

1
00:00:05,960 --> 00:00:13,699
welcome to the skeptic zone the podcast

2
00:00:09,119 --> 00:00:13,699
from Australia for science and reason

3
00:00:23,089 --> 00:00:27,629
Richard Saunders here from Sydney

4
00:00:25,739 --> 00:00:31,589
Australia for the skeptic zone podcast

5
00:00:27,629 --> 00:00:35,460
it's episode number 126 was just one

6
00:00:31,589 --> 00:00:38,280
week ago well just over a week ago I was

7
00:00:35,460 --> 00:00:42,000
quite happy with myself I got the

8
00:00:38,280 --> 00:00:43,820
previous skeptic zone out online I was

9
00:00:42,000 --> 00:00:46,670
sitting back and enjoying the afternoon

10
00:00:43,820 --> 00:00:49,939
when I happened to flick on the TV and

11
00:00:46,670 --> 00:00:53,850
there was a report of an earthquake in

12
00:00:49,939 --> 00:00:58,439
Japan and I don't need to tell you the

13
00:00:53,850 --> 00:01:01,260
rest as it happened I was having a chat

14
00:00:58,439 --> 00:01:05,158
to a good friend of mine Kerry I win one

15
00:01:01,259 --> 00:01:07,649
of the skeptics and we watched together

16
00:01:05,159 --> 00:01:12,118
in horror in our respective countries

17
00:01:07,650 --> 00:01:14,219
the unfolding disaster so some of this

18
00:01:12,118 --> 00:01:17,400
week's show will be devoted to topics

19
00:01:14,219 --> 00:01:20,849
relating to disasters i guess the

20
00:01:17,400 --> 00:01:24,000
tsunami and previous tsunamis and also

21
00:01:20,849 --> 00:01:28,048
to the interesting issue of atomic

22
00:01:24,000 --> 00:01:30,590
reactors in fact first up Maynard will

23
00:01:28,049 --> 00:01:33,360
interview professor David Jamison

24
00:01:30,590 --> 00:01:36,478
professor of physics at the University

25
00:01:33,359 --> 00:01:39,450
of Melbourne about his thoughts and

26
00:01:36,478 --> 00:01:41,310
feelings about atomic reactors and his

27
00:01:39,450 --> 00:01:44,640
thoughts about the current situation in

28
00:01:41,310 --> 00:01:47,399
Japan and after that on a similar sort

29

00:01:44,640 --> 00:01:51,140
of topic dr. Richie and dr. Reggie

30
00:01:47,399 --> 00:01:53,640
reports will look at the unbelievable

31
00:01:51,140 --> 00:01:57,829
newsletter that came out from homeopathy

32
00:01:53,640 --> 00:02:01,140
plus here in Australia advocating

33
00:01:57,828 --> 00:02:04,500
homeopathic remedies or radiation

34
00:02:01,140 --> 00:02:06,090
sickness you might have to rewind that

35
00:02:04,500 --> 00:02:08,878
little bit to understand it now I'll

36
00:02:06,090 --> 00:02:10,860
tell you again they are advocating that

37
00:02:08,878 --> 00:02:13,169
you take homeopathy to counter the

38
00:02:10,860 --> 00:02:15,290
effects of radiation sickness

39
00:02:13,169 --> 00:02:19,409
I don't even have to comment about that

40
00:02:15,289 --> 00:02:22,609
following dr. H E is reality bites with

41
00:02:19,409 --> 00:02:25,680
Joanne been home ooh and then we have to

42
00:02:22,610 --> 00:02:28,230
editorials one from the former president

43
00:02:25,680 --> 00:02:31,260

and former CEO of Australian skeptics

44

00:02:28,229 --> 00:02:35,009

and former editor of the magazine the

45

00:02:31,259 --> 00:02:37,349

skeptic magazine Barry Williams with an

46

00:02:35,009 --> 00:02:42,598

editorial he originally wrote to cover

47

00:02:37,349 --> 00:02:43,799

the previous tsunami back in 2004 and to

48

00:02:42,598 --> 00:02:46,289

round off the show we have another

49

00:02:43,800 --> 00:02:49,380

editorial from Peter Babbage otherwise

50

00:02:46,289 --> 00:02:51,959

known as red bag from ratbags calm with

51

00:02:49,379 --> 00:02:54,959

an editorial he wrote along a similar

52

00:02:51,959 --> 00:02:57,479

vein here is the skeptic zone and this

53

00:02:54,959 --> 00:03:01,759

week it is particularly relevant to the

54

00:02:57,479 --> 00:03:01,759

current situation in Japan

55

00:03:16,090 --> 00:03:23,489

here's my not spooky action at the

56

00:03:21,039 --> 00:03:23,489

distance

57

00:03:26,659 --> 00:03:31,620

good afternoon how hello I'm just fine

58
00:03:29,909 --> 00:03:33,210
look thank you for taking my call you

59
00:03:31,620 --> 00:03:36,150
have very busy would conferences last

60
00:03:33,210 --> 00:03:38,250
time we spoke changed since we last

61
00:03:36,150 --> 00:03:39,780
spoke it certainly has that ladies and

62
00:03:38,250 --> 00:03:41,490
gentlemen a few months ago I was trying

63
00:03:39,780 --> 00:03:44,729
to do a story with this man here dr.

