



ROBIN HANSON
GRABBY ALIENS



1
00:00:06,190 --> 00:00:03,590
this is Lou Elizondo and you are

2
00:00:11,629 --> 00:00:06,200
listening to that UFO podcast

3
00:00:16,250 --> 00:00:13,970
hi everyone and welcome back to that UFO

4
00:00:18,290 --> 00:00:16,260
podcast my name is Andy and delighted to

5
00:00:20,689 --> 00:00:18,300
be joined on the show today by a

6
00:00:22,550 --> 00:00:20,699
professor at George Mason University and

7
00:00:25,370 --> 00:00:22,560
researcher at the future of humanity

8
00:00:27,589 --> 00:00:25,380
Institute at Oxford Mr Robin Hanson

9
00:00:30,050 --> 00:00:27,599
Robin welcome to the podcast thanks for

10
00:00:31,970 --> 00:00:30,060
having me very much looking forward to

11
00:00:34,010 --> 00:00:31,980
this and ever so slightly nervous Robin

12
00:00:35,630 --> 00:00:34,020
as I mentioned before I've listened to

13
00:00:38,569 --> 00:00:35,640

your interview with Lex Friedman at

14

00:00:40,490 --> 00:00:38,579

twice and uh some of that certainly went

15

00:00:42,170 --> 00:00:40,500

over my head I think I got the gist of

16

00:00:44,030 --> 00:00:42,180

most of it but I'm looking forward to

17

00:00:46,190 --> 00:00:44,040

the conversation and seeing where we go

18

00:00:47,990 --> 00:00:46,200

with it before we get to that I want to

19

00:00:49,970 --> 00:00:48,000

take you back and ask you what were some

20

00:00:53,330 --> 00:00:49,980

of your earliest memories of the the

21

00:00:56,389 --> 00:00:53,340

subject of aliens UFOs

22

00:00:57,650 --> 00:00:56,399

well UFOs haven't been much of my life

23

00:00:59,389 --> 00:00:57,660

at all

24

00:01:01,849 --> 00:00:59,399

obviously I've always enjoyed science

25

00:01:04,429 --> 00:01:01,859

fiction so the idea of aliens has been

26

00:01:06,710 --> 00:01:04,439

part of that but that's usually in the

27

00:01:09,170 --> 00:01:06,720

context of some much larger time scales

28

00:01:11,870 --> 00:01:09,180

where we our descendants might need

29

00:01:14,030 --> 00:01:11,880

aliens in in the distant future

30

00:01:17,330 --> 00:01:14,040

um so you know I have I've never

31

00:01:19,670 --> 00:01:17,340

expected to meet Aliens myself

32

00:01:22,010 --> 00:01:19,680

nor have I paid that much attention in

33

00:01:24,230 --> 00:01:22,020

my lifetime to those who said they had

34

00:01:25,850 --> 00:01:24,240

so it was very much a passing interest

35

00:01:27,050 --> 00:01:25,860

obviously but we're going to get to the

36

00:01:29,090 --> 00:01:27,060

point of talking about having the

37

00:01:30,649 --> 00:01:29,100

website the papers and your interest

38

00:01:32,210 --> 00:01:30,659

that you're you've recently been on Lex

39

00:01:33,350 --> 00:01:32,220

Friedman and millions of people are

40

00:01:36,109 --> 00:01:33,360

seeing you talk about alien

41

00:01:38,569 --> 00:01:36,119

civilizations is it something that

42

00:01:41,870 --> 00:01:38,579

you've really picked up in an academic

43

00:01:44,090 --> 00:01:41,880

form as you've kind of grown in years

44

00:01:46,850 --> 00:01:44,100

so one of my main intellectual

45

00:01:49,730 --> 00:01:46,860

strategies is just to look for important

46

00:01:53,270 --> 00:01:49,740

neglected topics

47

00:01:55,310 --> 00:01:53,280

somewhat early on I noticed that even

48

00:01:57,649 --> 00:01:55,320

though the idea of aliens is obviously

49

00:01:59,450 --> 00:01:57,659

important it seems somewhat neglected at

50

00:02:02,030 --> 00:01:59,460

least among intellectuals

51
00:02:04,850 --> 00:02:02,040
and that tempted me to dabble a bit more

52
00:02:07,310 --> 00:02:04,860
