforward as a documentary

1293

00:48:53,640 --> 00:48:52,180

and that's going to have me shot by both

1294

00:48:56,309 --> 00:48:53,650

sides for sure even by saying that

1295

00:48:58,109 --> 00:48:56,319

because they do bring some testable

1296

00:48:59,609 --> 00:48:58,119

evidence in there in the form of science

1297

00:49:02,700 --> 00:48:59,619

who claimed scientist who claims he

1298

00:49:04,229 --> 00:49:02,710

found some nano-thermite and I just

1299

00:49:06,089 --> 00:49:04,239

brought up the fact of discussion

1300

00:49:07,950 --> 00:49:06,099

afterwards that well that could have

1301

00:49:10,440 --> 00:49:07,960

there was no chain of evidence like if

1302

00:49:11,700 --> 00:49:10,450

you if you are a police organization you

1303

00:49:13,410 --> 00:49:11,710

have someone who gets evidence from the

1304

00:49:15,749 --> 00:49:13,420

scene and they sign off to everybody

1305

00:49:18,390 --> 00:49:15,759

before it gets to the lab and there was

1306

00:49:19,859 --> 00:49:18,400

no chain of evidence as such there and

1307

00:49:22,440 --> 00:49:19,869

so it could have been come from

1308

00:49:24,420 --> 00:49:22,450

somewhere else conceivably or maybe it

1309

00:49:26,400 --> 00:49:24,430

was there because some it was in one of

1310

00:49:28,109 --> 00:49:26,410

them being at the CIA had the FBI had

1311

00:49:31,339 --> 00:49:28,119

all kinds of Billy Billy dared to

1312

00:49:34,709 --> 00:49:31,349

contradict something well I Asian I

1313

00:49:36,660 --> 00:49:34,719

offered an alternative solution and were

1314

00:49:38,099 --> 00:49:36,670

they delighted and pleased that somebody

1315

00:49:39,959 --> 00:49:38,109

came along with a different idea look

1316

00:49:42,809 --> 00:49:39,969

I'm trying not to paint them as being

1317

00:49:44,670 --> 00:49:42,819

any one way or the other but um let's

1318

00:49:45,090 --> 00:49:44,680

just say that they were not happy with

1319

00:49:47,460 --> 00:49:45,100

me doing

1320

00:49:50,090 --> 00:49:47,470

yeah I see my dad and I had a discussion

1321

00:49:53,430 --> 00:49:50,100

about this earlier this week and I

1322

00:49:56,460 --> 00:49:53,440

talked about how a dragon con not this

1323

00:49:59,310 --> 00:49:56,470

year but last year during a talk by Ben

1324

00:50:01,320 --> 00:49:59,320

Radford and Joe Nickell they were there

1325

00:50:04,310 --> 00:50:01,330

were two guys who were ghost hunters who

1326

00:50:06,930 --> 00:50:04,320

were in the audience and they took

1327

00:50:09,450 --> 00:50:06,940

exception to something that Ben Radford

1328

00:50:11,310 --> 00:50:09,460

said about their about ghosts or

1329

00:50:13,440 --> 00:50:11,320

something and they stood up and started

1330

00:50:15,090 --> 00:50:13,450

yelling and screaming yeah and Joe

1331

00:50:18,240 --> 00:50:15,100

Nickell just very calmly answered their

1332

00:50:19,620 --> 00:50:18,250

questions just you know gave them the

1333

00:50:22,140 --> 00:50:19,630

information that they wanted but they

1334

00:50:24,180 --> 00:50:22,150

were yelling and got quite angry and

1335

00:50:26,340 --> 00:50:24,190

eventually I think they stormed out if i

1336

00:50:30,450 --> 00:50:26,350

recall correctly so although we're

1337

00:50:32,640 --> 00:50:30,460

painted as as these nasty people that

1338

00:50:34,530 --> 00:50:32,650

dabangg can pooh-pooh everything I've

1339

00:50:37,260 --> 00:50:34,540

never seen a skeptic do that I've never

1340

00:50:39,120 --> 00:50:37,270

seen a skeptic yell at a believer who

1341

00:50:41,250 --> 00:50:39,130

I'm an idiot who call them stupid or

1342

00:50:43,140 --> 00:50:41,260

I've not ever experienced that I've

1343

00:50:45,060 --> 00:50:43,150

always that you can see people get

1344

00:50:47,700 --> 00:50:45,070

frustrated and sometimes a little bit

1345

00:50:49,320 --> 00:50:47,710

worked up but they will never look you

1346

00:50:51,270 --> 00:50:49,330

never tell you they don't ever shout you

1347

00:50:52,950 --> 00:50:51,280

down and tell you to shut up it might it

1348

00:50:54,840 --> 00:50:52,960

might look I can see it happening when

1349

00:50:56,520 --> 00:50:54,850

somebody who thinks there is skeptical

1350

00:50:58,980 --> 00:50:56,530

calls and this is Elsa skeptic which a

1351  
00:51:01,620 --> 00:50:58,990  
lot of people do yeah yeah it starts to

1352  
00:51:03,150 --> 00:51:01,630  
go off the rails but and look I would

1353  
00:51:05,220 --> 00:51:03,160  
certainly never call myself a skeptic

1354  
00:51:06,900 --> 00:51:05,230  
because I'm you know what I'm a bit of

1355  
00:51:08,580 --> 00:51:06,910  
Paris kept it go a bit curious about

1356  
00:51:10,710 --> 00:51:08,590  
things but I'm I haven't got much

1357  
00:51:12,480 --> 00:51:10,720  
knowledge that most people around this

1358  
00:51:14,250 --> 00:51:12,490  
table tend to have about things chief

1359  
00:51:15,780 --> 00:51:14,260  
Richards pretty clever you know he sees

1360  
00:51:20,250 --> 00:51:15,790  
free smart they just dropped his food on

1361  
00:51:26,220 --> 00:51:20,260  
the floor Thank You Man I'm sure our

1362  
00:51:30,270 --> 00:51:26,230  
listeners wanted to know that but but I

1363  
00:51:32,130 --> 00:51:30,280

I think what the people from let's just

1364

00:51:34,140 --> 00:51:32,140

say who are non skeptics off often feel

1365

00:51:36,360 --> 00:51:34,150

as that skeptics are reinforcing what is

1366

00:51:38,280 --> 00:51:36,370

considered to be consensus reality and

1367

00:51:39,960 --> 00:51:38,290

that you guys are if not working for the

1368

00:51:41,520 --> 00:51:39,970

man have been sucked into some view of

1369

00:51:43,230 --> 00:51:41,530

reality a lot of people think that yeah

1370

00:51:44,880 --> 00:51:43,240

suck into some view of reality which

1371

00:51:45,950 --> 00:51:44,890

people are going along with which which

1372

00:51:47,570 --> 00:51:45,960

they have seen

1373

00:51:49,070 --> 00:51:47,580

alternative to and they kind of get

1374

00:51:50,780 --> 00:51:49,080

annoyed because you won't do that's why

1375

00:51:52,790 --> 00:51:50,790

the 911 troopers like the people

1376  
00:51:54,859 --> 00:51:52,800  
themselves as the real skeptics in that

1377  
00:51:56,930 --> 00:51:54,869  
situation or in the old days when the

1378  
00:52:01,010 --> 00:51:56,940  
moon hoax was still going on the other

1379  
00:52:03,140 --> 00:52:01,020  
days still go yeah it's pretty sort of

1380  
00:52:04,790 --> 00:52:03,150  
but the people railing against saying

1381  
00:52:06,980 --> 00:52:04,800  
you know that the moon hoax see what was

1382  
00:52:08,720 --> 00:52:06,990  
the moon landings were filmed in the