64
00:03:41,490 --> 00:03:46,620
David Jamison and basically no one was

65
00:03:44,729 --> 00:03:48,269
interested because thorium reactors was

66
00:03:46,620 --> 00:03:50,520
something that only crazy scientist

67
00:03:48,270 --> 00:03:52,710
talks about an experimental way but

68
00:03:50,520 --> 00:03:54,300
suddenly dr. thorium reactors have

69
00:03:52,710 --> 00:03:57,060
become very interesting to a lot of

70
00:03:54,300 --> 00:04:01,170
people haven't they yes I have and

71
00:03:57,060 --> 00:04:05,159
people go thorium what is that well

72
00:04:01,169 --> 00:04:07,769
thorium is a relatively common heavy

73
00:04:05,159 --> 00:04:10,759
elements like uranium but a little bit

74
00:04:07,770 --> 00:04:13,140
lighter either because naturally in the

75
00:04:10,759 --> 00:04:15,629
crust of the earth where it's about as

76
00:04:13,139 --> 00:04:17,159
abundant as lead which I think not

77
00:04:15,629 --> 00:04:19,949
people would be much more familiar with

78
00:04:17,160 --> 00:04:23,640
and where are most of the deposits of

79
00:04:19,949 --> 00:04:26,310
thorium in the world at it seems to be

80
00:04:23,639 --> 00:04:29,849
fairly well distributed around the world

81
00:04:26,310 --> 00:04:32,370
some of the biggest deposits of thorium

82
00:04:29,850 --> 00:04:34,140
minerals are right here in Australia I

83
00:04:32,370 --> 00:04:36,090
think probably where are the number one

84
00:04:34,139 --> 00:04:39,990
or number two in the world for thorium

85
00:04:36,089 --> 00:04:43,918
reserves with the United States and

86

00:04:39,990 --> 00:04:46,980
India also with very big deposits of

87
00:04:43,918 --> 00:04:49,620
thorium it's not a very rare material

88
00:04:46,980 --> 00:04:52,350
now the question that's been asked is if

89
00:04:49,620 --> 00:04:55,280
this is a potential use in a nuclear

90
00:04:52,350 --> 00:04:57,600
reactor why aren't they doing it already

91
00:04:55,279 --> 00:04:59,939
well that's a very good question and

92
00:04:57,600 --> 00:05:02,610
experts in the field who have been asked

93
00:04:59,939 --> 00:05:05,370
that same question have said well it's a

94
00:05:02,610 --> 00:05:07,379
bit like going into a forest and cutting

95
00:05:05,370 --> 00:05:08,899
down a whole lot of green timber and

96
00:05:07,379 --> 00:05:11,189
trying to get a fire going with that

97
00:05:08,899 --> 00:05:13,739
instead of using all the dead wood

98
00:05:11,189 --> 00:05:16,050
flying around on the forest floor which

99
00:05:13,740 --> 00:05:18,410
burns a lot better so thorium is like

100
00:05:16,050 --> 00:05:20,639

the green wood and the dead wood is like

101

00:05:18,410 --> 00:05:24,330

uranium it's much easier to get the

102

00:05:20,639 --> 00:05:27,060

nuclear reaction started in uranium then

103

00:05:24,329 --> 00:05:30,329

the thorium and so that's why you're

104

00:05:27,060 --> 00:05:32,668

onium has had a head start in a nuclear

105

00:05:30,329 --> 00:05:34,168

reactor compared to thorium now the

106

00:05:32,668 --> 00:05:35,879

problem we have with the Japanese

107

00:05:34,168 --> 00:05:37,089

reactors at the moment if they were

108

00:05:35,879 --> 00:05:38,980

thorium

109

00:05:37,089 --> 00:05:40,329

be we be having any problem like this or

110

00:05:38,980 --> 00:05:44,770

is the main problem of the Japanese

111

00:05:40,329 --> 00:05:46,750

reactors their age anyway well there's a

112

00:05:44,769 --> 00:05:49,240

there's a diversity of opinion about

113

00:05:46,750 --> 00:05:51,160

that Maynard but from my point of view

114

00:05:49,240 --> 00:05:52,960

the the problem that the Japanese

115
00:05:51,160 --> 00:05:57,430
reactors have experienced is that

116
00:05:52,959 --> 00:06:01,239
terrible tsunami which has washed

117
00:05:57,430 --> 00:06:04,120
through the the old the old plant which

118
00:06:01,240 --> 00:06:07,600
hadn't behaved very well obviously it's

119
00:06:04,120 --> 00:06:09,840
a terrible tragedy but what seems to

120
00:06:07,600 --> 00:06:12,910
have happened is that the tsunami has

121
00:06:09,839 --> 00:06:15,609
destroyed all the backup power systems

122
00:06:12,910 --> 00:06:18,700
which were needed for the cooling of the

123
00:06:15,610 --> 00:06:22,900
shutdown reactors i'm pretty sure from

124
00:06:18,699 --> 00:06:24,819
the press reports that the reactor all

125
00:06:22,899 --> 00:06:28,359
the reactors on the site there had been

126
00:06:24,819 --> 00:06:31,930
shut down as you'd expect automatically

127
00:06:28,360 --> 00:06:34,030
after the earthquake but unfortunately

128
00:06:31,930 --> 00:06:35,709
the tsunami which arrived as the

129
00:06:34,029 --> 00:06:39,000
reactors were shutting down or had

130
00:06:35,709 --> 00:06:42,159
already shut down destroyed all the

131
00:06:39,000 --> 00:06:45,610
power switch yards and the backup diesel

132
00:06:42,160 --> 00:06:48,729
generators leaving them very vulnerable

133
00:06:45,610 --> 00:06:52,720
now to the to overheating but I

134
00:06:48,728 --> 00:06:55,269
emphasized that although the the six

135
00:06:52,720 --> 00:06:58,840
reactors on the site of the Fukushima

136
00:06:55,269 --> 00:07:00,879
one power station are the ones that are

137
00:06:58,839 --> 00:07:04,179
causing the problem the three of them

138
00:07:00,879 --> 00:07:05,829
were weren't in service at the time of

139
00:07:04,180 --> 00:07:09,370
the earthquake and the other three were

140
00:07:05,829 --> 00:07:13,180
but would have shut down immediately in

141
00:07:09,370 --> 00:07:14,860
response to the earthquake but the after

142
00:07:13,180 --> 00:07:16,870
you shadow reactor down you have to keep

143

00:07:14,860 --> 00:07:18,370
the cooling pumps running to dissipate

144
00:07:16,870 --> 00:07:21,129
the enormous amount of heat in the

145
00:07:18,370 --> 00:07:24,069
reactor core and the tsunami has been

146
00:07:21,129 --> 00:07:27,219
destroyed the it appears has destroyed

147
00:07:24,069 --> 00:07:29,649
the pumps and the water intakes and the

148
00:07:27,220 --> 00:07:31,840
power stations and this has created some

149
00:07:29,649 --> 00:07:33,909
significant difficulties obviously which

150
00:07:31,839 --> 00:07:35,469
we're seeing today well given what has

151
00:07:33,910 --> 00:07:38,320
happened in Japan do you think there

152
00:07:35,470 --> 00:07:39,820
would be any interest worldwide on

153
00:07:38,319 --> 00:07:42,189
particularly in Australia to do any

154
00:07:39,819 --> 00:07:44,379
further thorium research to maybe

155
00:07:42,189 --> 00:07:46,149
perhaps make new nuclear power plants as

156
00:07:44,379 --> 00:07:48,459
this is not going to make the image of

157
00:07:46,149 --> 00:07:50,439

nuclear power generally any healthier I

158

00:07:48,459 --> 00:07:51,879

well yes indeed

159

00:07:50,439 --> 00:07:54,189

in fact I should have answered your

160

00:07:51,879 --> 00:07:55,540

question whether their thorium reactor

161

00:07:54,189 --> 00:07:58,689

would have had the same problems that

162

00:07:55,540 --> 00:08:02,020

probably would have because any any

163

00:07:58,689 --> 00:08:04,360

reactor needs to be cooled for a period

164

00:08:02,019 --> 00:08:06,069

of time after is shut down just to get

165

00:08:04,360 --> 00:08:08,759

the heat out of the core because they're

166

00:08:06,069 --> 00:08:15,009

operating at very high temperatures and

167

00:08:08,759 --> 00:08:16,810

I I think that probably when when Japan

168

00:08:15,009 --> 00:08:19,990

begins to recover from this terrible

169

00:08:16,810 --> 00:08:23,410

terrible disaster pawling loss of life

170

00:08:19,990 --> 00:08:26,970

and livelihood that in the overall

171

00:08:23,410 --> 00:08:29,140

scheme of things although the nuclear

172
00:08:26,970 --> 00:08:31,060
disaster is getting an enormous amount

173
00:08:29,139 --> 00:08:34,449
of press coverage I think the loss of

174
00:08:31,060 --> 00:08:37,120
life and livelihood from just a physical

175
00:08:34,450 --> 00:08:39,490
destruction caused by the tsunami of the

176
00:08:37,120 --> 00:08:43,179
railways and the roads and the houses

177
00:08:39,490 --> 00:08:46,180
and the awful tragedy of people who have

178
00:08:43,179 --> 00:08:49,389
lost their lives will will will be

179
00:08:46,179 --> 00:08:52,750
greatly outweigh the problems caused by

180
00:08:49,389 --> 00:08:55,990
the reactors I mean you've got already

181
00:08:52,750 --> 00:08:58,899
an estimate of 10,000 people killed from

182
00:08:55,990 --> 00:09:01,240
the tsunami which is really appalling we

183
00:08:58,899 --> 00:09:04,419
have to keep in mind those the reactors

184
00:09:01,240 --> 00:09:07,090
in Japan have spent 40 years producing

185
00:09:04,419 --> 00:09:09,129
electricity with very low amounts of

186
00:09:07,090 --> 00:09:11,980
greenhouse gas emissions we must always

187
00:09:09,129 --> 00:09:14,649