in it to think about the overall you

53
00:02:10,249 --> 00:02:07,320
know Arc of history from the origin of

54
00:02:11,930 --> 00:02:10,259
life to the rise of humans to where we

55
00:02:14,630 --> 00:02:11,940
might go in the distant future and

56
00:02:17,510 --> 00:02:14,640
become that whole long-term Arc just

57
00:02:19,070 --> 00:02:17,520
seems obviously important but not that

58
00:02:21,290 --> 00:02:19,080
many academics or intellectuals really

59
00:02:23,270 --> 00:02:21,300
talk about so I did a little work

60
00:02:26,089 --> 00:02:23,280
thinking about that

61
00:02:29,150 --> 00:02:26,099
why do you think it has been avoided by

62
00:02:30,589 --> 00:02:29,160
Academia widely

63
00:02:33,110 --> 00:02:30,599

I think

64

00:02:34,610 --> 00:02:33,120

academics start out with the same sort

65

00:02:37,430 --> 00:02:34,620

of sense of what's important that

66

00:02:40,490 --> 00:02:37,440

everybody else has but academics are

67

00:02:42,830 --> 00:02:40,500

selected for being able to be impressive

68

00:02:44,390 --> 00:02:42,840

in some way they can credential among

69

00:02:45,589 --> 00:02:44,400

themselves that's really the product

70

00:02:47,750 --> 00:02:45,599

they sell

71

00:02:49,970 --> 00:02:47,760

they don't sell just being people

72

00:02:52,430 --> 00:02:49,980

interested in interesting things they

73

00:02:55,130 --> 00:02:52,440

sell we have some special method or

74

00:02:57,649 --> 00:02:55,140

approach that lets us credibly expertly

75

00:03:00,110 --> 00:02:57,659

say things on a topic that you couldn't

76
00:03:03,530 --> 00:03:00,120
say unless you knew our expert knowledge

77
00:03:05,509 --> 00:03:03,540
and methods and therefore academics

78
00:03:06,890 --> 00:03:05,519
search for topics where they can say

79
00:03:10,430 --> 00:03:06,900
such things

80
00:03:12,110 --> 00:03:10,440
and so in most areas of um Academia such

81
00:03:14,449 --> 00:03:12,120
as mine economics most introductory

82
00:03:16,850 --> 00:03:14,459
courses are focused on all the things we

83
00:03:18,649 --> 00:03:16,860
think we can say

84
00:03:20,089 --> 00:03:18,659
and then all the things we don't know

85
00:03:22,430 --> 00:03:20,099
much about or can't say we usually just

86
00:03:23,990 --> 00:03:22,440
shut up about and try to like pretend it

87
00:03:25,550 --> 00:03:24,000
doesn't exist

88
00:03:28,250 --> 00:03:25,560

and that's really interesting because

89

00:03:30,229 --> 00:03:28,260

some people who especially in the past I

90

00:03:33,050 --> 00:03:30,239

I would listen to podcasts or interviews

91

00:03:36,229 --> 00:03:33,060

of where Professor Brian Cox uh Neil

92

00:03:38,869 --> 00:03:36,239

deGrasse Tyson and even astronaut Chris

93

00:03:41,089 --> 00:03:38,879

Hadfield have all recently been quite

94

00:03:42,949 --> 00:03:41,099

outspoken and at times derogatory about

95

00:03:44,869 --> 00:03:42,959

the subject of of aliens and

96

00:03:46,130 --> 00:03:44,879

encompassing that UFOs and the

97

00:03:48,530 --> 00:03:46,140

mainstream media

98

00:03:50,690 --> 00:03:48,540

as someone who isn't a scientist quite

99

00:03:53,330 --> 00:03:50,700

clearly like myself

100

00:03:55,729 --> 00:03:53,340

as the basis of you know these kind of

101
00:03:58,309 --> 00:03:55,739
as a scientist you want to explore and

102
00:04:00,289 --> 00:03:58,319
you want to find new things and like you

103
00:04:02,030 --> 00:04:00,299
say the idea of aliens and alien

104
00:04:04,610 --> 00:04:02,040
civilizations would be one of the

105
00:04:06,289 --> 00:04:04,620
greatest discoveries of all time why do

106