1383  
00:52:11,270 --> 00:52:08,730  
studio they would call themselves the

1384  
00:52:13,010 --> 00:52:11,280  
real skeptics you see him well this also

1385  
00:52:14,750 --> 00:52:13,020  
brings a wider thing of where the

1386  
00:52:16,849 --> 00:52:14,760  
climate skeptics sit in the whole thing

1387  
00:52:18,560 --> 00:52:16,859  
too because that that's a really big one

1388  
00:52:20,720 --> 00:52:18,570

that's almost as bad as the atheists in

1389

00:52:23,120 --> 00:52:20,730

the skeptics custard look to be honest

1390

00:52:24,470 --> 00:52:23,130

the skeptic zone usually steers a bit

1391

00:52:26,060 --> 00:52:24,480

clear of that topic for that very

1392

00:52:27,500 --> 00:52:26,070

reasonable because it's a huge topic

1393

00:52:29,390 --> 00:52:27,510

with the huge amount of information that

1394

00:52:31,520 --> 00:52:29,400

if you've got to prove one side of the

1395

00:52:33,260 --> 00:52:31,530

other no I don't know I mean how do you

1396

00:52:35,720 --> 00:52:33,270

guys handle it are you talking about

1397

00:52:37,849 --> 00:52:35,730

climate change oh yeah well as

1398

00:52:40,430 --> 00:52:37,859

Australians give deeps which I represent

1399

00:52:41,810 --> 00:52:40,440

and so does Richard we about eight

1400

00:52:43,730 --> 00:52:41,820

months ago we actually wrote a statement

1401  
00:52:45,920 --> 00:52:43,740  
on our website issued a statement saying

1402  
00:52:49,160 --> 00:52:45,930  
that we don't talk about climate change

1403  
00:52:50,480 --> 00:52:49,170  
we are not we are not climate change

1404  
00:52:52,579 --> 00:52:50,490  
skeptics they are different by the

1405  
00:52:54,109 --> 00:52:52,589  
difference in us yeah we try to

1406  
00:52:57,410 --> 00:52:54,119  
differentiate ourselves by calling

1407  
00:53:01,099 --> 00:52:57,420  
ourselves skeptics with a capital s not

1408  
00:53:04,370 --> 00:53:01,109  
just skeptics like yeah but we can't

1409  
00:53:07,460 --> 00:53:04,380  
have we can't be across all basis all

1410  
00:53:10,070 --> 00:53:07,470  
the time hmm and as I may not climate

1411  
00:53:11,390 --> 00:53:10,080  
change sign I haven't signed us so we

1412  
00:53:13,250 --> 00:53:11,400  
leave it up to the best opinion at the

1413  
00:53:14,810 --> 00:53:13,260

time you know I wrote to one of the

1414

00:53:17,000 --> 00:53:14,820

offend of the show know who wrote to me

1415

00:53:19,190 --> 00:53:17,010

recently asking me something like this I

1416

00:53:23,599 --> 00:53:19,200

said look we pick our fights we can't

1417

00:53:27,020 --> 00:53:23,609

cover every possible situation we just

1418

00:53:29,320 --> 00:53:27,030

can't it's impossible I like to confine

1419

00:53:31,339 --> 00:53:29,330

myself to broadly speaking to these

1420

00:53:33,320 --> 00:53:31,349

traditional skeptical outlook which is

1421

00:53:35,359 --> 00:53:33,330

paranormal supernatural all made that

1422

00:53:37,400 --> 00:53:35,369

sort of stuff if other people want to

1423

00:53:40,190 --> 00:53:37,410

chase other topics then that that's

1424

00:53:42,200 --> 00:53:40,200

really great because if I tried to chase

1425

00:53:43,730 --> 00:53:42,210

every topic that people think we should

1426

00:53:45,410 --> 00:53:43,740

be chasing with

1427

00:53:48,530 --> 00:53:45,420

we couldn't get anywhere this was the

1428

00:53:50,600 --> 00:53:48,540

subject of a discussion that occurred

1429

00:53:53,920 --> 00:53:50,610

after tam 8 this year Richard because

1430

00:53:57,350 --> 00:53:53,930

Richard Dawkins scared at all where he

1431

00:54:00,740 --> 00:53:57,360

in he kind of set out what he thought

1432

00:54:02,300 --> 00:54:00,750

should be the priorities for skeptics to

1433

00:54:03,710 --> 00:54:02,310

be dealing with and who said the first

1434

00:54:05,870 --> 00:54:03,720

thing that they should be dealing with

1435

00:54:08,270 --> 00:54:05,880

and the most important thing is religion

1436

00:54:11,570 --> 00:54:08,280

and then everything else comes after

1437

00:54:13,790 --> 00:54:11,580

that now I don't agree with that I think

1438

00:54:15,200 --> 00:54:13,800

like you that each person should just

1439

00:54:19,340 --> 00:54:15,210

pick their fight depending on what they

1440

00:54:21,020 --> 00:54:19,350

want to do I particularly disagree with

1441

00:54:24,290 --> 00:54:21,030

that because I think that people that

1442

00:54:26,180 --> 00:54:24,300

push old med or scam products or

1443

00:54:30,040 --> 00:54:26,190

anti-vaccination people are doing a lot

1444

00:54:33,620 --> 00:54:30,050

more direct damage than religious people

1445

00:54:36,050 --> 00:54:33,630

so he said his idea was well everything

1446

00:54:37,130 --> 00:54:36,060

else is irrelevant because religion is

1447

00:54:38,810 --> 00:54:37,140

the biggest problem that we have

1448

00:54:40,940 --> 00:54:38,820

remember that's that's his fine and

1449

00:54:42,290 --> 00:54:40,950

that's fine I know but I and that's fine

1450

00:54:43,670 --> 00:54:42,300

he come down and do that and he does a

1451

00:54:46,760 --> 00:54:43,680

good job of that and that's his business

1452

00:54:47,990 --> 00:54:46,770

but to then say that everyone else

1453

00:54:50,090 --> 00:54:48,000

should be doing that I think it's wrong

1454

00:54:52,040 --> 00:54:50,100

I think people can pick their fights and

1455

00:54:54,320 --> 00:54:52,050

if you somebody wants to go off and

1456

00:54:56,660 --> 00:54:54,330

debunk climate change that's what ever

1457

00:54:59,570 --> 00:54:56,670

thats good going you know knock yourself

1458

00:55:01,700 --> 00:54:59,580

out that's not what I do I try and apply

1459

00:55:04,460 --> 00:55:01,710

my skills where I can to do the best I

1460

00:55:07,520 --> 00:55:04,470

can and to that for me is not religion

1461

00:55:08,870 --> 00:55:07,530

so now I know I totally agree because we

1462

00:55:11,599 --> 00:55:08,880

do pick our fights because that's where

1463

00:55:13,370 --> 00:55:11,609

our specialty lies yeah and now I'm I

1464

00:55:14,930 --> 00:55:13,380

wouldn't be much good out there when I'm

1465

00:55:16,400 --> 00:55:14,940

climate change I really wouldn't I'd

1466

00:55:17,960 --> 00:55:16,410

look like a goose cuz i really don't

1467

00:55:19,220 --> 00:55:17,970

know enough about it who does you know

1468

00:55:21,080 --> 00:55:19,230

it's really difficult i don't know how

1469

00:55:22,400 --> 00:55:21,090

to tell as creationists because i don't

1470

00:55:24,109 --> 00:55:22,410

know their arguments that's not my area

1471

00:55:25,470 --> 00:55:24,119

right but I can certainly get out there

1472

00:55:28,740 --> 00:55:25,480

and