keep that in mind when assessing you

188
00:09:11,980 --> 00:09:18,159
know what's happening now that's 40

189
00:09:14,649 --> 00:09:20,230
years of not producing carbon dioxide in

190
00:09:18,159 --> 00:09:22,839
response to producing an enormous amount

191
00:09:20,230 --> 00:09:26,700
of electric power for the for the nation

192
00:09:22,840 --> 00:09:29,590
I think we should we should weigh up the

193
00:09:26,700 --> 00:09:32,560
alternatives to to producing electricity

194
00:09:29,590 --> 00:09:35,050
with low carbon dioxide whether it's geo

195
00:09:32,559 --> 00:09:38,379
sequestration or solar or wind or

196
00:09:35,049 --> 00:09:40,209
geothermal or or the different flavors

197
00:09:38,379 --> 00:09:43,990
of nuclear reactor we should weigh them

198
00:09:40,210 --> 00:09:46,629
all up and do a cost-benefit analysis

199
00:09:43,990 --> 00:09:49,629
and we've find out which one is going to

200

00:09:46,629 --> 00:09:51,700
be the cheapest and most effective for

201
00:09:49,629 --> 00:09:54,009
Australia for Victoria for New South

202
00:09:51,700 --> 00:09:56,490
Wales wherever we choose to look at

203
00:09:54,009 --> 00:09:59,019
alternatives to to what we're doing now

204
00:09:56,490 --> 00:10:01,450
so do you think if there is a future for

205
00:09:59,019 --> 00:10:04,208
thorium in the nuclear industry how many

206
00:10:01,450 --> 00:10:09,040
years would be away if anyone decided

207
00:10:04,208 --> 00:10:13,349
really given solid go to roll it out on

208
00:10:09,039 --> 00:10:16,419
a scale sufficient to to make an impact

209
00:10:13,350 --> 00:10:18,939
so for example in India they they want

210
00:10:16,419 --> 00:10:22,178
to try and get a quarter of their power

211
00:10:18,938 --> 00:10:25,509
needs by the 2050 time scale I mentioned

212
00:10:22,178 --> 00:10:27,669
earlier that's about 270 gigawatts which

213
00:10:25,509 --> 00:10:31,058
is an enormous amount of power India

214
00:10:27,669 --> 00:10:33,248

being a big country after all and they

215

00:10:31,058 --> 00:10:37,259

have a they have a very aggressive

216

00:10:33,249 --> 00:10:40,689

program to achieve that goal so that's

217

00:10:37,259 --> 00:10:44,649

two so that's an example of the sort of

218

00:10:40,688 --> 00:10:46,688

timeframe that people are working to how

219

00:10:44,649 --> 00:10:49,149

do you feel when you see sort of quack

220

00:10:46,688 --> 00:10:50,919

ideas of like zero point energy and you

221

00:10:49,149 --> 00:10:54,159

see guys making experiment on a bench

222

00:10:50,919 --> 00:10:55,748

and I seem to be creating that power out

223

00:10:54,159 --> 00:10:57,159

of nothing how do you as a physicist

224

00:10:55,749 --> 00:10:58,778

take that because it every once in a

225

00:10:57,159 --> 00:11:01,409

while we get someone with a miracle way

226

00:10:58,778 --> 00:11:05,740

to make power that doesn't really add up

227

00:11:01,409 --> 00:11:08,379

well yeah a good question I have a

228

00:11:05,740 --> 00:11:09,519

pretty thick file here in my office and

229
00:11:08,379 --> 00:11:15,308
people who have written to me about

230
00:11:09,519 --> 00:11:18,759
these schemes but it's look you know

231
00:11:15,308 --> 00:11:20,499
it's a bit like imagining someone

232
00:11:18,759 --> 00:11:22,298
proposing to the government they need

233
00:11:20,499 --> 00:11:25,089
some funding to go off and discover a

234
00:11:22,298 --> 00:11:27,818
new continent in the Pacific Ocean that

235
00:11:25,089 --> 00:11:29,319
hasn't been discovered yet you know

236
00:11:27,818 --> 00:11:31,509
you'd be pretty reluctant to put any

237
00:11:29,318 --> 00:11:33,548
money behind financing an expedition

238
00:11:31,509 --> 00:11:35,318
expedition to discover that continent

239
00:11:33,548 --> 00:11:37,928
and you'd really need a pretty

240
00:11:35,318 --> 00:11:39,789
compelling reason why this person

241
00:11:37,928 --> 00:11:41,230
thought there was a new continent out

242
00:11:39,789 --> 00:11:43,990
there in the Pacific that no one had

243
00:11:41,230 --> 00:11:46,480
seen yet and and looking for new sources

244
00:11:43,990 --> 00:11:48,610
of energy is a bit like that i'm pretty

245
00:11:46,480 --> 00:11:51,548
happy to listen to someone with a really

246
00:11:48,610 --> 00:11:54,249
good reason why they think they can roll

247
00:11:51,548 --> 00:11:55,720
out a new form of energy or power

248
00:11:54,249 --> 00:11:59,199
generation that no one's thought of

249
00:11:55,720 --> 00:12:01,959
before but without that very very good

250
00:11:59,198 --> 00:12:04,599
reason our i really would prefer not to

251
00:12:01,958 --> 00:12:06,219
listen and do these are proposals to you

252
00:12:04,600 --> 00:12:08,740
come in the form of a perpetual motion

253
00:12:06,220 --> 00:12:11,319
machine or a completely new way to

254
00:12:08,740 --> 00:12:13,568
generate power well sometimes it's very

255
00:12:11,318 --> 00:12:15,189
difficult to say to tell the truth it's

256
00:12:13,568 --> 00:12:18,279
often difficult to

257

00:12:15,190 --> 00:12:22,510
understand exactly what they're talking

258
00:12:18,279 --> 00:12:25,299
about and you know the diagrams are

259
00:12:22,509 --> 00:12:27,819
complex and sometimes it's often just a

260
00:12:25,299 --> 00:12:29,740
matter that they forget about the second

261
00:12:27,820 --> 00:12:31,840
law of thermodynamics and I don't want

262
00:12:29,740 --> 00:12:34,990
to go into the advanced course on in

263
00:12:31,840 --> 00:12:37,090
this phone call but it's that's it it's

264
00:12:34,990 --> 00:12:39,100
not just sufficient to conserve energy

265
00:12:37,090 --> 00:12:40,180
in your power station you've got to

266
00:12:39,100 --> 00:12:42,279
worry about the second law of

267
00:12:40,179 --> 00:12:44,409
thermodynamics which basically says if

268
00:12:42,279 --> 00:12:46,029
you've got a bathtub full of hot water

269
00:12:44,409 --> 00:12:48,759
you've got an enormous amount of energy

270
00:12:46,029 --> 00:12:50,139
in that hot water but you can't use it

271
00:12:48,759 --> 00:12:52,899

to charge the battery of your mobile

272

00:12:50,139 --> 00:12:55,480

phone I'm afraid or at least you can't

273

00:12:52,899 --> 00:12:57,399

do it very efficiently because of the

274

00:12:55,480 --> 00:12:59,200

second law look look while we're talking

275

00:12:57,399 --> 00:13:00,909

about on the verge of conspiracy

276

00:12:59,200 --> 00:13:03,120

theories I'll just ask you one question

277

00:13:00,909 --> 00:13:05,469

as a physicist there is a conspiracy

278

00:13:03,120 --> 00:13:07,539

theory that the Germans during the

279

00:13:05,470 --> 00:13:10,720

Second World War were actually able to

280

00:13:07,539 --> 00:13:13,120

fire off some some kind of dirty nuclear

281

00:13:10,720 --> 00:13:14,860

weapon somewhere in the in the Gulf of

282

00:13:13,120 --> 00:13:16,720

Finland up that way do you think there's

283

00:13:14,860 --> 00:13:18,759

any possibility that they did that

284

00:13:16,720 --> 00:13:21,550

because although that just pure

285

00:13:18,759 --> 00:13:24,819

speculation actually I've looked into

286
00:13:21,549 --> 00:13:27,009
this and I believe its without merit I

287
00:13:24,820 --> 00:13:31,060
don't think there's even a grain of

288
00:13:27,009 --> 00:13:33,610
truth in SD the thing about nuclear

289
00:13:31,059 --> 00:13:36,639
materials and radioactive materials is

290
00:13:33,610 --> 00:13:40,000
that they produce a very strong signal

291
00:13:36,639 --> 00:13:43,509
just lying around as we all know we've

292
00:13:40,000 --> 00:13:45,250
all seen the terrible scenes of people

293
00:13:43,509 --> 00:13:47,740
in Japan being screened for

294
00:13:45,250 --> 00:13:51,340
contamination with Geiger counters and

295
00:13:47,740 --> 00:13:54,009
in some ways you could regard that as an

296
00:13:51,340 --> 00:13:56,350
advantage any any contamination unlike

297
00:13:54,009 --> 00:13:58,720
chemical contamination which may be very

298
00:13:56,350 --> 00:14:01,659
difficult to detect until it's all over

299
00:13:58,720 --> 00:14:03,490
the the the waste from nuclear reactors

300
00:14:01,659 --> 00:14:07,269
produce strong signals that are easy to

301
00:14:03,490 --> 00:14:11,710
detect and so if if such an experiment

302
00:14:07,269 --> 00:14:13,389
had been had happened you don't need to

303
00:14:11,710 --> 00:14:15,190
be it wouldn't be subtle you could get

304
00:14:13,389 --> 00:14:16,899
your Geiger counter and get out there in

305
00:14:15,190 --> 00:14:19,630
the field and try and measure that the

306
00:14:16,899 --> 00:14:22,120
waste products and it wouldn't be a

307
00:14:19,629 --> 00:14:23,529
subtle signal so on this island they

308
00:14:22,120 --> 00:14:25,269
literally did it it wouldn't be just

309
00:14:23,529 --> 00:14:26,629
slightly above background radiation

310