00:04:07,850 --> 00:04:06,299
you think again these very well-known

107
00:04:09,350 --> 00:04:07,860
people is it the same sort of reasons

108
00:04:11,929 --> 00:04:09,360
you think they stayed away from that

109
00:04:13,970 --> 00:04:11,939
conversation

110
00:04:17,449 --> 00:04:13,980
I think in general

111
00:04:19,610 --> 00:04:17,459
um we scientists try to follow an ideal

112
00:04:20,749 --> 00:04:19,620
concept of inference or drawing

113
00:04:23,030 --> 00:04:20,759

conclusions

114

00:04:24,170 --> 00:04:23,040

and there's this idea of Bayesian

115

00:04:26,210 --> 00:04:24,180

inference which is one of our

116

00:04:28,430 --> 00:04:26,220

mathematical models of it and and this

117

00:04:31,730 --> 00:04:28,440

formal theory of how we draw conclusions

118

00:04:34,430 --> 00:04:31,740

says on each topic we combine two things

119

00:04:37,430 --> 00:04:34,440

we combine some prior probabilities of

120

00:04:40,969 --> 00:04:37,440

what seems plausible times some evidence

121

00:04:42,710 --> 00:04:40,979

of particular things we see and that

122

00:04:43,850 --> 00:04:42,720

might push us toward one conclusion or

123

00:04:45,110 --> 00:04:43,860

another

124

00:04:47,150 --> 00:04:45,120

so

125

00:04:49,610 --> 00:04:47,160

um in general academics and everyone

126
00:04:50,990 --> 00:04:49,620
else when we think of things like ghosts

127
00:04:55,070 --> 00:04:51,000
or fairies

128
00:04:56,570 --> 00:04:55,080
uh then we ask from our point of view of

129
00:04:58,610 --> 00:04:56,580
our basic Theory the other things we

130
00:05:00,170 --> 00:04:58,620
know about the world how a priori

131
00:05:02,029 --> 00:05:00,180
plausible is it that there are say

132
00:05:05,029 --> 00:05:02,039
ghosts or fairies

133
00:05:08,150 --> 00:05:05,039
and then we multiply that times any

134
00:05:11,629 --> 00:05:08,160
particular reports that people have seen

135
00:05:13,490 --> 00:05:11,639
uh and try to ask well if that theory

136
00:05:15,409 --> 00:05:13,500
was true or some other theory was true

137
00:05:17,270 --> 00:05:15,419
How likely is it that this sort of

138
00:05:18,650 --> 00:05:17,280

report would have been generated and

139

00:05:21,110 --> 00:05:18,660

you're supposed to multiply those two

140

00:05:22,670 --> 00:05:21,120

two things for each different Theory and

141

00:05:24,409 --> 00:05:22,680

then renormalize over all the theories

142

00:05:25,730 --> 00:05:24,419

and that's supposed to tell you what

143

00:05:29,230 --> 00:05:25,740

things to believe in

144

00:05:32,469 --> 00:05:29,240

and so most intellectuals and academics

145

00:05:36,050 --> 00:05:32,479

on these topics usually it's the priors

146

00:05:38,749 --> 00:05:36,060

that make them uninterested

147

00:05:41,810 --> 00:05:38,759

so given everything else we know about

148

00:05:43,909 --> 00:05:41,820

say the universe uh our prior on ghosts

149

00:05:46,850 --> 00:05:43,919

and fairies is really low we think

150

00:05:48,890 --> 00:05:46,860

that's just crazy unlikely

151
00:05:50,330 --> 00:05:48,900
and if your prior is low enough then any

152
00:05:52,129 --> 00:05:50,340
particular evidence you see where you

153
00:05:53,990 --> 00:05:52,139
say yeah that's kind of weird but it's

154
00:05:56,390 --> 00:05:54,000
more likely that a weird thing was

155
00:05:58,430 --> 00:05:56,400
generated by an ordinary reality that

156
00:06:01,129 --> 00:05:58,440
just happened in some situation to come

157
00:06:03,290 --> 00:06:01,139
out looking weird then it would be

158
00:06:05,689 --> 00:06:03,300
to have been generated by an actual

159
00:06:08,990 --> 00:06:05,699