1473

00:55:30,240 --> 00:55:28,750

do the old UFO which I did you just

1474

00:55:31,890 --> 00:55:30,250

ruined that book for everything I do

1475

00:55:34,020 --> 00:55:31,900

know that something is out there

1476

00:55:36,030 --> 00:55:34,030

unlocking Australia's paranormal secrets

1477

00:55:37,770 --> 00:55:36,040

you've torn the gusset out of that and

1478

00:55:40,380 --> 00:55:37,780

that's a scientific term I think Joe

1479

00:55:43,050 --> 00:55:40,390

that was first used by Madame Curie I

1480

00:55:45,000 --> 00:55:43,060

believe something you do in Radium now

1481

00:55:46,770 --> 00:55:45,010

who has published this book mammoth Wow

1482

00:55:49,859 --> 00:55:46,780

this one is let's park assist

1483

00:55:51,030 --> 00:55:49,869

from allen & unwinn Alan Lanham and I've

1484

00:55:52,080 --> 00:55:51,040

been trying to chase the authors for an

1485

00:55:54,030 --> 00:55:52,090

interview and I'd love to talk to them

1486

00:55:55,680 --> 00:55:54,040

I'd I just want to know how that what

1487

00:55:58,200 --> 00:55:55,690

these people were like that they met

1488

00:55:59,820 --> 00:55:58,210

unlocking Australia's paranormal secrets

1489

00:56:01,530 --> 00:55:59,830

something is out there I'm sure I'll

1490

00:56:03,330 --> 00:56:01,540

listeners could google that or maybe

1491

00:56:05,280 --> 00:56:03,340

find it in your favorite book shop it's

1492

00:56:07,859 --> 00:56:05,290

great picture in there right I think

1493

00:56:10,080 --> 00:56:07,869

it's over 300 pages sorry Rachel there's

1494

00:56:12,870 --> 00:56:10,090

a picture of the alleged monster that

1495

00:56:15,150 --> 00:56:12,880

lives in the hawkesbury river this is a

1496

00:56:18,990 --> 00:56:15,160

guy who I think you're familiar with Rex

1497

00:56:20,310 --> 00:56:19,000

Gilroy yeah um yeah II hunter and all

1498

00:56:21,840 --> 00:56:20,320

that sort of stuff hits from the Blue

1499

00:56:23,130 --> 00:56:21,850

Mountains and me and he's been doing

1500

00:56:24,900 --> 00:56:23,140

this for a long time but he believes

1501

00:56:26,820 --> 00:56:24,910

there's a dinosaur living in the

1502

00:56:28,800 --> 00:56:26,830

hawkesbury river and there's a

1503

00:56:31,410 --> 00:56:28,810

photograph in this book it's fantastic

1504

00:56:34,500 --> 00:56:31,420

actually is oh is this a satellite photo

1505

00:56:36,060 --> 00:56:34,510

no no it looks like at night I've got to

1506

00:56:37,740 --> 00:56:36,070

be a pennant now and say it please your

1507

00:56:39,780 --> 00:56:37,750

saw wasn't technically a dinosaur but I

1508

00:56:44,840 --> 00:56:39,790

know we give me there it is look there

1509

00:56:49,740 --> 00:56:44,850

it is look at small that's that's scary

1510

00:56:51,930 --> 00:56:49,750

yes Rachel stop laughing well I've got

1511

00:56:53,160 --> 00:56:51,940

some new here for you with child only be

1512

00:56:54,810 --> 00:56:53,170

made aware of this week I'm sure

1513

00:56:56,790 --> 00:56:54,820

American listeners will probably know

1514

00:56:58,080 --> 00:56:56,800

about this already but I rang Richard

1515

00:56:59,640 --> 00:56:58,090

and Rachel stretch she wasn't available

1516

00:57:02,160 --> 00:56:59,650

she was she was in some executive lounge

1517

00:57:03,810 --> 00:57:02,170

I couldn't get on the right path I bet

1518

00:57:07,560 --> 00:57:03,820

on the Richard immediately when I saw an

1519

00:57:11,190 --> 00:57:07,570

ad for what looked like infusion RX oh

1520

00:57:14,040 --> 00:57:11,200

yeah now what this is it will if what

1521

00:57:16,200 --> 00:57:14,050

seems to be purported to be is instead

1522

00:57:18,359 --> 00:57:16,210

of in getting Botox injections which can

1523

00:57:20,099 --> 00:57:18,369

go horribly wrong this the better you

1524

00:57:22,020 --> 00:57:20,109

get this substance which is in a syringe

1525

00:57:23,550 --> 00:57:22,030

but not with a needle that's right you

1526

00:57:27,400 --> 00:57:23,560

could use dab it onto the surface of

1527

00:57:29,470 --> 00:57:27,410

your skin and it it sort of freezes your

1528

00:57:32,109 --> 00:57:29,480

your muscles I watched the ad that he

1529

00:57:34,150 --> 00:57:32,119

sent me yeah yeah well and I've looked

1530

00:57:37,000 --> 00:57:34,160

it I've looked into it what it appears

1531

00:57:40,230 --> 00:57:37,010

to do is it makes the water molecules in

1532

00:57:42,490 --> 00:57:40,240

your skin swell and fill in the cracks

1533

00:57:44,380 --> 00:57:42,500

so it causes swelling in the water

1534

00:57:46,750 --> 00:57:44,390

molecules that's what it was claiming to

1535

00:57:48,430 --> 00:57:46,760

do you're horrified I'm wondering

1536

00:57:51,160 --> 00:57:48,440

whether this is the same out i saw on

1537

00:57:52,900 --> 00:57:51,170

pay-tv with the snake venom and it's got

1538

00:57:55,650 --> 00:57:52,910

this woman going look I can't even frown

1539

00:58:00,130 --> 00:57:55,660

any more like it's a good thing that you

1540

00:58:02,529 --> 00:58:00,140

was she got BP it's no it's it's a

1541

00:58:04,089 --> 00:58:02,539

similar product a similar product and

1542

00:58:05,500 --> 00:58:04,099

what they do is they do one off mmm

1543

00:58:06,520 --> 00:58:05,510

space and lyndella half and you're

1544

00:58:09,670 --> 00:58:06,530

thinking well that's not much good in

1545

00:58:11,620 --> 00:58:09,680

the bus home is it but the end I saw was

1546

00:58:14,260 --> 00:58:11,630

half is this stuff and half as Botox

1547

00:58:17,710 --> 00:58:14,270

yeah and can you choose which is Botox

1548

00:58:19,059 --> 00:58:17,720

and which is our stuff I'm actually

1549

00:58:21,160 --> 00:58:19,069

thinking of getting some of this and

1550

00:58:22,839 --> 00:58:21,170

trying the half face test at like one of

1551

00:58:24,910 --> 00:58:22,849

the skeptics meetings I reckon I'm just

1552

00:58:26,559 --> 00:58:24,920

the kind of guy like sometimes you need

1553

00:58:29,740 --> 00:58:26,569

an idiot and I'm just the kidiot to put

1554

00:58:32,349 --> 00:58:29,750

their hand up no I watched the ad you

1555

00:58:33,970 --> 00:58:32,359

sent me may not and and I did make some

1556

00:58:37,720 --> 00:58:33,980

claims about how it fills up the

1557

00:58:39,970 --> 00:58:37,730

wrinkles but didn't explain how well no

1558

00:58:42,420 --> 00:58:39,980

because first out you can't put water

1559

00:58:46,029 --> 00:58:42,430

into selves that just makes them first

1560

00:58:48,549 --> 00:58:46,039

because that's why when you with if you

1561

00:58:50,620 --> 00:58:48,559

are dehydrated and you get a drip you

1562

00:58:53,710 --> 00:58:50,630

get saline drip they don't put water in