00:14:25,269 --> 00:14:29,509
level it would be a lot

311
00:14:26,629 --> 00:14:31,669
yes and and you could you could actually

312
00:14:29,509 --> 00:14:33,590
measure the act of the signals in a more

313
00:14:31,669 --> 00:14:34,819
sophisticated way than just using a

314

00:14:33,590 --> 00:14:37,100
Geiger counter with some very

315
00:14:34,820 --> 00:14:40,270
straightforward detectives and you'd see

316
00:14:37,100 --> 00:14:42,320
immediately the fingerprint of any such

317
00:14:40,269 --> 00:14:44,509
such experiment that would be

318
00:14:42,320 --> 00:14:46,370
unmistakable and unambiguous it and it

319
00:14:44,509 --> 00:14:49,700
wouldn't be subtle it would be would be

320
00:14:46,370 --> 00:14:51,049
very very clear what had gone on look

321
00:14:49,700 --> 00:14:52,820
them Thank You professor David Jamison

322
00:14:51,049 --> 00:14:55,159
thank you for talking to us today and

323
00:14:52,820 --> 00:14:57,070
talking to us about thorium and putting

324
00:14:55,159 --> 00:14:59,860
a couple of these conspiracies to rest

325
00:14:57,070 --> 00:15:03,110
I've got to think up some new ones now

326
00:14:59,860 --> 00:15:04,850
okay fine yes look at that thank you

327
00:15:03,110 --> 00:15:07,990
very much for your time and I really

328
00:15:04,850 --> 00:15:07,990

appreciate this is his thing

329

00:15:13,919 --> 00:15:19,240

now on Belfast FM we turn to the person

330

00:15:16,539 --> 00:15:21,339

lads easygoing and confident skeptic

331

00:15:19,240 --> 00:15:23,680

seeks other critical thinkers for fun

332

00:15:21,340 --> 00:15:25,780

laughter and good times must be willing

333

00:15:23,679 --> 00:15:27,669

to apply logic liberally and a good

334

00:15:25,779 --> 00:15:29,740

listener expect something new and

335

00:15:27,669 --> 00:15:31,719

interesting every month come and meet me

336

00:15:29,740 --> 00:15:33,610

in Belfast in Northern Ireland if this

337

00:15:31,720 --> 00:15:37,210

sounds like you check out my profile on

338

00:15:33,610 --> 00:15:46,060

alpha skeptics calm music by Kevin

339

00:15:37,210 --> 00:15:51,490

MacLeod now it's time for dr. Rachel

340

00:15:46,059 --> 00:15:53,169

reports with dr. Rachel Dunlop hello

341

00:15:51,490 --> 00:15:56,740

listeners and welcome to dr. ecchi

342

00:15:53,169 --> 00:15:58,299

reports well it is said that disasters

343
00:15:56,740 --> 00:16:00,639
bring out the best and the worst in

344
00:15:58,299 --> 00:16:02,709
people and sadly there has been plenty

345
00:16:00,639 --> 00:16:06,039
of opportunity to witness this play out

346
00:16:02,710 --> 00:16:07,840
of late in Australia the East Coast

347
00:16:06,039 --> 00:16:10,179
experienced the worst floods since

348
00:16:07,840 --> 00:16:12,970
nineteen seventy-four quickly followed

349
00:16:10,179 --> 00:16:15,338
by Cyclone Yasi ravaging as far inland

350
00:16:12,970 --> 00:16:16,480
as Mount aiza then there was the

351
00:16:15,339 --> 00:16:19,510
terrible earthquake in christchurch

352
00:16:16,480 --> 00:16:22,529
where many died across the pond and then

353
00:16:19,509 --> 00:16:25,330
on friday a massive 9.0 earthquake

354
00:16:22,529 --> 00:16:27,220
exploded under the pacific ocean sending

355
00:16:25,330 --> 00:16:30,400
a huge tsunami smashing into the

356
00:16:27,220 --> 00:16:32,589
northeast coast of japan the japanese

357
00:16:30,399 --> 00:16:34,449
are suffering terribly and not just

358
00:16:32,589 --> 00:16:36,790
because tens of thousands of missing

359
00:16:34,450 --> 00:16:38,500
feared dead but they also face bitter

360
00:16:36,789 --> 00:16:41,649
cold as snow is dumped on the

361
00:16:38,500 --> 00:16:43,240
devastation and even worse for nuclear

362
00:16:41,649 --> 00:16:45,069
reactors which took the brunt of the

363
00:16:43,240 --> 00:16:47,740
tsunami and earthquake are now at risk

364
00:16:45,070 --> 00:16:49,960
of meltdown although the reactors are

365
00:16:47,740 --> 00:16:52,629
built to withstand earthquakes the

366
00:16:49,960 --> 00:16:55,300
combination of such a huge event coupled

367
00:16:52,629 --> 00:16:57,580
with a massive tsunami wiped out backup

368
00:16:55,299 --> 00:17:00,729
systems required to keep the fuel rods

369
00:16:57,580 --> 00:17:02,770
cool as water levels dropped the rods

370
00:17:00,730 --> 00:17:05,680
heated up some producing enough hydrogen

371

00:17:02,769 --> 00:17:07,689
gas to cause explosions and subsequently

372
00:17:05,680 --> 00:17:10,990
the release of radioactive gas into the

373
00:17:07,689 --> 00:17:12,850
air the manufacturers are madly dumping

374
00:17:10,990 --> 00:17:15,160
seawater from helicopters onto the

375
00:17:12,849 --> 00:17:17,409
rapidly heating fuel rods and as a

376
00:17:15,160 --> 00:17:19,420
precaution have set up an exclusion zone

377
00:17:17,410 --> 00:17:22,480
in a 30-kilometer radius around the

378
00:17:19,420 --> 00:17:24,400
plant however if meltdown cannot be

379
00:17:22,480 --> 00:17:26,110
prevented there is a risk of the

380
00:17:24,400 --> 00:17:29,019
days of radioactive gas clouds which

381
00:17:26,109 --> 00:17:31,809
could drift into populated areas so

382
00:17:29,019 --> 00:17:33,670
enter the vultures several days ago

383
00:17:31,809 --> 00:17:35,889
Australian skeptics Vice President

384
00:17:33,670 --> 00:17:38,410
Richard Saunders circulated an email

385
00:17:35,890 --> 00:17:40,330

from homeopathy plus describing

386

00:17:38,410 --> 00:17:43,210

homeopathic remedies for radiation

387

00:17:40,329 --> 00:17:45,309

sickness and poisoning the email

388

00:17:43,210 --> 00:17:47,710

described how homeopathy offered quote

389

00:17:45,309 --> 00:17:50,259

key remedies that have been used either

390

00:17:47,710 --> 00:17:53,680

in research or historically to prevent

391

00:17:50,259 --> 00:17:56,410

or treat radiation poisoning the email

392

00:17:53,680 --> 00:17:59,470

dated March thirteenth states quote if

393

00:17:56,410 --> 00:18:01,600

at risk of radiation exposure any one of

394

00:17:59,470 --> 00:18:04,089

the above remedies may be taken as an

395

00:18:01,599 --> 00:18:07,990

emergency response three times a day in

396

00:18:04,089 --> 00:18:11,579

a 30 C potency the remedies referred to

397

00:18:07,990 --> 00:18:15,250

a cadmium iodide cadmium sulfurous

398

00:18:11,579 --> 00:18:17,949

strontium carbonic command x-rays that's

399

00:18:15,250 --> 00:18:21,400

right listeners homeopathic preparations

400
00:18:17,950 --> 00:18:23,440
of x-rays but before you get worried

401
00:18:21,400 --> 00:18:25,180
that more x-rays might not be the best

402
00:18:23,440 --> 00:18:27,519
thing to treat radiation burns or

403
00:18:25,180 --> 00:18:30,700
sickness let's take a look at precisely

404
00:18:27,519 --> 00:18:33,069
what 30 C means this is a common

405
00:18:30,700 --> 00:18:34,930
homeopathic dilution in fact one you

406
00:18:33,069 --> 00:18:37,329
might find on your local pharmacy shelf

407
00:18:34,930 --> 00:18:40,210
and means the original substance has

408
00:18:37,329 --> 00:18:43,869
been diluted 10 to the power of 60 times

409
00:18:40,210 --> 00:18:48,009
so in simple terms that means 10 with 60

410
00:18:43,869 --> 00:18:49,629
zeros at a dilution this great in order

411
00:18:48,009 --> 00:18:52,720
for you to come into contact with even

412
00:18:49,630 --> 00:18:55,260
one molecule of the original x-rays you

413
00:18:52,720 --> 00:18:58,990
would have to give two billion doses per

414
00:18:55,259 --> 00:19:03,039
second to six billion people for four

415
00:18:58,990 --> 00:19:05,680
billion years or to put it another way a

416
00:19:03,039 --> 00:19:08,529
30-seat dilution is the equivalent of

417
00:19:05,680 --> 00:19:11,230
placing one mil of liquid into a cube of

418
00:19:08,529 --> 00:19:14,410
water measuring a million million

419
00:19:11,230 --> 00:19:17,259
million meters per side clearly

420
00:19:14,410 --> 00:19:20,259
impossible and preposterous but there's

421
00:19:17,259 --> 00:19:22,509
more quote if radiation sickness has

422
00:19:20,259 --> 00:19:24,640
developed your homeopath is the best

423
00:19:22,509 --> 00:19:27,099
person to advise on treatment dosages

424
00:19:24,640 --> 00:19:28,990
and potencies as these will depend on

425
00:19:27,099 --> 00:19:32,529
the symptoms you are experiencing and

426
00:19:28,990 --> 00:19:34,690
their severity but not just any

427
00:19:32,529 --> 00:19:36,819
homeopath apparently some people are

428

00:19:34,690 --> 00:19:38,670
confused by the number of remedies being

429
00:19:36,819 --> 00:19:41,019
offered by different homie

430
00:19:38,670 --> 00:19:43,660
apparently they can't even agree amongst

431
00:19:41,019 --> 00:19:46,410
themselves but never fear homeopathy

432
00:19:43,660 --> 00:19:48,610
plus will only recommend you quote

433
00:19:46,410 --> 00:19:51,460
remedies whose effects are also