weird thing so if we get to something

160
00:06:11,930 --> 00:06:09,000
like UFOs many people would classify

161
00:06:14,450 --> 00:06:11,940
that as like ghosts or fairies they

162
00:06:15,890 --> 00:06:14,460
would say look sure if it were true it'd

163
00:06:17,870 --> 00:06:15,900

be really interesting

164

00:06:20,629 --> 00:06:17,880

but given everything else we know it's

165

00:06:23,570 --> 00:06:20,639

so a priori unlikely that you just

166

00:06:25,370 --> 00:06:23,580

really can't take much evidence for it

167

00:06:27,590 --> 00:06:25,380

very seriously

168

00:06:29,330 --> 00:06:27,600

um now in the past we've had things that

169

00:06:31,490 --> 00:06:29,340

were classified as like ghosts and

170

00:06:33,710 --> 00:06:31,500

fairies that have turned out now in the

171

00:06:35,749 --> 00:06:33,720

consensus to be true so for example

172

00:06:37,490 --> 00:06:35,759

asteroids were once thought of as just

173

00:06:40,370 --> 00:06:37,500

crazy rocks couldn't be falling from the

174

00:06:41,570 --> 00:06:40,380

sky now we believe that's true ball

175

00:06:43,010 --> 00:06:41,580

lightning is something that people

176

00:06:45,230 --> 00:06:43,020

thought well you know that's pretty

177

00:06:46,550 --> 00:06:45,240

crazy but then they generated in the lab

178

00:06:48,650 --> 00:06:46,560

and so people go I guess it's real

179

00:06:50,270 --> 00:06:48,660

because we've made it in the lab and

180

00:06:52,730 --> 00:06:50,280

then there are some very high level

181

00:06:54,770 --> 00:06:52,740

kinds of lightning that the first pilot

182

00:06:56,570 --> 00:06:54,780

saw sort of octopus looking pink things

183

00:06:58,969 --> 00:06:56,580

way up high in the atmosphere

184

00:07:00,529 --> 00:06:58,979

and uh Pilots learn quickly to not

185

00:07:01,909 --> 00:07:00,539

report them because they didn't want to

186

00:07:04,850 --> 00:07:01,919

be thought of as crazy because they

187

00:07:06,589 --> 00:07:04,860

wanted to keep a pilot's license but and

188

00:07:09,110 --> 00:07:06,599

so nobody reported it for many decades

189

00:07:10,909 --> 00:07:09,120

until NASA put up a satellite and looked

190

00:07:13,790 --> 00:07:10,919

in high in the atmosphere and there was

191

00:07:16,129 --> 00:07:13,800

these big pink octopus like lightning so

192

00:07:17,870 --> 00:07:16,139

in the past we have

193

00:07:19,730 --> 00:07:17,880

on occasion come across things that

194

00:07:22,850 --> 00:07:19,740

people had dismissed and

195

00:07:26,749 --> 00:07:22,860

they were you know revised so then the

196

00:07:28,909 --> 00:07:26,759

question about UFOs is how implausible

197

00:07:31,969 --> 00:07:28,919

is it from a priority considerations

198

00:07:34,249 --> 00:07:31,979

that there would actually be you know

199

00:07:36,830 --> 00:07:34,259

real things behind this phenomena

200

00:07:37,790 --> 00:07:36,840

and that's where I think I have some

201
00:07:39,830 --> 00:07:37,800
expertise

202
00:07:42,650 --> 00:07:39,840
and that's where I would weigh in on the

203
00:07:44,869 --> 00:07:42,660
topic so I do not consider myself very

204
00:07:47,029 --> 00:07:44,879
expert on the particular sightings and

205
00:07:48,230 --> 00:07:47,039
the particular reports I mean I think to

206
00:07:50,089 --> 00:07:48,240
look at that you need to know the

207
00:07:52,189 --> 00:07:50,099
weather you need to be no be pilot

208
00:07:54,290 --> 00:07:52,199
expertise you know the technology and

209
00:07:55,670 --> 00:07:54,300
equipment and the kinds of sensors and

210
00:07:57,230 --> 00:07:55,680