1563

00:58:56,950 --> 00:58:53,720

TV because your cells are ass a line

1564

00:58:58,900 --> 00:58:56,960

that contain salts so if you put water

1565

00:59:01,210 --> 00:58:58,910

into a salty mixture that displaces the

1566

00:59:04,630 --> 00:59:01,220

salt and they're so burst listen to be

1567

00:59:07,059 --> 00:59:04,640

claiming that the water cells swell how

1568

00:59:12,190 --> 00:59:07,069

would they swell well they can't swell

1569

00:59:15,099 --> 00:59:12,200

unless you block the receptors on the

1570

00:59:17,529 --> 00:59:15,109

plasma membrane and you can't do that

1571

00:59:19,779 --> 00:59:17,539

with a syringe so I wanted I would how

1572

00:59:20,710 --> 00:59:19,789

it does work because it appeared to do

1573

00:59:22,660 --> 00:59:20,720

something area

1574

00:59:25,480 --> 00:59:22,670

yeah and and and there and they're very

1575

00:59:28,480 --> 00:59:25,490

big as mostly sings on long explanations

1576

00:59:29,740 --> 00:59:28,490

that don't mean much yeah got a moment

1577

00:59:31,300 --> 00:59:29,750

I'll actually go to their website now

1578

00:59:32,890 --> 00:59:31,310

and read it and maybe someone with a

1579

00:59:34,570 --> 00:59:32,900

doctorate can explain i qi the hell

1580

00:59:36,310 --> 00:59:34,580

can't while you're doing that manner you

1581

00:59:37,690 --> 00:59:36,320

look that up I just let our listen to

1582

00:59:40,330 --> 00:59:37,700

know about a few more things while we're

1583

00:59:42,280 --> 00:59:40,340

going the latest magazine from

1584

00:59:45,400 --> 00:59:42,290

Australian skeptics and verse skeptics

1585

00:59:47,230 --> 00:59:45,410

is out and available with a report on

1586

00:59:50,080 --> 00:59:47,240

Tam eight and many other things and you

1587

00:59:56,680 --> 00:59:50,090

can have a little order that in fact at

1588

00:59:58,930 --> 00:59:56,690

ww skeptics calm a you up for auction at

1589

01:00:01,990 --> 00:59:58,940

the moment is death from the skies by

1590

01:00:05,230 --> 01:00:02,000

dr. Phil Plait as signed on the skeptic

1591

01:00:11,020 --> 01:00:05,240

zone episode 99 phil was very gracious

1592

01:00:14,440 --> 01:00:11,030

to sign a copy be quiet and wait there's

1593

01:00:16,390 --> 01:00:14,450

more look you get sick stay close oh now

1594

01:00:18,820 --> 01:00:16,400

phil was gracious enough to give me a

1595

01:00:21,520 --> 01:00:18,830

copy and sign it and that's up for

1596

01:00:23,589 --> 01:00:21,530

auction on ebay just googled death from

1597

01:00:25,810 --> 01:00:23,599

the skies still plate and i'll put a

1598

01:00:28,120 --> 01:00:25,820

link on the skeptic zone for that now

1599

01:00:31,060 --> 01:00:28,130

dr. Richie yes a quick nut word about

1600

01:00:33,040 --> 01:00:31,070

Tam Australia yes that's so exciting and

1601  
01:00:35,650 --> 01:00:33,050  
working very hard to bring our most

1602  
01:00:39,150 --> 01:00:35,660  
radical everybody we have become

1603  
01:00:43,420 --> 01:00:39,160  
available some sponsorship opportunities

1604  
01:00:44,890 --> 01:00:43,430  
for Tam Australia now we've got 600 plus

1605  
01:00:48,339 --> 01:00:44,900  
delegates coming along if there any

1606  
01:00:50,829 --> 01:00:48,349  
companies in Sydney or in Australia or

1607  
01:00:53,349 --> 01:00:50,839  
in the world anywhere anywhere who are

1608  
01:00:55,900 --> 01:00:53,359  
interested in sponsoring tam australia

1609  
01:00:58,810 --> 01:00:55,910  
by getting your information to every

1610  
01:01:02,290 --> 01:00:58,820  
delegate by leaflets or pens or whatever

1611  
01:01:03,550 --> 01:01:02,300  
you want to do you can contact us we're

1612  
01:01:05,920 --> 01:01:03,560  
looking for some more sponsors at the

1613  
01:01:08,140 --> 01:01:05,930

moment and we've also got some new

1614

01:01:10,599 --> 01:01:08,150

speakers to announce richard which is

1615

01:01:13,420 --> 01:01:10,609

very exciting Australians would know

1616

01:01:15,040 --> 01:01:13,430

very well Steve Canaan who is a

1617

01:01:16,690 --> 01:01:15,050

journalist a Walkley award winning

1618

01:01:22,660 --> 01:01:16,700

journalist hot he's pretty hot

1619

01:01:25,680 --> 01:01:22,670

too look at me or grin I think we have a

1620

01:01:27,650 --> 01:01:25,690

man-crush here a second and of course

1621

01:01:30,829 --> 01:01:27,660

currently

1622

01:01:32,839 --> 01:01:30,839

is on ABC 24 and does oh my god the drum

1623

01:01:34,279 --> 01:01:32,849

yeah but also works at late line and he

1624

01:01:37,400 --> 01:01:34,289

broke a lot of the stories about the

1625

01:01:39,349 --> 01:01:37,410

avian throughout 2010 he's going to be

1626  
01:01:42,589 --> 01:01:39,359  
coming we're also very excited to have

1627  
01:01:45,349 --> 01:01:42,599  
Nick cowdrey now he is the current DPP

1628  
01:01:49,480 --> 01:01:45,359  
the Director of Public Prosecutions yes

1629  
01:01:53,000 --> 01:01:49,490  
so o Allah I might keep a low profile

1630  
01:01:54,319 --> 01:01:53,010  
and catchment alum be and of course I

1631  
01:01:57,470 --> 01:01:54,329  
know that gets a secret the big smith

1632  
01:01:59,599 --> 01:01:57,480  
will be speaking yes dick smith is

1633  
01:02:02,390 --> 01:01:59,609  
actually going to be interviewing on

1634  
01:02:03,740 --> 01:02:02,400  
stage james randi although or a chat

1635  
01:02:06,529 --> 01:02:03,750  
they'll be chatting me i'll be chatting

1636  
01:02:08,150 --> 01:02:06,539  
what was that I said wow I'm so jealous

1637  
01:02:10,549 --> 01:02:08,160  
that I'm not gonna be here for 10 miles

1638  
01:02:12,529 --> 01:02:10,559

that I'll be my way across the globe but

1639

01:02:17,690 --> 01:02:12,539

you can you get a little ater hosen

1640

01:02:21,020 --> 01:02:17,700

polka stuff ok yeah you can do the duck

1641

01:02:23,359 --> 01:02:21,030

dance no I'm close Richard you might

1642

01:02:24,950 --> 01:02:23,369

remember that dick smith was one of the

1643

01:02:28,400 --> 01:02:24,960

people who was a founding member of

1644

01:02:31,640 --> 01:02:28,410

australians indoors he is he was yeah so

1645

01:02:33,380 --> 01:02:31,650

for the first time in 30 years Randy and

1646

01:02:35,180 --> 01:02:33,390

it's not Dick Smith will be on stage

1647

01:02:37,519 --> 01:02:35,190

together chatting about the old days

1648

01:02:41,029 --> 01:02:37,529

that'll be fantastic a few more enough

1649

01:02:46,250 --> 01:02:41,039

quick announcements the the Opera House

1650

01:02:49,269 --> 01:02:46,260

has written to me and I yes it's a hyper

1651  
01:02:52,819 --> 01:02:49,279  
opera frankly I'm I'm skeptical of that

1652  
01:02:55,819 --> 01:02:52,829  
they're holding their holding the