434
00:19:48,609 --> 00:19:54,369
supported by research and/or confirmed

435
00:19:51,460 --> 00:19:56,230
with clinical successes as reported by

436
00:19:54,369 --> 00:19:58,479
doctors and physicians dealing with

437
00:19:56,230 --> 00:20:02,980
radiation exposure during the great

438
00:19:58,480 --> 00:20:04,480
world wars thank goodness for that but

439
00:20:02,980 --> 00:20:06,370
what if you can't get your hands on a

440
00:20:04,480 --> 00:20:09,700
super dilute one to the bajillion

441
00:20:06,369 --> 00:20:11,559
dilution of x-rays well no problem you

442
00:20:09,700 --> 00:20:13,900

can take a more concentrated dose of

443

00:20:11,559 --> 00:20:17,349

x-rays but you just need to take it more

444

00:20:13,900 --> 00:20:20,200

frequently yes you heard me correctly if

445

00:20:17,349 --> 00:20:22,019

the preparation is more concentrated you

446

00:20:20,200 --> 00:20:24,400

just need to take it more often

447

00:20:22,019 --> 00:20:27,339

according to the helpful homeopathy plus

448

00:20:24,400 --> 00:20:29,500

newsletter this means quote taking a

449

00:20:27,339 --> 00:20:32,289

more frequent dose for lower potencies

450

00:20:29,500 --> 00:20:34,329

of four to six times a day and a less

451

00:20:32,289 --> 00:20:37,899

frequent dose one to two times a day for

452

00:20:34,329 --> 00:20:39,609

higher potencies now this might seem a

453

00:20:37,900 --> 00:20:41,680

bit confusing but this is because

454

00:20:39,609 --> 00:20:44,829

homeopaths believe that the more dilute

455

00:20:41,680 --> 00:20:46,509

the preparation the stronger it is no

456

00:20:44,829 --> 00:20:48,699

folks you couldn't make this stuff up

457
00:20:46,509 --> 00:20:51,039
well actually you could but no one would

458
00:20:48,700 --> 00:20:53,170
believe you so as you might expect

459
00:20:51,039 --> 00:20:55,269
homeopathy plus have copped a little bit

460
00:20:53,170 --> 00:20:57,940
of flack for this irresponsible nonsense

461
00:20:55,269 --> 00:21:01,089
the story was reported in the Australian

462
00:20:57,940 --> 00:21:03,670
newspaper on the punch website by Phil

463
00:21:01,089 --> 00:21:05,859
Plait in his bad astronomy blog by Brian

464
00:21:03,670 --> 00:21:08,350
Dunning on skeptic blog and by Ben

465
00:21:05,859 --> 00:21:10,990
Radford Adam creswell from the

466
00:21:08,349 --> 00:21:12,819
Australian newspaper asked some experts

467
00:21:10,990 --> 00:21:15,069
about the claims that homeopathy can

468
00:21:12,819 --> 00:21:18,700
treat radiation burns and got a

469
00:21:15,069 --> 00:21:21,069
predictable response Victorian GP Bill

470
00:21:18,700 --> 00:21:24,100
Williams who is also a nuclear safety

471
00:21:21,069 --> 00:21:26,379
experts said there was quote absolutely

472
00:21:24,099 --> 00:21:29,079
no evidence for any of the remedies

473
00:21:26,380 --> 00:21:33,160
being promoted by homeopathy plus being

474
00:21:29,079 --> 00:21:35,679
useful in treating radiation sickness he

475
00:21:33,160 --> 00:21:37,570
continued it's not really very helpful

476
00:21:35,680 --> 00:21:40,000
for people to be promoting treatments in

477
00:21:37,569 --> 00:21:42,490
a dire situation like this which could

478
00:21:40,000 --> 00:21:45,430
give people false comfort dr. Williams

479
00:21:42,490 --> 00:21:47,470
said nuclear radiologist Peter Karim

480
00:21:45,430 --> 00:21:51,400
askis said the claims that were made by

481
00:21:47,470 --> 00:21:52,450
homeopathy plus were quote rubbish such

482
00:21:51,400 --> 00:21:54,190
claims are dangerous

483
00:21:52,450 --> 00:21:57,850
in that it might compromise proper

484
00:21:54,190 --> 00:21:59,200
treatment and give false security but

485

00:21:57,849 --> 00:22:01,629
sadly this is not the first time

486
00:21:59,200 --> 00:22:04,240
homeopathy plus have spouted rubbish on

487
00:22:01,630 --> 00:22:06,490
the unsuspecting public the homeopathy

488
00:22:04,240 --> 00:22:09,549
plus newsletter and clinic are both run

489
00:22:06,490 --> 00:22:11,380
by homeopath Fran Sheffield who as an

490
00:22:09,549 --> 00:22:13,990
aside is also good mates with the

491
00:22:11,380 --> 00:22:16,570
Australian anti-vaccination Network well

492
00:22:13,990 --> 00:22:18,549
birds of a feather and all that in 2010

493
00:22:16,569 --> 00:22:21,490
the Therapeutic Goods Administration the

494
00:22:18,549 --> 00:22:23,799
TGA instructed miss Sheffield to remove

495
00:22:21,490 --> 00:22:25,779
claims that homeopathy was an effective

496
00:22:23,799 --> 00:22:28,769
substitute for vaccinations from her

497
00:22:25,779 --> 00:22:31,359
website and also publish a retraction

498
00:22:28,769 --> 00:22:33,509
she refused to do so on the grounds that

499
00:22:31,359 --> 00:22:36,429

she didn't agree with the decision and

500

00:22:33,509 --> 00:22:38,410

as with approximately thirty percent of

501

00:22:36,430 --> 00:22:41,019

those served with a tsg a retraction

502

00:22:38,410 --> 00:22:45,850

order nothing was done to enforce the

503

00:22:41,019 --> 00:22:48,430

finding in fact the TGA told ABC's late

504

00:22:45,849 --> 00:22:50,649

line program that no legal action has

505

00:22:48,430 --> 00:22:53,230

ever been taken over non-compliance

506

00:22:50,650 --> 00:22:56,050

which makes the complaint system look

507

00:22:53,230 --> 00:22:58,029

like a complete farce and indeed

508

00:22:56,049 --> 00:23:00,220

following the Lateline report Fran

509

00:22:58,029 --> 00:23:02,109

Sheffield jumped a flotilla of sharks

510

00:23:00,220 --> 00:23:05,710

and published a piece on her website

511

00:23:02,109 --> 00:23:07,990

called quite late line can homeopathy

512

00:23:05,710 --> 00:23:10,960

safely protect against epidemic and

513

00:23:07,990 --> 00:23:13,950

infectious diseases can homeopathy treat

514
00:23:10,960 --> 00:23:16,600
serious diseases such as aids and cancer

515
00:23:13,950 --> 00:23:18,309
it was a veritable gish gallop of

516
00:23:16,599 --> 00:23:20,859
references purporting to show that

517
00:23:18,309 --> 00:23:23,559
indeed homeopathy can treat aids and

518
00:23:20,859 --> 00:23:25,119
cancers so not only did miss Sheffield

519
00:23:23,559 --> 00:23:27,399
refused to remove false and misleading

520
00:23:25,119 --> 00:23:30,159
information about vaccinations from her

521
00:23:27,400 --> 00:23:33,790
website when challenged she simply added

522
00:23:30,160 --> 00:23:36,519
more a few months prior she also sent

523
00:23:33,789 --> 00:23:38,259
out an email alert entitled homeopathy

524
00:23:36,519 --> 00:23:41,710
as good as chemotherapy for breast

525
00:23:38,259 --> 00:23:43,390
cancer and non-toxic which was based on

526
00:23:41,710 --> 00:23:46,269
a paper published in the international

527
00:23:43,390 --> 00:23:49,090
journal of oncology firstly the paper

528
00:23:46,269 --> 00:23:51,759
had not made such a claim it was only a

529
00:23:49,089 --> 00:23:53,949
study in cells and secondly it was a

530
00:23:51,759 --> 00:23:57,609
terrible piece of bad science chock-full

531
00:23:53,950 --> 00:23:59,620
of dodgy data so much so that one of the

532
00:23:57,609 --> 00:24:01,679
author's left a comment on my blog where

533
00:23:59,619 --> 00:24:03,879
I had taken the paper to pieces

534
00:24:01,680 --> 00:24:06,289
dissociating herself from the work and

535
00:24:03,880 --> 00:24:08,480
saying quote I asked

536
00:24:06,289 --> 00:24:11,809
be included because I did not think it

537
00:24:08,480 --> 00:24:14,000
was a sound study still French Sheffield

538
00:24:11,809 --> 00:24:16,609
continues to claim that magic vibrating

539
00:24:14,000 --> 00:24:18,799
water can cure everything in a flyer

540
00:24:16,609 --> 00:24:21,740
sent out for a workshop last year she

541
00:24:18,799 --> 00:24:24,649
stated quote homeopathy works for autism

542

00:24:21,740 --> 00:24:27,559
infections anxiety allergies insomnia

543
00:24:24,650 --> 00:24:30,620
coughs and colds depression irritable

544
00:24:27,559 --> 00:24:32,299
bowel syndrome and much much more sorry

545
00:24:30,619 --> 00:24:34,609
Fran but there is no evidence that

546
00:24:32,299 --> 00:24:37,190
homeopathy works for anything except

547
00:24:34,609 --> 00:24:38,869
maybe for hangovers I love a nice cold

548
00:24:37,190 --> 00:24:40,880
drink of water when I'm hungover and

549
00:24:38,869 --> 00:24:42,799
certainly the claim that homeopathy

550
00:24:40,880 --> 00:24:45,950
works for radiation poisoning or

551
00:24:42,799 --> 00:24:47,750
illnesses is complete rubbish you can

552
00:24:45,950 --> 00:24:49,430
find the accompanying blog of this

553
00:24:47,750 --> 00:24:51,500
week's dr. Richie reports on the

554
00:24:49,430 --> 00:24:55,279
official blog of this skeptic zone at

555
00:24:51,500 --> 00:25:01,069
skeptics book calm and until next time

556
00:24:55,279 --> 00:25:02,899

this has been dr. Richie reports dr.