those are the kind of things you should

211
00:07:59,749 --> 00:07:57,240
know about if you want to weigh in on

212
00:08:02,029 --> 00:07:59,759
the particular reports and I've done

213
00:08:03,469 --> 00:08:02,039

sort of an amateur survey enough to say

214

00:08:05,330 --> 00:08:03,479

well there's you know something to be

215

00:08:07,129 --> 00:08:05,340

taken seriously there

216

00:08:08,689 --> 00:08:07,139

but I don't want to weigh in the the

217

00:08:10,490 --> 00:08:08,699

most thing I would say is when I've

218

00:08:12,529 --> 00:08:10,500

looked at the best evidence for say

219

00:08:14,089 --> 00:08:12,539

ghosts or fairies I say that looks

220

00:08:16,610 --> 00:08:14,099

pretty weak

221

00:08:18,170 --> 00:08:16,620

and when I look at UFOs I go that looks

222

00:08:20,809 --> 00:08:18,180

a lot stronger I can't tell you how much

223

00:08:23,210 --> 00:08:20,819

stronger but a lot stronger more

224

00:08:24,589 --> 00:08:23,220

something to be taken seriously but I'm

225

00:08:26,029 --> 00:08:24,599

not going to claim to be an expert there

226

00:08:28,909 --> 00:08:26,039

I'm going to be a claiming to be an

227

00:08:31,969 --> 00:08:28,919

expert on the prior that is how how

228

00:08:35,269 --> 00:08:31,979

plausible is it on basic considerations

229

00:08:39,350 --> 00:08:35,279

that there would be some powerful

230

00:08:41,089 --> 00:08:39,360

creatures who could and would do the

231

00:08:42,709 --> 00:08:41,099

powerful amazing things we seem to see

232

00:08:45,290 --> 00:08:42,719

with UFOs

233

00:08:47,150 --> 00:08:45,300

let me ask you and I want you to pick a

234

00:08:49,190 --> 00:08:47,160

part the way I I sometimes in my

235

00:08:51,410 --> 00:08:49,200

layman's terms try and talk about this

236

00:08:53,509 --> 00:08:51,420

and you can please do pull this apart if

237

00:08:55,910 --> 00:08:53,519

it's completely wrong I've often said

238

00:08:57,650 --> 00:08:55,920

that when people talk about it it would

239

00:08:59,750 --> 00:08:57,660

be almost impossible for another

240

00:09:02,329 --> 00:08:59,760

civilization to have technology to

241

00:09:04,250 --> 00:09:02,339

travel the distance required to to visit

242

00:09:06,710 --> 00:09:04,260

us here on Earth even if they did exist

243

00:09:08,389 --> 00:09:06,720

somewhere else and I've I've often used

244

00:09:10,190 --> 00:09:08,399

the example that if people were standing

245

00:09:13,009 --> 00:09:10,200

on the shore long before we invented

246

00:09:15,230 --> 00:09:13,019

even boats or a method to sell

247

00:09:17,509 --> 00:09:15,240

the traversing the oceans would have

248

00:09:19,670 --> 00:09:17,519

seemed impossible because we didn't have

249

00:09:22,009 --> 00:09:19,680

the sufficient craft or technology to do

250

00:09:25,009 --> 00:09:22,019

that and isn't it just a case of another

251

00:09:27,170 --> 00:09:25,019

civilization being sufficiently advanced

252

00:09:30,110 --> 00:09:27,180

could have developed those means and

253

00:09:32,449 --> 00:09:30,120

methods to travel distances that we once

254

00:09:35,150 --> 00:09:32,459

thought were incredibly you know vast

255

00:09:38,509 --> 00:09:35,160

but to them because of how they do it

256

00:09:41,389 --> 00:09:38,519

it's not or is that too simple

257

00:09:43,850 --> 00:09:41,399

in order for a scenario to be plausible

258

00:09:46,430 --> 00:09:43,860

we need to think about all the different

259

00:09:47,990 --> 00:09:46,440

aspects of that scenario we can and ask

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00:09:50,930 --> 00:09:48,000