1653  
01:02:58,400 --> 01:02:55,829  
festival of Dangerous Ideas in early

1654  
01:03:00,910 --> 01:02:58,410  
October second or third of October and

1655  
01:03:04,640 --> 01:03:00,920  
they've got events with people like

1656  
01:03:06,890 --> 01:03:04,650  
Geoffrey Robinson QC talking about

1657  
01:03:08,809 --> 01:03:06,900  
should the Pope be held to account that

1658  
01:03:12,200 --> 01:03:08,819  
sounds quite controversial another

1659  
01:03:15,109 --> 01:03:12,210  
highlight is why the religious will

1660  
01:03:18,019 --> 01:03:15,119  
inherit the earth anyway listeners can

1661  
01:03:20,960 --> 01:03:18,029  
certainly go to Sydney Opera House calm

1662  
01:03:23,720 --> 01:03:20,970  
/ what's on and find out more the

1663  
01:03:24,920 --> 01:03:23,730

festival of Dangerous Ideas and a few

1664

01:03:26,359 --> 01:03:24,930

more announcements I'll get to at the

1665

01:03:28,789 --> 01:03:26,369

end of the show now may not what have we

1666

01:03:30,380 --> 01:03:28,799

found well look I've come up with a not

1667

01:03:32,100 --> 01:03:30,390

the actual website for this product but

1668

01:03:34,800 --> 01:03:32,110

it describes here what it's

1669

01:03:38,160 --> 01:03:34,810

I'll try and try and reel make this nice

1670

01:03:39,570 --> 01:03:38,170

and big dead dr. Reggie just explaining

1671

01:03:42,900 --> 01:03:39,580

this wrinkle cream does that help to you

1672

01:03:44,970 --> 01:03:42,910

at Oliver yes I've read this I read this

1673

01:03:47,640 --> 01:03:44,980

when you send it to me a feed respir

1674

01:03:52,470 --> 01:03:47,650

technology what is there yeah that's

1675

01:03:54,720 --> 01:03:52,480

made up so do you use the term

1676

01:03:58,170 --> 01:03:54,730

highly ironic now highly ironic acid is

1677

01:04:01,200 --> 01:03:58,180

a molecule that is part of I think I've

1678

01:04:04,680 --> 01:04:01,210

College ins component but it is actually

1679

01:04:06,180 --> 01:04:04,690

a molecule so then what they've done

1680

01:04:07,440 --> 01:04:06,190

here they noticed something which

1681

01:04:09,180 --> 01:04:07,450

shouldn't I talk about a lot is they've

1682

01:04:11,160 --> 01:04:09,190

taken a whole lot of science words and

1683

01:04:13,650 --> 01:04:11,170

they put them into a hat and then

1684

01:04:15,570 --> 01:04:13,660

they've pulled them out at random to

1685

01:04:18,450 --> 01:04:15,580

make it sound science ii so they've said

1686

01:04:20,940 --> 01:04:18,460

a feed rest via technology uses

1687

01:04:23,310 --> 01:04:20,950

hyaluronic microspheres of marine origin

1688

01:04:25,170 --> 01:04:23,320

that's they fill in deep

1689

01:04:27,180 --> 01:04:25,180

wrinkles dehydrated for a better

1690

01:04:29,690 --> 01:04:27,190

penetration their micro injected into

1691

01:04:31,590 --> 01:04:29,700

the skin and swell up with water

1692

01:04:35,250 --> 01:04:31,600

wrinkles are filled in very quickly

1693

01:04:36,650 --> 01:04:35,260

thanks to volume increase the technology

1694

01:04:40,800 --> 01:04:36,660

also provides long-lasting hydration

1695

01:04:42,240 --> 01:04:40,810

thanks to a micro reservoir effects so

1696

01:04:45,180 --> 01:04:42,250

somehow they're claiming that there's

1697

01:04:47,070 --> 01:04:45,190

water coming from somewhere else in your

1698

01:04:49,050 --> 01:04:47,080

skin to swell it up or as the water

1699

01:04:52,020 --> 01:04:49,060

coming from the cream that is put on it

1700

01:04:54,200 --> 01:04:52,030

and why can't you have a hydrologic

1701

01:04:57,210 --> 01:04:54,210

microsphere of marina region by the way

1702

01:04:59,550 --> 01:04:57,220

hyaluronic acid is a compound microscope

1703

01:05:04,830 --> 01:04:59,560

is is a word but that sentence is

1704

01:05:07,200 --> 01:05:04,840

amazing Marine origin well I mean it

1705

01:05:08,820 --> 01:05:07,210

comes from fish or call wrong at all

1706

01:05:12,930 --> 01:05:08,830

have you wanna custard you can just buy

1707

01:05:15,210 --> 01:05:12,940

it in a jar marine origin is pretty

1708

01:05:16,740 --> 01:05:15,220

meaningless system yeah maybe they

1709

01:05:18,690 --> 01:05:16,750

bought it at a shop near the harbor I

1710

01:05:21,540 --> 01:05:18,700

used to watch marine boy when I was a

1711

01:05:24,000 --> 01:05:21,550

boy it came off he had if he had great

1712

01:05:25,440 --> 01:05:24,010

swimmers dude trillion I'm I'm currently

1713

01:05:29,160 --> 01:05:25,450

writing a paper on this

1714

01:05:30,780 --> 01:05:29,170

it was like astro boy yeah on how people

1715

01:05:32,490 --> 01:05:30,790

use science is sounding words to make

1716

01:05:34,349 --> 01:05:32,500

their products are more legitimate and

1717

01:05:36,660 --> 01:05:34,359

then they can charge weirdly turns into

1718

01:05:38,819 --> 01:05:36,670

battery yeah well we did that we did

1719

01:05:41,640 --> 01:05:38,829

that yeah and you've done that as well

1720

01:05:44,130 --> 01:05:41,650

as he oh and also the one you do in

1721

01:05:47,280 --> 01:05:44,140

mystery investigators fake fake yes yeah

1722

01:05:49,800 --> 01:05:47,290

which is future applied was a future

1723

01:05:52,470 --> 01:05:49,810

applied committees kinetic energy yeah

1724

01:05:54,359 --> 01:05:52,480

right and here which is harmonic energy

1725

01:05:56,790 --> 01:05:54,369

oscillation yeah so this is an example

1726

01:05:58,950 --> 01:05:56,800

of where they've just taken a lot of

1727

01:06:00,510 --> 01:05:58,960

words that sound science ii and throwing

1728

01:06:02,790 --> 01:06:00,520

them into a sentence to make it sound

1729

01:06:05,370 --> 01:06:02,800

legitimate and then they can charge \$64

1730

01:06:07,560 --> 01:06:05,380

94 ah well see this is where i come see

1731

01:06:08,760 --> 01:06:07,570

dr. Reggie knows what the go is here I

1732

01:06:10,200 --> 01:06:08,770

see there'd and I think well that's

1733

01:06:11,819 --> 01:06:10,210

funny I can make a joke out of that

1734

01:06:13,650 --> 01:06:11,829

that's why you need people I got to

1735

01:06:17,160 --> 01:06:13,660

reach you in the world look I haven't

1736

01:06:18,359 --> 01:06:17,170

seen that the blurb is gibberish I don't

1737

01:06:19,859 --> 01:06:18,369

know if there's any evidence that this

1738

01:06:22,589 --> 01:06:19,869

stuff actually does anything I haven't

1739

01:06:25,680 --> 01:06:22,599

looked up the sign it does on the ad

1740

01:06:27,390 --> 01:06:25,690

well it just says here clinically proven

1741

01:06:29,579 --> 01:06:27,400

eighty-three percent reduction in

1742

01:06:32,010 --> 01:06:29,589

wrinkles or something so administered

1743

01:06:33,180 --> 01:06:32,020