557

00:25:01,069 --> 00:25:05,659

Rachel Dunlop is one of Australia's

558

00:25:02,900 --> 00:25:07,090

foremost media commentators in matters

559

00:25:05,660 --> 00:25:09,620

concerning so-called alternative

560

00:25:07,089 --> 00:25:13,339

medicine she has appeared on national

561

00:25:09,619 --> 00:25:15,739

radio and national television dr. 'he is

562

00:25:13,339 --> 00:25:19,669

available for interviews and you can

563

00:25:15,740 --> 00:25:23,079

contact her at rachel at skeptic zone

564

00:25:19,670 --> 00:25:23,080

got TV

565

00:25:26,380 --> 00:25:30,650

yeah aight guys i was talking to Richard

566

00:25:28,759 --> 00:25:32,750

Saunders isn't it alright he said if we

567

00:25:30,650 --> 00:25:35,150

record a trailer for our podcast

568

00:25:32,750 --> 00:25:36,950

skeptics with a que he declared on the

569

00:25:35,150 --> 00:25:38,240

initial last nice of him that's very

570

00:25:36,950 --> 00:25:39,680

generous it's pretty good i'm not sure

571
00:25:38,240 --> 00:25:41,210
what we could do though I mean well

572
00:25:39,680 --> 00:25:44,000
suppose you tell people the shows about

573
00:25:41,210 --> 00:25:45,980
but it's basically this yeah like yeah

574
00:25:44,000 --> 00:25:47,660
but you know we talk about science and

575
00:25:45,980 --> 00:25:49,009
skepticism and things that's that's true

576
00:25:47,660 --> 00:25:50,779
as fuzzy you mentioned the website

577
00:25:49,009 --> 00:25:52,700
address not merseyside skeptics talk

578
00:25:50,779 --> 00:25:54,349
don't you k yeah yeah just like searches

579
00:25:52,700 --> 00:25:56,779
nineteen's oh and then we could end with

580
00:25:54,349 --> 00:26:02,079
like a big song like the skeptics with

581
00:25:56,779 --> 00:26:02,079
okay odd no no no no don't don't do that

582
00:26:08,170 --> 00:26:23,660
is food for thought it's reality bites

583
00:26:13,660 --> 00:26:25,730
with Java and Ben amoud statutory

584
00:26:23,660 --> 00:26:28,009
authority Food Standards Australia New

585
00:26:25,730 --> 00:26:30,019
Zealand issued an urgent recall this

586
00:26:28,009 --> 00:26:32,329
week a popular slimming product the

587
00:26:30,019 --> 00:26:33,950
Latin seed this followed urgent advice

588
00:26:32,329 --> 00:26:36,589
from the New South Wales Food Authority

589
00:26:33,950 --> 00:26:39,140
the state government agency charged with

590
00:26:36,589 --> 00:26:41,829
ensuring food safety and quality on this

591
00:26:39,140 --> 00:26:43,970
and another similar product slim seed

592
00:26:41,829 --> 00:26:46,039
testing has shown that the products

593
00:26:43,970 --> 00:26:48,890
labeled as earlier I smell you Cana

594
00:26:46,039 --> 00:26:51,139
commonly known as candlelight actually

595
00:26:48,890 --> 00:26:54,080
contain highly toxic the veterinary

596
00:26:51,140 --> 00:26:56,570
foliar ortho vet here peruviana also

597
00:26:54,079 --> 00:26:58,699
known as yellow oleander this highly

598
00:26:56,569 --> 00:27:00,859
toxic species contains cardiac

599

00:26:58,700 --> 00:27:02,930
glycosides and is listed in the Food

600
00:27:00,859 --> 00:27:05,839
Standards code under prohibited and

601
00:27:02,930 --> 00:27:07,549
restricted plants and fungi listeners

602
00:27:05,839 --> 00:27:10,189
may be familiar with another of the

603
00:27:07,549 --> 00:27:13,039
glycosides digitalis also known as

604
00:27:10,190 --> 00:27:16,279
foxglove symptoms of poisoning include

605
00:27:13,039 --> 00:27:18,639
nausea vomiting diarrhea coma

606
00:27:16,279 --> 00:27:21,079
convulsions and cardiac arrhythmias

607
00:27:18,640 --> 00:27:23,420
interestingly a side effect of these

608
00:27:21,079 --> 00:27:25,460
substances is decreased appetite and

609
00:27:23,420 --> 00:27:28,370
people have been known to use them to

610
00:27:25,460 --> 00:27:30,200
aid weight loss the Food Authority has

611
00:27:28,369 --> 00:27:32,409
requested that sale of the products be

612
00:27:30,200 --> 00:27:36,110
discontinued and the products withdrawn

613
00:27:32,410 --> 00:27:37,820

finest of 1760 dollars

614

00:27:36,109 --> 00:27:39,859

have been issued to balanced opinions

615

00:27:37,819 --> 00:27:42,139

proprietary limited and slim seed

616

00:27:39,859 --> 00:27:43,939

Australia proprietary limited and both

617

00:27:42,140 --> 00:27:46,640

have been listed on the authorities name

618

00:27:43,940 --> 00:27:48,350

and shame register both were found to

619

00:27:46,640 --> 00:27:49,880

have breached the Food Standards code in

620

00:27:48,349 --> 00:27:52,730

a relation to health and weight loss

621

00:27:49,880 --> 00:27:54,500

claims made about the products these are

622

00:27:52,730 --> 00:27:56,480

the latest in a long line of companies

623

00:27:54,500 --> 00:27:59,808

to be investigated by the authority for

624

00:27:56,480 --> 00:28:01,970

similar breaches in March last year pure

625

00:27:59,808 --> 00:28:03,889

natural health proprietary limited the

626

00:28:01,970 --> 00:28:06,110

company behind the popular lemon detox

627

00:28:03,890 --> 00:28:08,900

diet was fined by the authority for

628
00:28:06,109 --> 00:28:11,209
similar breaches at the time of

629
00:28:08,900 --> 00:28:13,220
recording the website of Latin seed is

630
00:28:11,210 --> 00:28:15,710
directing to a recall notice from the

631
00:28:13,220 --> 00:28:17,600
company no mention is made on the site

632
00:28:15,710 --> 00:28:20,329
of the potential dangers of the product

633
00:28:17,599 --> 00:28:23,058
however an earlier version of the site

634
00:28:20,329 --> 00:28:25,159
states one hundred percent natural no

635
00:28:23,058 --> 00:28:27,829
harmful chemicals artificial colors or

636
00:28:25,160 --> 00:28:30,110
preservatives added the Latin seed is a

637
00:28:27,829 --> 00:28:32,418
product of thorough quality control and

638
00:28:30,109 --> 00:28:34,339
is harvested classified and carefully

639
00:28:32,419 --> 00:28:37,070
selected to guarantee the integrity and

640
00:28:34,339 --> 00:28:39,980
effectiveness following up on a previous

641
00:28:37,069 --> 00:28:41,359
story the West Australian newspaper this

642
00:28:39,980 --> 00:28:43,460
week reported on the Australian

643
00:28:41,359 --> 00:28:46,099
competition and consumer Commission's

644
00:28:43,460 --> 00:28:47,750
case against green gram of the spiritual

645
00:28:46,099 --> 00:28:50,689
healing association of western Australia

646
00:28:47,750 --> 00:28:53,298
the case has been dealt a blow up to

647
00:28:50,690 --> 00:28:55,039
federal judge Antony see AAPIs refused

648
00:28:53,298 --> 00:28:57,349
to grant injunctions until further

649
00:28:55,039 --> 00:28:59,329
evidence is presented Justice Siapa

650
00:28:57,349 --> 00:29:01,759
supreme it concerns about the

651
00:28:59,329 --> 00:29:03,139
vulnerability of people with cancer but

652
00:29:01,759 --> 00:29:04,700
commented that the case had the

653
00:29:03,140 --> 00:29:07,280
potential to blur the lines between

654
00:29:04,700 --> 00:29:09,319
issues of trade practice and spiritual

655
00:29:07,279 --> 00:29:11,210
belief treatments offered by the group

656

00:29:09,319 --> 00:29:13,819
include walking into the water and

657
00:29:11,210 --> 00:29:15,950
emerging like Jesus with claims of

658
00:29:13,819 --> 00:29:17,808
hundred percent effectiveness in curing

659
00:29:15,950 --> 00:29:19,970
cancer the judge made comparisons

660
00:29:17,808 --> 00:29:22,339
between Catholic belief in our lady of

661
00:29:19,970 --> 00:29:25,519
lourdes and similar faith-based beliefs

662
00:29:22,339 --> 00:29:27,349
about miracle cures stating can you ever

663
00:29:25,519 --> 00:29:29,869
find that the conduct is misleading if

664
00:29:27,349 --> 00:29:32,569
it's founded on a representation that I

665
00:29:29,869 --> 00:29:34,759
can if you believe the case has been

666
00:29:32,569 --> 00:29:37,899
adjourned until the first of April this

667
00:29:34,759 --> 00:29:37,900
has been Joe been homo

668
00:29:47,259 --> 00:29:50,929
hi this is michael cruz from the

669
00:29:49,910 --> 00:29:52,880
committee for the advancement of

670
00:29:50,929 --> 00:29:55,280

scientific skepticism at the center for

671

00:29:52,880 --> 00:29:56,750

inquiry canada Cass is committed to

672

00:29:55,279 --> 00:29:58,670

critically examining scientific

673

00:29:56,750 --> 00:30:01,130

technological and medical claims in the

674

00:29:58,670 --> 00:30:03,500

public forum across Canada working with

675

00:30:01,130 --> 00:30:05,299

our expert advisors local cfi branches

676

00:30:03,500 --> 00:30:06,829

and other skeptical groups Cass

677

00:30:05,298 --> 00:30:09,429

confronts the peddlers as pseudoscience

678

00:30:06,829 --> 00:30:11,689

with evidence-based scientific inquiry

679

00:30:09,429 --> 00:30:14,000

2010 has been a watershed year for the

680

00:30:11,690 --> 00:30:15,890

sceptical movement in Canada and in 2011

681

00:30:14,000 --> 00:30:18,230

cast will continue fighting bad science

682

00:30:15,890 --> 00:30:19,490

in the media and the government if you

683

00:30:18,230 --> 00:30:20,808

would like to become involved in the

684

00:30:19,490 --> 00:30:22,339

fight to promote critical thinking in

685
00:30:20,808 --> 00:30:23,869
Canada or if you have a concern about

686
00:30:22,339 --> 00:30:26,058
the spread of pseudoscience in the

687
00:30:23,869 --> 00:30:28,969
Canadian media please contact us at

688
00:30:26,058 --> 00:30:31,700
casts at cfi canada CA you can also

689
00:30:28,970 --> 00:30:33,740
follow us on twitter at cfi casts and on

690
00:30:31,700 --> 00:30:36,620
facebook at cass at center for inquiry

691
00:30:33,740 --> 00:30:39,669
canada casts fighting pseudoscience

692
00:30:36,619 --> 00:30:39,668
without apology

693
00:30:49,730 --> 00:30:54,929
well the recent tragic events in in

694
00:30:52,859 --> 00:30:56,490
Japan and the last few days cause me to

695
00:30:54,929 --> 00:30:59,100
think about an editorial are right for

696
00:30:56,490 --> 00:31:01,740
the skeptic after similarly tragic

697
00:30:59,099 --> 00:31:03,209
events back in 2004 this is what I said

698
00:31:01,740 --> 00:31:05,548
then and I don't think there's any

699
00:31:03,210 --> 00:31:07,470
difference has happened in the way we

700
00:31:05,548 --> 00:31:11,490
think about things in the intervening

701
00:31:07,470 --> 00:31:13,259
few years who to blame few people could

702
00:31:11,490 --> 00:31:15,269
have remained unaffected by the tragic

703
00:31:13,259 --> 00:31:17,158
events that began in the Indian Ocean of

704
00:31:15,269 --> 00:31:20,849
Sumatra on the morning of December the

705
00:31:17,159 --> 00:31:22,860
26th last year the tsunami profit while

706
00:31:20,849 --> 00:31:24,869
the shifting of tectonic plates under

707
00:31:22,859 --> 00:31:27,240
the sea cut short a quarter of a million

708
00:31:24,869 --> 00:31:29,908
lives ranking it as one of the most

709
00:31:27,240 --> 00:31:32,069
lethal and natural disasters in the

710
00:31:29,909 --> 00:31:33,840
entire history of our planet that this

711
00:31:32,069 --> 00:31:35,129
tragedy touched the hearts of many in

712
00:31:33,839 --> 00:31:37,109
Australia is attested by the

713

00:31:35,130 --> 00:31:39,240