whether that whole combination is

261

00:09:52,970 --> 00:09:50,940

plausible so if you know some scenario

262

00:09:55,009 --> 00:09:52,980

has a particular element that particular

263

00:09:56,210 --> 00:09:55,019

element might seem plausible but that

264

00:09:58,610 --> 00:09:56,220

doesn't mean the whole scenario is

265

00:10:00,650 --> 00:09:58,620

possible so if you say assume the aliens

266

00:10:02,389 --> 00:10:00,660

you know had crafts and they came to

267

00:10:04,550 --> 00:10:02,399

visit here would they have doors in The

268

00:10:05,630 --> 00:10:04,560

Craft well yeah I guess they probably

269

00:10:07,490 --> 00:10:05,640

have doors

270

00:10:09,050 --> 00:10:07,500

and you might say see haha this isn't so

271

00:10:10,490 --> 00:10:09,060

crazy these people reported seeing a

272

00:10:12,530 --> 00:10:10,500

door in this thing and I go well yeah

273

00:10:14,210 --> 00:10:12,540

that part of the report isn't so crazy

274

00:10:16,250 --> 00:10:14,220

given that there's this thing here sure

275

00:10:17,569 --> 00:10:16,260

there's a door but I might say but the

276

00:10:18,889 --> 00:10:17,579

rest of the scenario you generated

277

00:10:21,470 --> 00:10:18,899

that's the thing I might have a problem

278

00:10:23,030 --> 00:10:21,480

with right so you might say couldn't

279

00:10:25,069 --> 00:10:23,040

there have been some civilization out

280

00:10:26,150 --> 00:10:25,079

there and you know long ago and they're

281

00:10:28,910 --> 00:10:26,160

much more advanced than they came here

282

00:10:30,829 --> 00:10:28,920

and I'd say sure given that they're more

283

00:10:33,470 --> 00:10:30,839

advanced then yeah they could do more

284

00:10:35,509 --> 00:10:33,480

stuff than we did but I need a whole

285

00:10:37,250 --> 00:10:35,519

scenario a whole story that makes sense

286

00:10:39,610 --> 00:10:37,260

that includes that element that's the

287

00:10:42,470 --> 00:10:39,620

harder part so I think when most other

288

00:10:44,810 --> 00:10:42,480

academics are saying this sounds kind of

289

00:10:46,790 --> 00:10:44,820

crazy it's the whole package that

290

00:10:48,710 --> 00:10:46,800

they're responding to

291

00:10:50,630 --> 00:10:48,720

so they're looking for the context to

292

00:10:52,610 --> 00:10:50,640

fleshing out into before that's not a

293

00:10:54,769 --> 00:10:52,620

conversation I can have and that's where

294

00:10:56,329 --> 00:10:54,779

it's better people I can't have that

295

00:10:58,310 --> 00:10:56,339

conversation right now if you want we

296

00:10:59,810 --> 00:10:58,320

can talk about it yeah well do you know

297

00:11:01,790 --> 00:10:59,820

what I've got some stuff that will come

298

00:11:03,290 --> 00:11:01,800

to that a bit more later on so we'll

299

00:11:04,910 --> 00:11:03,300

park that because I do want to get to

300

00:11:06,829 --> 00:11:04,920

talking about your own work at the

301
00:11:09,470 --> 00:11:06,839
moment and in your conversation with Lex

302
00:11:11,569 --> 00:11:09,480
Friedman but was fascinating like I said

303
00:11:13,670 --> 00:11:11,579
I used the term lemon some of the more

304
00:11:16,310 --> 00:11:13,680
mathematical conversations and equations

305
00:11:18,470 --> 00:11:16,320
went a bit over my head I like to think

306
00:11:19,670 --> 00:11:18,480
I understood the gist of what was being

307
00:11:21,290 --> 00:11:19,680
discussed

308
00:11:22,970 --> 00:11:21,300
um I really like the way you broke some

309
00:11:25,130 --> 00:11:22,980
of that conversation down though it

310
00:11:26,569 --> 00:11:25,140
didn't come across as condescending and

311
00:11:28,670 --> 00:11:26,579
that's something I think even Lex

312
00:11:30,350 --> 00:11:28,680
himself commented on early in the

313
00:11:32,569 --> 00:11:30,360

interview that he appreciated how you

314

00:11:35,630 --> 00:11:32,579

you spoke about these terms and ideas

315

00:11:37,130 --> 00:11:35,640

and you know not not afraid to to go

316

00:11:39,290 --> 00:11:37,140

into some conversations that others

317

00:11:43,490 --> 00:11:39,300

might stay away from can I ask you to

318

00:11:47,030 --> 00:11:43,500

first off explain the term grab a alien

319

00:11:49,069 --> 00:11:47,040

sure so when we look up in the sky

320

00:11:50,210 --> 00:11:49,079

the universe looks empty

321

00:11:51,949 --> 00:11:50,220

and

322

00:11:53,870 --> 00:11:51,959

we can draw some conclusions from that

323

00:11:55,910 --> 00:11:53,880

that's data

324