minutes see photos oh no that's nothing

1744

01:06:35,339 --> 01:06:33,190

that's a different products out there

1745

01:06:37,349 --> 01:06:35,349

today but like I said I might actually

1746

01:06:39,750 --> 01:06:37,359

put down some of the the main-yard

1747

01:06:41,849 --> 01:06:39,760

millions on this and and maybe try it

1748

01:06:44,430 --> 01:06:41,859

out sometime and we'll see how we go I'm

1749

01:06:45,839 --> 01:06:44,440

looking forward to it let me quickly

1750

01:06:47,490 --> 01:06:45,849

mention a couple more things for our

1751

01:06:52,050 --> 01:06:47,500

listeners might be interested in there's

1752

01:06:55,800 --> 01:06:52,060

a new shop on zazzle stop merrill dory

1753

01:06:57,750 --> 01:06:55,810

oh you can buy your stop merrill dory

1754

01:06:59,460 --> 01:06:57,760

merchandise including t-shirts and

1755

01:07:02,010 --> 01:06:59,470

you're looking at one earlier dr. AG

1756

01:07:04,470 --> 01:07:02,020

yeah earlier that says i have a brain

1757

01:07:06,030 --> 01:07:04,480

too yes metal died up now there's lots

1758

01:07:09,930 --> 01:07:06,040

of links i've been given here but look

1759

01:07:12,140 --> 01:07:09,940

if listeners just go to zazzle.com au /

1760

01:07:13,309 --> 01:07:12,150

stop merrill dory

1761

01:07:15,620 --> 01:07:13,319

at the moment I think that's probably

1762

01:07:17,359 --> 01:07:15,630

the easiest thing to run to and check

1763

01:07:20,359 --> 01:07:17,369

out the list of merchandise you can also

1764

01:07:26,539 --> 01:07:20,369

buy a mug that says vaccination it works

1765

01:07:29,029 --> 01:07:26,549

in fact I've got on under my

1766

01:07:31,640 --> 01:07:29,039

sleeve I've got my vaccination tattoo

1767

01:07:33,349 --> 01:07:31,650

you roll up my sleeve right dr. AG and

1768

01:07:36,049 --> 01:07:33,359

there it is look I know me I'm

1769

01:07:38,089 --> 01:07:36,059

fascinated that's so cool yeah that is

1770

01:07:39,650 --> 01:07:38,099

very nice you guys now if you were

1771

01:07:41,510 --> 01:07:39,660

really serious you would had a blood

1772

01:07:43,460 --> 01:07:41,520

tattoo like Penn & Teller recommended

1773

01:07:45,440 --> 01:07:43,470

data method which is you go to a tattoo

1774

01:07:47,390 --> 01:07:45,450

parlor they don't want ink in there and

1775

01:07:48,980 --> 01:07:47,400

they do it with the needle so it's cars

1776

01:07:50,599 --> 01:07:48,990

but then it goes away after a while if

1777

01:07:52,700 --> 01:07:50,609

you're a serious science guy you'd have

1778

01:07:54,529 --> 01:07:52,710

a blood test maybe I'm not okay oh yes

1779

01:07:59,240 --> 01:07:54,539

then has a little bit scared of things

1780

01:08:01,220 --> 01:07:59,250

like that time and finally we have a we

1781

01:08:03,019 --> 01:08:01,230

have a new forum which may be of

1782

01:08:05,359 --> 01:08:03,029

interest to our listeners in New Zealand

1783

01:08:09,589 --> 01:08:05,369

Australia and the Pacific region which

1784

01:08:13,519 --> 01:08:09,599

is HTTP colon slash slash australasian

1785

01:08:16,590 --> 01:08:13,529

skeptics dot info to new forum just

1786

01:08:18,720 --> 01:08:16,600

started up about the

1787

01:08:23,400 --> 01:08:18,730

specific interest to Australia New

1788

01:08:26,190 --> 01:08:23,410

Zealand and the area there so as they

1789

01:08:28,440 --> 01:08:26,200

say as Molly Meldrum would say do

1790

01:08:29,970 --> 01:08:28,450

yourself a favor do yourself a favor

1791

01:08:36,390 --> 01:08:29,980

we're at cowboy hat and do try and be

1792

01:08:38,130 --> 01:08:36,400

gay I see but that's only for the

1793

01:08:40,650 --> 01:08:38,140

Austrian lessness can I just bring some

1794

01:08:43,260 --> 01:08:40,660

terbium into it for a moment oh yes now

1795

01:08:45,630 --> 01:08:43,270

um okay as you know I gay what should I

1796

01:08:48,810 --> 01:08:45,640

keep up with their current events at the

1797

01:08:51,750 --> 01:08:48,820

moment China has stopped all exports of

1798

01:08:52,860 --> 01:08:51,760

raw earth elements to Japan well big

1799

01:08:54,870 --> 01:08:52,870

deal we'll get them somewhere else well

1800

01:08:57,210 --> 01:08:54,880

probably you know Japan's bit unhappy

1801

01:08:59,610 --> 01:08:57,220

about this because terbium is one rare

1802

01:09:00,840 --> 01:08:59,620

earth element of which I think China has

1803

01:09:03,270 --> 01:09:00,850

about ninety three percent of the

1804

01:09:04,740 --> 01:09:03,280

world's supply now terbium is the kind

1805

01:09:06,510 --> 01:09:04,750

of thing instead of bound within other

1806

01:09:08,280 --> 01:09:06,520

rocks on that but it is really useful

1807

01:09:10,770 --> 01:09:08,290

and I had to look this up to make sure I

1808

01:09:13,410 --> 01:09:10,780

say this right it is a crystal

1809

01:09:14,970 --> 01:09:13,420

stabilizer in fuel cells so if using a

1810

01:09:17,700 --> 01:09:14,980

fuel cell in anything could be like you

1811

01:09:19,560 --> 01:09:17,710

know you're here hybrid cars or anything

1812

01:09:21,450 --> 01:09:19,570

that they used for now you probably need

1813

01:09:23,010 --> 01:09:21,460

a bit of turbulence get a bit upset

1814

01:09:24,000 --> 01:09:23,020

about this and the reason the Chinese

1815

01:09:25,680 --> 01:09:24,010

aren't letting in the habit is because

1816

01:09:27,030 --> 01:09:25,690

they've got is a fishing dispute going

1817

01:09:29,280 --> 01:09:27,040

on between the two of them at the moment

1818

01:09:31,800 --> 01:09:29,290

so the Vietnamese are getting into this

1819

01:09:33,330 --> 01:09:31,810

by getting a bit some terbium processing

1820

01:09:36,360 --> 01:09:33,340

factories just near the border people

1821

01:09:38,670 --> 01:09:36,370

are sneak in terbium over so next time

1822

01:09:40,170 --> 01:09:38,680

in plot conversation go well if

1823

01:09:42,750 --> 01:09:40,180

something Bad's happening wells not as

1824

01:09:45,599 --> 01:09:42,760

bad as that terbium situation and then

1825

01:09:51,260 --> 01:09:45,609

go so try and use that I say on the was

1826  
01:09:54,120 --> 01:09:51,270  
a skippy scarred universe sure be there

1827  
01:09:56,160 --> 01:09:54,130  
quote a wealth of information right no

1828  
01:09:58,800 --> 01:09:56,170  
no another will can he said in the

1829  
01:10:01,230 --> 01:09:58,810  
DeLorean in Back to the Future made up I

1830  
01:10:02,940 --> 01:10:01,240  
reckon you would I reckon a flux

1831  
01:10:05,430 --> 01:10:02,950  
capacitor the bit where the crazy

1832  
01:10:08,880 --> 01:10:05,440  
science the banana in that that little

1833  
01:10:11,580 --> 01:10:08,890  
battle mr. was enormous mr. fuel mr.