unprecedented generosity of individuals

714
00:31:37,109 --> 00:31:41,609
governments and organizations were all

715
00:31:39,240 --> 00:31:43,740
sorts in donating to relief efforts and

716
00:31:41,609 --> 00:31:45,689
by the dedication of those who went the

717
00:31:43,740 --> 00:31:47,538
item distressed victims this generosity

718
00:31:45,690 --> 00:31:50,159
shows the better part of human nature

719
00:31:47,538 --> 00:31:53,029
our certain religious issues have

720
00:31:50,159 --> 00:31:54,990
emerged of a not so benign evidence from

721
00:31:53,029 --> 00:31:57,450
neurophysiological research indicates

722
00:31:54,990 --> 00:32:00,179
that our genetic makeup makes Homo

723
00:31:57,450 --> 00:32:03,330
sapiens receptive to abstract beliefs

724
00:32:00,179 --> 00:32:05,460
that have no rational foundation this

725
00:32:03,329 --> 00:32:07,730
faith usually manifests itself as

726
00:32:05,460 --> 00:32:09,779
religion but includes various

727
00:32:07,730 --> 00:32:11,929

totalitarian political philosophies that

728

00:32:09,779 --> 00:32:14,220

emerged during the 20th century which

729

00:32:11,929 --> 00:32:17,280

while they ostensibly eschewed

730

00:32:14,220 --> 00:32:19,200

supernatural causes never lest embraced

731

00:32:17,279 --> 00:32:22,308

many of the trappings and certainly the

732

00:32:19,200 --> 00:32:24,419

dogmatism of religion in the replication

733

00:32:22,308 --> 00:32:27,058

observation tends to support this

734

00:32:24,419 --> 00:32:28,740

conclusion throughout history religions

735

00:32:27,058 --> 00:32:30,808

have emerged from all cultures in all

736

00:32:28,740 --> 00:32:32,579

times and most of them have died out or

737

00:32:30,808 --> 00:32:36,058

evolved with the passing of the cultures

738

00:32:32,579 --> 00:32:37,859

or of the time simple logic dictates

739

00:32:36,058 --> 00:32:40,769

that the beliefs of all religions cannot

740

00:32:37,859 --> 00:32:42,928

possibly be right on the other hand it

741

00:32:40,769 --> 00:32:45,690

is an impeccably rational proposition

742
00:32:42,929 --> 00:32:48,780
that all of them could be wrong there is

743
00:32:45,690 --> 00:32:51,298
no evidence to suggest that faith plan X

744
00:32:48,779 --> 00:32:53,730
has a better explanation of the

745
00:32:51,298 --> 00:32:55,918
inexplicable when this faith brand why

746
00:32:53,730 --> 00:32:58,620
there is far more persuasive evidence

747
00:32:55,919 --> 00:33:02,610
that all religions as constructively

748
00:32:58,619 --> 00:33:04,769
human mind a primer fell ability this

749
00:33:02,609 --> 00:33:06,990
proposed human predisposition to believe

750
00:33:04,769 --> 00:33:09,539
and to invent things in which to believe

751
00:33:06,990 --> 00:33:11,640
has like most human institutions

752
00:33:09,539 --> 00:33:14,039
resulted in both sublime benefits and

753
00:33:11,640 --> 00:33:16,020
grave thoughts they can be little doubt

754
00:33:14,039 --> 00:33:18,720
religious devotion has inspired

755
00:33:16,019 --> 00:33:20,819
wonderful art music architecture and

756
00:33:18,720 --> 00:33:24,210
literature without which the world would

757
00:33:20,819 --> 00:33:26,039
be a decidedly poor a place North can

758
00:33:24,210 --> 00:33:28,410
there be much doubt that religions can

759
00:33:26,039 --> 00:33:30,389
provide comfort to their adherence or

760
00:33:28,410 --> 00:33:32,910
inspire great acts of kindness and

761
00:33:30,390 --> 00:33:34,950
sacrifice but religion and similar

762
00:33:32,910 --> 00:33:38,040
dogmatic beliefs also has a dark side

763
00:33:34,950 --> 00:33:40,169
with sectarian inspired conflict war and

764
00:33:38,039 --> 00:33:42,210
genocide romania's constant throughout

765
00:33:40,169 --> 00:33:44,070
human history thus we have seen

766
00:33:42,210 --> 00:33:46,860
statements from clerics for various

767
00:33:44,069 --> 00:33:49,500
faiths seeking to justify how such

768
00:33:46,859 --> 00:33:51,329
violent natural axles at tsunami fitted

769
00:33:49,500 --> 00:33:53,759
with their concept of their particular

770

00:33:51,329 --> 00:33:56,609
deity the tsunami was immaculately

771
00:33:53,759 --> 00:33:58,679
ecumenical in its effects killing tens

772
00:33:56,609 --> 00:34:02,159
of thousands of Muslims Buddhists Hindus

773
00:33:58,679 --> 00:34:05,400
Christians Jews seeks adherents of many

774
00:34:02,160 --> 00:34:07,798
other faiths sex you Age spirituality as

775
00:34:05,400 --> 00:34:10,679
well as no doubt many skeptics atheists

776
00:34:07,798 --> 00:34:12,719
agnostics illness and rationals who are

777
00:34:10,679 --> 00:34:14,280
lucky enough to be in its path it did

778
00:34:12,719 --> 00:34:16,648
this without regard to their religious

779
00:34:14,280 --> 00:34:18,629
political or other affiliations age sex

780
00:34:16,648 --> 00:34:20,819
state of health or well they were good

781
00:34:18,628 --> 00:34:23,099
or bad people that this caused great

782
00:34:20,820 --> 00:34:25,200
intellectual discomfort the cleric was

783
00:34:23,099 --> 00:34:28,378
evident in a tortured logic they sought

784
00:34:25,199 --> 00:34:30,839

to use in their rationalizations to the

785

00:34:28,378 --> 00:34:33,269

obvious skeptic in question how could

786

00:34:30,840 --> 00:34:36,329

any hypothetical omniscient omnipresent

787

00:34:33,269 --> 00:34:39,090

and benevolent deity allow such

788

00:34:36,329 --> 00:34:41,969

indiscriminate killing the answers range

789

00:34:39,090 --> 00:34:44,519

from punishment was trained from the

790

00:34:41,969 --> 00:34:47,489

true car including newborn babies

791

00:34:44,519 --> 00:34:49,320

presumably to the grace of God is shown

792

00:34:47,489 --> 00:34:52,019

in the generosity of the response from

793

00:34:49,320 --> 00:34:54,000

people surely any deity worth his salt

794

00:34:52,019 --> 00:34:56,519

could have found all this tragic method

795

00:34:54,000 --> 00:34:58,849

of demonstrating it but by far the most

796

00:34:56,519 --> 00:35:01,769

common response was couched in terms of

797

00:34:58,849 --> 00:35:04,710

God's ways are not our ways and we

798

00:35:01,769 --> 00:35:06,449

cannot know the mind of God which might

799
00:35:04,710 --> 00:35:08,010
have sounded more sincere had it not

800
00:35:06,449 --> 00:35:10,349
issued from the mouths of those his

801
00:35:08,010 --> 00:35:12,090
lives and livelihoods were precisely

802
00:35:10,349 --> 00:35:13,750
dedicated to promulgating and

803
00:35:12,090 --> 00:35:17,320
interpreting the action

804
00:35:13,750 --> 00:35:20,170
words of God in passing several of them

805
00:35:17,320 --> 00:35:22,990
more vital clerics chose to try those of

806
00:35:20,170 --> 00:35:24,820
a skeptics atheist NL who do not

807
00:35:22,989 --> 00:35:26,949
subscribe to their nations of Daddy's

808
00:35:24,820 --> 00:35:29,230
implying that we could find no comfort

809
00:35:26,949 --> 00:35:32,049
in our scientific view the world in the

810
00:35:29,230 --> 00:35:34,000
face of catastrophe it might surprise

811
00:35:32,050 --> 00:35:35,800
them to learn that what rational people

812
00:35:34,000 --> 00:35:38,349
the Royal I from science is not comfort

813
00:35:35,800 --> 00:35:39,730
but understanding part of that

814
00:35:38,349 --> 00:35:41,860
understanding is that we live on a

815
00:35:39,730 --> 00:35:44,920
dynamic planet where natural forces

816
00:35:41,860 --> 00:35:47,110
reign supreme that these insensate

817
00:35:44,920 --> 00:35:49,840
forces are neither than I normal I'm I

818
00:35:47,110 --> 00:35:53,620
just are a natural disaster is just that

819
00:35:49,840 --> 00:35:56,200
natural sometimes no one is to blame not

820
00:35:53,619 --> 00:35:58,480
even God it is not the rationalist who

821
00:35:56,199 --> 00:36:01,269
is discomfited by such an occurrence it

822
00:35:58,480 --> 00:36:03,429
is those who strive painfully to justify

823
00:36:01,269 --> 00:36:07,210
the incompatibility of a benevolent body

824
00:36:03,429 --> 00:36:09,489
with the horrific events on a personal

825
00:36:07,210 --> 00:36:11,679
level if not comfort I did derive some

826
00:36:09,489 --> 00:36:13,449
satisfaction when the service in which I

827

00:36:11,679 --> 00:36:15,759
spent 15 of my younger years the

828
00:36:13,449 --> 00:36:18,369
Honorable AF was first on the ground

829
00:36:15,760 --> 00:36:20,560
carrying a dose imatra in 48 hours of

830
00:36:18,369 --> 00:36:23,799
the disaster where it continued to

831
00:36:20,559 --> 00:36:25,269
provide assistance today if any comfort

832
00:36:23,800 --> 00:36:28,000
comes and comes from seeing people

833
00:36:25,269 --> 00:36:31,059
selflessly doing good when other people

834
00:36:28,000 --> 00:36:33,039
are in need in this case such people are

835
00:36:31,059 --> 00:36:36,659
many and they come from right across the

836
00:36:33,039 --> 00:36:36,659
religious and non-religious spectrum

837
00:36:42,889 --> 00:36:47,338
watching the scenes from Japan over the

838
00:36:45,179 --> 00:36:48,959
last few days listen to religious

839
00:36:47,338 --> 00:36:51,239
nutcases blame the earthquake and

840
00:36:48,958 --> 00:36:53,239
tsunami on the wrath of God reminded me

841
00:36:51,239 --> 00:36:55,108

of something I wrote in early 2005

842
00:36:53,239 --> 00:36:56,789
following the earthquake to the west of

843
00:36:55,108 --> 00:36:58,259
Indonesia and the subsequent tsunami

844
00:36:56,789 --> 00:37:00,689
that affected countries around the

845
00:36:58,259 --> 00:37:02,759
Indian Ocean is just as topic on the

846
00:37:00,688 --> 00:37:05,578
hours at most five years ago on November

847
00:37:02,759 --> 00:37:06,958
the first 1755 an earthquake occurred on

848
00:37:05,579 --> 00:37:09,749
the floor of the Atlantic Ocean off the

849
00:37:06,958 --> 00:37:11,698
coast of Portugal an estimated twenty

850
00:37:09,748 --> 00:37:13,948
thousand people died within minutes as

851
00:37:11,699 --> 00:37:15,838
buildings collapsed in Lisbon and about

852
00:37:13,949 --> 00:37:17,699
forty thousand more died is result of

853
00:37:15,838 --> 00:37:19,588
the tsunami wave which struck the city

854
00:37:17,699 --> 00:37:22,259
half an hour later and serves beyond

855
00:37:19,588 --> 00:37:23,400
ruins burn up the Tagus River the vast

856
00:37:22,259 --> 00:37:24,539
majority the dead would have been

857
00:37:23,400 --> 00:37:27,869
Christians they believed in the

858
00:37:24,539 --> 00:37:30,539
benevolent omnipotent God I December 26

859
00:37:27,869 --> 00:37:32,189
2004 North quake off the western tip of

860
00:37:30,539 --> 00:37:33,778
Indonesia sent a tsunami across the

861
00:37:32,188 --> 00:37:35,399
Indian Ocean which killed at least a

862
00:37:33,778 --> 00:37:37,650
hundred and twenty-five thousand people

863
00:37:35,400 --> 00:37:39,358
immediately and count was more later of

864
00:37:37,650 --> 00:37:41,880
disease and starvation race ahead of the

865
00:37:39,358 --> 00:37:44,278
relief effort this wave was not selected

866
00:37:41,880 --> 00:37:46,318
for religion and Hindus Muslims Sikhs

867
00:37:44,278 --> 00:37:47,998
Buddhists Christians and Jews who

868
00:37:46,318 --> 00:37:50,188
eluding observant painful and blameless