00:11:58,910 --> 00:11:55,920

it's data about

325

00:12:01,370 --> 00:11:58,920

one kind of alien but not another and I

326

00:12:04,069 --> 00:12:01,380

want to distinguish the two so I will

327

00:12:05,810 --> 00:12:04,079

say it's data about the loud but not the

328

00:12:10,910 --> 00:12:05,820

quiet aliens

329

00:12:12,829 --> 00:12:10,920

away they small they're staying small

330

00:12:13,730 --> 00:12:12,839

they don't last long they're not doing

331

00:12:15,590 --> 00:12:13,740

much

332

00:12:18,410 --> 00:12:15,600

they're really hard to see

333

00:12:21,470 --> 00:12:18,420

so a big empty universe is consistent

334

00:12:23,329 --> 00:12:21,480

with a lot of quiet aliens out there

335

00:12:25,730 --> 00:12:23,339

however there's another kind of alien

336

00:12:28,370 --> 00:12:25,740

this is an alien which once it appears

337

00:12:31,009 --> 00:12:28,380

starts to grow expand rapidly and then

338

00:12:33,889 --> 00:12:31,019

in the volume it touches it changes that

339

00:12:35,389 --> 00:12:33,899

volume makes a big difference

340

00:12:37,129 --> 00:12:35,399

that's the sort of thing life is done

341

00:12:39,050 --> 00:12:37,139

here on Earth and humans are doing on

342

00:12:40,190 --> 00:12:39,060

earth that is when we go places we

343

00:12:41,150 --> 00:12:40,200

change things and we make them look

344

00:12:44,269 --> 00:12:41,160

different

345

00:12:46,370 --> 00:12:44,279

uh that's the kind of life and

346

00:12:48,769 --> 00:12:46,380

civilization that we don't see in the

347

00:12:51,530 --> 00:12:48,779

universe and so loud aliens are what

348

00:12:54,350 --> 00:12:51,540

we're not seeing and that's the data to

349

00:12:57,230 --> 00:12:54,360

think about so grabby aliens is our

350

00:13:01,129 --> 00:12:57,240

specific mathematical model of this more

351

00:13:02,990 --> 00:13:01,139

general idea of loud aliens so grabby is

352

00:13:05,750 --> 00:13:03,000

to connote this idea that they go out

353

00:13:08,150 --> 00:13:05,760

and grab stuff and they change it

354

00:13:10,430 --> 00:13:08,160

and that we can confront with our

355

00:13:12,230 --> 00:13:10,440

observations because that would make a

356

00:13:15,410 --> 00:13:12,240

big physical difference

357

00:13:18,050 --> 00:13:15,420

and by grabby do you mean there'd be

358

00:13:19,910 --> 00:13:18,060

more likely to potentially be hostile or

359

00:13:22,790 --> 00:13:19,920

aggressive in their actions

360

00:13:25,009 --> 00:13:22,800

not by definition but you might guess

361

00:13:27,769 --> 00:13:25,019

that perhaps but the key thing about

362

00:13:28,790 --> 00:13:27,779

them is they are grabbing and changing

363

00:13:31,129 --> 00:13:28,800

things

364

00:13:33,550 --> 00:13:31,139

right they aren't just visitors they're

365

00:13:38,030 --> 00:13:33,560

not zookeepers they're not games men

366

00:13:40,490 --> 00:13:38,040

they are developers and colonizers and

367

00:13:42,230 --> 00:13:40,500

Changers they go out into the universe

368

00:13:44,930 --> 00:13:42,240

and they take things and they do things

369

00:13:46,610 --> 00:13:44,940

with them uh that don't aren't

370

00:13:48,829 --> 00:13:46,620

consistent with their original uses and

371

00:13:51,110 --> 00:13:48,839

purposes so one key idea of a gravity

372

00:13:53,329 --> 00:13:51,120

aliens if if grabby aliens had come here

373

00:13:55,730 --> 00:13:53,339

in the past

374

00:13:57,829 --> 00:13:55,740

we couldn't be here now

375

00:14:00,230 --> 00:13:57,839

they would have taken Earth and

376

00:14:01,310 --> 00:14:00,240

everything around us and used it for

377

00:14:04,129 --> 00:14:01,320

their purposes

378

00:14:07,610 --> 00:14:04,139

and that would be noticeable

379

00:14:09,850 --> 00:14:07,620

when you say they also change things is

380

00:14:12,350 --> 00:14:09,860

there any potential that grab it aliens

381

00:14:13,730 --> 00:14:12,360

could have visited and let's use an

382

00:14:15,949 --> 00:14:13,740

example and this goes a little bit

383

00:14:18,170 --> 00:14:15,959

ancient alien desk but the classic one

384

00:14:19,610 --> 00:14:18,180

is aliens built the pyramids and we

385

00:14:21,350 --> 00:14:19,620

don't have to get into that conversation

386

00:14:23,689 --> 00:14:21,360

that's for other other shows and whatnot

387

00:14:26,150 --> 00:14:23,699

but is it possible they could have come

388

00:14:29,269 --> 00:14:26,160

here and interfered in a way that did

389

00:14:31,670 --> 00:14:29,279