1834  
01:10:15,930 --> 01:10:11,590  
fusion diffusion was probably pure

1835  
01:10:17,670 --> 01:10:15,940  
terbium and finally just another note

1836  
01:10:19,890 --> 01:10:17,680  
from me or two more notes our good

1837  
01:10:20,760 --> 01:10:19,900  
friend philip has coffee now he's back

1838  
01:10:22,590 --> 01:10:20,770

in Austria

1839

01:10:24,210 --> 01:10:22,600

yeah I think he's in Melbourne at the

1840

01:10:27,500 --> 01:10:24,220

moment now he was interviewed on the

1841

01:10:29,490 --> 01:10:27,510

skeptic zone Oh three or four months ago

1842

01:10:32,370 --> 01:10:29,500

fantastic moment longer than that

1843

01:10:34,890 --> 01:10:32,380

fantastic Mentalist yeah then a really

1844

01:10:36,630 --> 01:10:34,900

nice bloke to boot philip s coffee check

1845

01:10:38,190 --> 01:10:36,640

him out if you're in Melbourne is that

1846

01:10:40,020 --> 01:10:38,200

the Melbourne comedy festival during a

1847

01:10:41,700 --> 01:10:40,030

show called six more impossible things

1848

01:10:43,620 --> 01:10:41,710

before dinner and I can thoroughly

1849

01:10:45,290 --> 01:10:43,630

recommend that you go see it hey Philip

1850

01:10:49,140 --> 01:10:45,300

if you're listening give us a shot and

1851

01:10:50,790 --> 01:10:49,150

finally the last episode of the skeptic

1852

01:10:54,570 --> 01:10:50,800

zone which was of course the skeptics

1853

01:10:58,230 --> 01:10:54,580

and live from dragoncon is now online on

1854

01:11:01,170 --> 01:10:58,240

YouTube as a video you can check it out

1855

01:11:04,830 --> 01:11:01,180

if you go to youtube and just type in

1856

01:11:08,880 --> 01:11:04,840

skeptic zone or my youtube channel which

1857

01:11:10,920 --> 01:11:08,890

is skeptic zone podcast all one word and

1858

01:11:12,570 --> 01:11:10,930

please if you are out come along to the

1859

01:11:14,760 --> 01:11:12,580

big skeptic atheist blow out of the bar

1860

01:11:17,730 --> 01:11:14,770

on the hill you councilman said their

1861

01:11:20,070 --> 01:11:17,740

night and look me and Dunning a mean

1862

01:11:21,600 --> 01:11:20,080

meet me and Brian Dunning a very close

1863

01:11:23,010 --> 01:11:21,610

in fact I've got this very special event

1864

01:11:25,140 --> 01:11:23,020

coming up with the skeptics in Sydney

1865

01:11:27,210 --> 01:11:25,150

soon and I rang Brian I said Brian I

1866

01:11:28,410 --> 01:11:27,220

need your full support behind this and

1867

01:11:31,770 --> 01:11:28,420

he has thrown himself wholeheartedly

1868

01:11:35,700 --> 01:11:31,780

behind me talking to the skeptics he's

1869

01:11:39,930 --> 01:11:35,710

that sort of guy from scribd com room

1870

01:11:43,080 --> 01:11:39,940

now big it's um it's it's a bond by osh

1871

01:11:47,580 --> 01:11:43,090

it is boys as you'll soon be saying good

1872

01:11:49,050 --> 01:11:47,590

the riser yeah again all our German

1873

01:11:50,400 --> 01:11:49,060

listeners Meg's heading your way she's

1874

01:11:53,100 --> 01:11:50,410

going to be living in Hamburg but check

1875

01:11:54,210 --> 01:11:53,110

out the Hamburg skeptics and you'll be

1876

01:11:55,860 --> 01:11:54,220

looking forward to meeting all such

1877

01:11:58,170 --> 01:11:55,870

people looking forward very much to

1878

01:12:00,420 --> 01:11:58,180

meeting them seeing what is the topics

1879

01:12:01,830 --> 01:12:00,430

that the German skeptics are are talking

1880

01:12:03,600 --> 01:12:01,840

about what what are the fights that

1881

01:12:06,210 --> 01:12:03,610

they're fighting over there and I know

1882

01:12:07,240 --> 01:12:06,220

homeopathy is huge in Germany very very

1883

01:12:09,490 --> 01:12:07,250

entrenched

1884

01:12:12,010 --> 01:12:09,500

so I do know that the Hamburg skeptics

1885

01:12:14,740 --> 01:12:12,020

are getting behind the 10 23 campaign

1886

01:12:15,670 --> 01:12:14,750

for next beginning of next year so that

1887

01:12:18,580 --> 01:12:15,680

will definitely be something to look

1888

01:12:21,040 --> 01:12:18,590

forward to and seeing how the Germans

1889

01:12:23,740 --> 01:12:21,050

react to to a whole bunch of skeptics

1890

01:12:26,020 --> 01:12:23,750

overdosing on homeopathy medication well

1891

01:12:28,060 --> 01:12:26,030

look may get there if anything comes up

1892

01:12:34,660 --> 01:12:28,070

and you're able to send us a report but

1893

01:12:36,130 --> 01:12:34,670

wait alchemy European correspondent good

1894

01:12:37,660 --> 01:12:36,140

in the bottom third when your photos up

1895

01:12:39,850 --> 01:12:37,670

there and and I just say that earlier

1896

01:12:41,560 --> 01:12:39,860

this year I proposed to the ABC that I

1897

01:12:43,600 --> 01:12:41,570

did and overdosing on Homer pathak

1898

01:12:45,580 --> 01:12:43,610

medicine at the front of John Hunter

1899

01:12:46,840 --> 01:12:45,590

Hospital film did did it live so episode

1900

01:12:49,240 --> 01:12:46,850

anything goes wrong I could just go on

1901

01:12:50,410 --> 01:12:49,250

into the casualty and I want to put out

1902

01:12:51,790 --> 01:12:50,420

though I was gonna be outside because I

1903