869
00:37:47,998 --> 00:37:52,288
lives who swept away with the Atheist

870
00:37:50,188 --> 00:37:53,879
app estates and sinners following both

871
00:37:52,289 --> 00:37:55,829
of these events the question arose of

872
00:37:53,880 --> 00:37:57,630
how a benevolent non-dividend God could

873
00:37:55,829 --> 00:37:59,159
allow such things to happen one of the

874
00:37:57,630 --> 00:38:00,809
philosophical arguments against the

875
00:37:59,159 --> 00:38:02,909
existence of God it's always been based

876
00:38:00,809 --> 00:38:04,199
on the existence of evil this is easily

877
00:38:02,909 --> 00:38:06,419
countered nor most any religious

878
00:38:04,199 --> 00:38:07,979
tradition our ships and the attack on

879
00:38:06,418 --> 00:38:10,259
the world trade center will react to men

880
00:38:07,978 --> 00:38:11,458
who had fully chosen to commit evil the

881
00:38:10,259 --> 00:38:13,769
concept of sin has to allow the

882
00:38:11,458 --> 00:38:15,899
existence of sinners as of the concept

883
00:38:13,768 --> 00:38:17,938
of redemption if Simmons cannot choose

884

00:38:15,900 --> 00:38:20,519
to sin they also cannot choose to ask

885
00:38:17,938 --> 00:38:22,318
forgiveness for those sins the

886
00:38:20,518 --> 00:38:25,078
earthquake cannot however be explained

887
00:38:22,318 --> 00:38:26,788
away so easily a natural disaster which

888
00:38:25,079 --> 00:38:28,169
causes this much suffering can only

889
00:38:26,789 --> 00:38:30,359
happen because God wanted to do it

890
00:38:28,168 --> 00:38:31,858
because God could not stop it must be of

891
00:38:30,358 --> 00:38:34,708
course God didn't care if it happened or

892
00:38:31,858 --> 00:38:36,179
not if God wanted to do it there appears

893
00:38:34,708 --> 00:38:38,129
to be no rational reason to punish good

894
00:38:36,179 --> 00:38:40,199
people with sinners in God can hardly

895
00:38:38,130 --> 00:38:41,929
describe is benevolent and a god he will

896
00:38:40,199 --> 00:38:44,099
explain Evelyn slacks a possible virtue

897
00:38:41,929 --> 00:38:46,429
and something more perfect and this God

898
00:38:44,099 --> 00:38:48,509

can be imagined this God is not God

899

00:38:46,429 --> 00:38:49,889

similarly if God could not stop the

900

00:38:48,509 --> 00:38:51,900

earthquake then God is not omnipotent

901

00:38:49,889 --> 00:38:54,298

and again like to virtually which an

902

00:38:51,900 --> 00:38:55,650

existing God must have if God doesn't

903

00:38:54,298 --> 00:38:56,309

care about us then why should we care

904

00:38:55,650 --> 00:38:57,869

about him

905

00:38:56,309 --> 00:38:59,099

if we don't need to care about him then

906

00:38:57,869 --> 00:39:01,650

why does he need to exist in the first

907

00:38:59,099 --> 00:39:03,449

place over the days following the 2004

908

00:39:01,650 --> 00:39:04,680

earthquake I saw several religious

909

00:39:03,449 --> 00:39:06,119

figures trying to reconcile the

910

00:39:04,679 --> 00:39:08,309

thousands of deaths with their concept

911

00:39:06,119 --> 00:39:09,839

of God those who could be taken

912

00:39:08,309 --> 00:39:11,610

seriously seem to be desperately

913
00:39:09,840 --> 00:39:14,340
preaching a synthesis / three options

914
00:39:11,610 --> 00:39:15,900
outlined above God had done this is a

915
00:39:14,340 --> 00:39:17,490
way of punishing sinners and warning

916
00:39:15,900 --> 00:39:19,440
potential sinners it was unfortunate

917
00:39:17,489 --> 00:39:21,599
that the innocent had to suffer this was

918
00:39:19,440 --> 00:39:22,740
a burden expected of believers and God

919
00:39:21,599 --> 00:39:25,469
was sorry but things have to keep

920
00:39:22,739 --> 00:39:27,089
following some eternal plan it was this

921
00:39:25,469 --> 00:39:29,250
very form of sophistry which made me an

922
00:39:27,090 --> 00:39:30,360
atheist being asked to believe in

923
00:39:29,250 --> 00:39:31,920
creationism it pushed me out of

924
00:39:30,360 --> 00:39:33,599
organized religion long before that I

925
00:39:31,920 --> 00:39:35,070
can remember the precise moment when I

926
00:39:33,599 --> 00:39:37,230
came to the realization that I did not

927
00:39:35,070 --> 00:39:39,120
need a personal God we set my

928
00:39:37,230 --> 00:39:40,949
grandmother's funeral and the police was

929
00:39:39,119 --> 00:39:43,049
desperately trying to explain how when I

930
00:39:40,949 --> 00:39:44,609
just world a person would lead an

931
00:39:43,050 --> 00:39:45,690
unblemished and charitable life she had

932
00:39:44,610 --> 00:39:47,190
been stricken with the disease which

933
00:39:45,690 --> 00:39:49,710
caused her to spend the last year's our

934
00:39:47,190 --> 00:39:51,119
life in increasing pain he finally

935
00:39:49,710 --> 00:39:52,380
decided that she had taken the burden

936
00:39:51,119 --> 00:39:54,029
which rightly belong to sinners the

937
00:39:52,380 --> 00:39:56,579
Saints is supposed to do and his Jesus

938
00:39:54,030 --> 00:39:57,870
did a partially blasphemy of the idea

939
00:39:56,579 --> 00:39:59,940
that my grandmother was taking up their

940
00:39:57,869 --> 00:40:01,829
jerseys it swept off attack was that she

941

00:39:59,940 --> 00:40:04,559
had not chosen to be crippled God had

942
00:40:01,829 --> 00:40:06,029
done to all without asking I realized

943
00:40:04,559 --> 00:40:07,440
that a God who could do that is not the

944
00:40:06,030 --> 00:40:09,630
sort of God I needed to believe him I

945
00:40:07,440 --> 00:40:10,619
should have a point out but no problem

946
00:40:09,630 --> 00:40:12,510
with other people they want to believe

947
00:40:10,619 --> 00:40:14,159
in a personal God unless that belief

948
00:40:12,510 --> 00:40:16,170
leads to harm to others one of the

949
00:40:14,159 --> 00:40:20,759
differences between seven and 55 and

950
00:40:16,170 --> 00:40:21,900
2005 and even 2011 is that in 1755 there

951
00:40:20,760 --> 00:40:24,090
was an Enlightenment going on across

952
00:40:21,900 --> 00:40:26,369
Europe if it will felt free to ask hard

953
00:40:24,090 --> 00:40:27,900
questions about God in his works even a

954
00:40:26,369 --> 00:40:30,179
fruity criticized religion the religious

955
00:40:27,900 --> 00:40:32,369

bodies two and a half centuries later

956

00:40:30,179 --> 00:40:34,109
and since we're in the middle of an in

957

00:40:32,369 --> 00:40:35,699
darkened money where politeness

958

00:40:34,110 --> 00:40:37,349
political correctness and cultural

959

00:40:35,699 --> 00:40:40,289
relativity restrict free criticism of

960

00:40:37,349 --> 00:40:41,579
religion during the 2004 election

961

00:40:40,289 --> 00:40:43,679
campaigns in the United States and

962

00:40:41,579 --> 00:40:45,449
Australia both countries with explicit

963

00:40:43,679 --> 00:40:47,819
constitutional separation of church and

964

00:40:45,449 --> 00:40:49,619
state incumbent president and prime

965

00:40:47,820 --> 00:40:50,910
minister respectively actively courted

966

00:40:49,619 --> 00:40:52,500
the lunatic fringe of Christian

967

00:40:50,909 --> 00:40:54,190
fundamentalism and Oliver recruits their

968

00:40:52,500 --> 00:40:55,960
chances of re-election

969

00:40:54,190 --> 00:40:57,820
anyone who dare to suggest that

970
00:40:55,960 --> 00:40:59,500
fundamentalist Islam poses a threat and

971
00:40:57,820 --> 00:41:01,330
civilized societies as a cue to

972
00:40:59,500 --> 00:41:03,130
religious bigotry and racism as if

973
00:41:01,329 --> 00:41:04,210
religion which is a option mental

974
00:41:03,130 --> 00:41:07,750
condition has anything to do with

975
00:41:04,210 --> 00:41:09,099
genetics when the tsunami exposed

976
00:41:07,750 --> 00:41:11,349
landmines buried in the fields of

977
00:41:09,099 --> 00:41:12,819
northern Sri Lanka no commentator made

978
00:41:11,349 --> 00:41:14,619
the point that those mines been placed

979
00:41:12,820 --> 00:41:15,880
there by people of one religion to kill

980
00:41:14,619 --> 00:41:17,859
among people with a different set of

981
00:41:15,880 --> 00:41:19,300
beliefs I was criticized for pointing

982
00:41:17,860 --> 00:41:22,510
out for the mood Utley up to Christmas

983
00:41:19,300 --> 00:41:24,310
2003 30,000 people were killed in an

984
00:41:22,510 --> 00:41:28,150
earthquake which hit banned in Iran and

985
00:41:24,309 --> 00:41:30,400
immediately after Christmas 2004 125,000

986
00:41:28,150 --> 00:41:32,230
people were killed by a tsunami then I

987
00:41:30,400 --> 00:41:33,610
asked the question why does God choose

988
00:41:32,230 --> 00:41:36,309
this method of celebrating his son's

989
00:41:33,610 --> 00:41:38,019
birth date what surprised me was that a

990
00:41:36,309 --> 00:41:40,779
lot of the criticism came from atheists

991
00:41:38,019 --> 00:41:42,579
and other skeptics who obviously were

992
00:41:40,780 --> 00:41:44,920
suffering from political correctness I

993
00:41:42,579 --> 00:41:47,199
wonder what the world would be like 250

994
00:41:44,920 --> 00:41:48,550
years from now well people that time

995
00:41:47,199 --> 00:41:51,159
have recovered what has been lost over

996
00:41:48,550 --> 00:41:52,390
the last 250 years and going to prepare

997
00:41:51,159 --> 00:41:54,609
to accept the idea that they can live

998

00:41:52,389 --> 00:41:55,869
without the need for superstition but

999
00:41:54,610 --> 00:41:57,880
will the world's regressed even more

1000
00:41:55,869 --> 00:41:59,739
look like it lost 500 years ago and

1001
00:41:57,880 --> 00:42:02,349
supposedly civilized cities read that

1002
00:41:59,739 --> 00:42:03,789
the smell of burning witches think about

1003
00:42:02,349 --> 00:42:06,579
the good things that God is supposed to

1004
00:42:03,789 --> 00:42:08,769
be then think about 125,000 people

1005
00:42:06,579 --> 00:42:11,349
killed in a single day of what insurance

1006
00:42:08,769 --> 00:42:12,400
companies like to call an act of God ask

1007
00:42:11,349 --> 00:42:15,099
yourself what's missing in this picture

1008
00:42:12,400 --> 00:42:17,170
of a deity remove the last line involved

1009
00:42:15,099 --> 00:42:19,000
his poem about the 1755 lisbon

1010
00:42:17,170 --> 00:42:21,900
earthquake he might have added one thing

1011
00:42:19,000 --> 00:42:21,900
further hope

1012
00:42:40,719 --> 00:42:45,739

thank you for listening to the skeptic

1013

00:42:43,039 --> 00:42:48,110

zone this week now because of the recent

1014

00:42:45,739 --> 00:42:50,599

situation in Japan I've put back the

1015

00:42:48,110 --> 00:42:53,930

interview Maynard conducted with the

1016

00:42:50,599 --> 00:42:57,380

heart transplant recipient so that

1017

00:42:53,929 --> 00:43:00,069

should be coming up next week but I

1018

00:42:57,380 --> 00:43:03,320

think that's all I have to say this week

1019

00:43:00,070 --> 00:43:11,600

so until then this is Richard Saunders

1020

00:43:03,320 --> 00:43:14,990

signing off from Sydney Australia you've

1021

00:43:11,599 --> 00:43:19,579

been listening to the skeptic zone visit

1022

00:43:14,989 --> 00:43:22,069

our website at [www.skeptics on TV](http://www.skepticsontv.com) for

1023

00:43:19,579 --> 00:43:24,699

comments contacts and extra video

1024

00:43:22,070 --> 00:43:24,700

reports