01:12:53,020 --> 01:12:51,800

didn't want actually clogged up casualty

1904

01:12:54,550 --> 01:12:53,030

with something like that you know that

1905

01:12:56,110 --> 01:12:54,560

wasn't needed i was going to be outside

1906

01:12:57,850 --> 01:12:56,120

and they would not let me do it they

1907

01:12:59,770 --> 01:12:57,860

said it is imitable behavior and you are

1908

01:13:02,410 --> 01:12:59,780

not allowed to do that how you see

1909

01:13:04,660 --> 01:13:02,420

maenad i am yes so you guys can be yes

1910

01:13:06,520 --> 01:13:04,670

oh yeah so you know ABC staff another

1911

01:13:08,350 --> 01:13:06,530

level overdose on homeopathic medicine

1912

01:13:11,560 --> 01:13:08,360

on camera because you sure we can take

1913

01:13:13,840 --> 01:13:11,570

as much coke as we like the window I'm

1914

01:13:15,490 --> 01:13:13,850

not allowed to touch the home of that

1915

01:13:17,590 --> 01:13:15,500

thank you may not and we look forward to

1916

01:13:20,110 --> 01:13:17,600

seeing you and Newcastle and then in

1917

01:13:22,060 --> 01:13:20,120

Sydney very soon for the first new

1918

01:13:23,380 --> 01:13:22,070

skeptics in the pub in our new pub and

1919

01:13:24,850 --> 01:13:23,390

the good thing is i'm only a small part

1920

01:13:28,450 --> 01:13:24,860

of both those events so it would be very

1921

01:13:30,790 --> 01:13:28,460

easy to miss me dr. AG thanks Richard

1922

01:13:33,580 --> 01:13:30,800

thank you for coming along and that was

1923

01:13:35,620 --> 01:13:33,590

a nice as ever I'm nice Chinese meal

1924

01:13:37,300 --> 01:13:35,630

we've had here at momma wants yes Mama's

1925

01:13:39,520 --> 01:13:37,310

lovely she always takes care of us as I

1926

01:13:40,690 --> 01:13:39,530

think he does oh and one last quick plug

1927

01:13:43,510 --> 01:13:40,700

if you like to know what kind of music

1928

01:13:45,430 --> 01:13:43,520

I'm into have listened at Manor com that

1929

01:13:47,380 --> 01:13:45,440

are you we've been doing a podcast line

1930

01:13:49,450 --> 01:13:47,390

from a bus stop and if you like the bus

1931

01:13:50,920 --> 01:13:49,460

announcements here a bus actually pulled

1932

01:13:53,730 --> 01:13:50,930

up and I interviewed a bus driver the

1933

01:13:57,130 --> 01:13:53,740

other day it's the opposite of gripping

1934

01:13:58,780 --> 01:13:57,140

is dripping its dripping

1935

01:14:01,660 --> 01:13:58,790

so thank you very much everybody for

1936

01:14:03,070 --> 01:14:01,670

coming along and uncle our next meeting

1937

01:14:09,209 --> 01:14:03,080

in a couple of weeks for the think tank

1938

01:14:09,219 --> 01:14:34,360

what did you say that

1939

01:14:40,910 --> 01:14:38,630  
on Sunday October third at nine-thirty

1940

01:14:42,860 --> 01:14:40,920  
am joined the Granite State skeptics on

1941

01:14:45,350 --> 01:14:42,870  
a walking tour of historic Salem

1942

01:14:47,570 --> 01:14:45,360  
Massachusetts learn the history and view

1943

01:14:49,580 --> 01:14:47,580  
the sights of this historic town made

1944

01:14:52,730 --> 01:14:49,590  
famous by arthur miller's the crucible

1945

01:14:54,320 --> 01:14:52,740  
and the Salem witch trials we will be

1946

01:14:56,210 --> 01:14:54,330  
meeting at the salem visitor center

1947

01:14:58,880 --> 01:14:56,220  
where we will begin our tour and enjoy

1948

01:15:01,190 --> 01:14:58,890  
such sights as a salem witch museum the

1949

01:15:03,830 --> 01:15:01,200  
House of the Seven Gables and the Salem

1950

01:15:05,810 --> 01:15:03,840  
pirate museum while the cost of the tour

1951

01:15:08,450 --> 01:15:05,820

is free some of the sites we will be

1952

01:15:10,400 --> 01:15:08,460

stopping at do charge a fee for more

1953

01:15:29,090 --> 01:15:10,410

information in full details check

1954

01:15:35,160 --> 01:15:31,650

thank you for listening to the skeptic

1955

01:15:37,320 --> 01:15:35,170

zone are more interviews from Tam 8

1956

01:15:39,750 --> 01:15:37,330

coming your way next week we have an

1957

01:15:42,360 --> 01:15:39,760

interview with bruce m hood and that's

1958

01:15:44,370 --> 01:15:42,370

conducted by dr. rachey thank you all

1959

01:15:47,070 --> 01:15:44,380

for continuing to listen and all the

1960

01:15:49,560 --> 01:15:47,080

support we've received after our 100th

1961

01:15:51,330 --> 01:15:49,570

episode and you can continue to support

1962

01:15:53,670 --> 01:15:51,340

the skeptic zone if you wish to by

1963

01:15:55,500 --> 01:15:53,680

subscribing only a dollar an episode if

1964

01:15:58,200 --> 01:15:55,510

you wish you'll find the links on our

1965

01:16:00,480 --> 01:15:58,210

homepage but until next week this is

1966

01:16:05,670 --> 01:16:00,490

Richard Saunders signing off from Sydney

1967

01:16:09,990 --> 01:16:05,680

Australia you've been listening to the

1968

01:16:13,230 --> 01:16:10,000

skeptic zone visit our website at WWF

1969

01:16:16,630 --> 01:16:13,240

digs on TV the comments contacts and

1970

01:16:19,550 --> 01:16:16,640

extra video reports

1971

01:16:21,640 --> 01:16:19,560

us kids

1972

01:16:28,140 --> 01:16:21,650

me