benefit them and they're no longer here

390

00:14:34,009 --> 00:14:31,680

of course that would be possible but

391

00:14:35,870 --> 00:14:34,019

that wouldn't be consistent with the

392

00:14:39,050 --> 00:14:35,880

kind of grabby aliens we're thinking of

393

00:14:42,290 --> 00:14:39,060

so think of in the United States say as

394

00:14:44,750 --> 00:14:42,300

Europeans spread across the West right

395

00:14:46,189 --> 00:14:44,760

they weren't just making taking some

396

00:14:48,530 --> 00:14:46,199

notes as they went along and maybe

397

00:14:52,009 --> 00:14:48,540

composing a song or two and leaving some

398

00:14:55,069 --> 00:14:52,019

markers they made farms they cut down

399

00:14:57,530 --> 00:14:55,079

trees they you know they made roads

400

00:14:58,910 --> 00:14:57,540

airports I mean that building cities

401
00:15:01,970 --> 00:14:58,920
right

402
00:15:04,610 --> 00:15:01,980
that is they change things because those

403
00:15:07,189 --> 00:15:04,620
new versions were more useful to them uh

404
00:15:08,329 --> 00:15:07,199
and so if aliens had come here doing

405
00:15:10,069 --> 00:15:08,339
that

406
00:15:13,490 --> 00:15:10,079
we would presumably see a lot more

407
00:15:15,530 --> 00:15:13,500
differences like changing a monument on

408
00:15:18,050 --> 00:15:15,540
Earth or two over the course of the last

409
00:15:20,810 --> 00:15:18,060
10 000 years would be a pretty minor

410
00:15:23,329 --> 00:15:20,820
effect right we're talking big things

411
00:15:25,670 --> 00:15:23,339
like taking apart the moon that's the

412
00:15:28,850 --> 00:15:25,680
kind of big thing we're talking about

413
00:15:30,769 --> 00:15:28,860

okay I'm following you now and and the

414

00:15:33,230 --> 00:15:30,779

difference between those loud and quiet

415

00:15:35,329 --> 00:15:33,240

civilizations is quite vast is there a

416

00:15:38,629 --> 00:15:35,339

moment within a civilization's

417

00:15:41,990 --> 00:15:38,639

development that it can almost decide to

418

00:15:43,490 --> 00:15:42,000

be a louder civilization or is it

419

00:15:45,650 --> 00:15:43,500

something that can just happen what's

420

00:15:48,949 --> 00:15:45,660

what's the deal there so presumably

421

00:15:51,470 --> 00:15:48,959

every civilization starts out quiet

422

00:15:53,949 --> 00:15:51,480

and then they may make a transition to

423

00:15:56,449 --> 00:15:53,959

becoming loud and almost by definition

424

00:15:59,389 --> 00:15:56,459

once they become loud they can't become

425

00:16:01,670 --> 00:15:59,399

quiet again that is a loud civilization

426

00:16:04,189 --> 00:16:01,680

would be spread out across a wide space

427

00:16:06,230 --> 00:16:04,199

with lots of different parts and even if

428

00:16:08,090 --> 00:16:06,240

some of the parts say chose to become

429

00:16:09,889 --> 00:16:08,100

quiet again the other parts would

430

00:16:11,329 --> 00:16:09,899

continue on to be loud and they would

431

00:16:13,670 --> 00:16:11,339

continue to grow and spread and the

432

00:16:15,829 --> 00:16:13,680

whole thing would continue to be loud

433

00:16:17,269 --> 00:16:15,839

so then the question is will there be a

434

00:16:20,569 --> 00:16:17,279

point in time where our descendants

435

00:16:23,210 --> 00:16:20,579

choose in some way to to become loud or

436

00:16:24,829 --> 00:16:23,220

not and I do think that's probably the

437

00:16:27,170 --> 00:16:24,839

biggest Choice our descendants will face

438

00:16:28,370 --> 00:16:27,180

in the long run and I'm trying to write

439

00:16:30,710 --> 00:16:28,380

a book about that idea

440

00:16:32,449 --> 00:16:30,720

and that's that's very interesting would

441

00:16:33,829 --> 00:16:32,459

you say that we're in the very early

442

00:16:36,530 --> 00:16:33,839

stages

443

00:16:39,470 --> 00:16:36,540

of trying to be loud sending probes out

444

00:16:42,170 --> 00:16:39,480

early for us to be able to become loud

445

00:16:43,910 --> 00:16:42,180

that is probably the key moment is when

446

00:16:47,210 --> 00:16:43,920

it's we're possible to send an

447

00:16:49,189 --> 00:16:47,220

Interstellar Colony out which could then

448

00:16:51,949 --> 00:16:49,199

reproduce itself

449

00:16:54,050 --> 00:16:51,959

once that happens on any substantial

450

00:16:56,269 --> 00:16:54,060

scale then the cat's out of the bag and

451
00:16:58,610 --> 00:16:56,279
it would be too late to stop it

452
00:16:59,629 --> 00:16:58,620
uh but before any colonies have been

453
00:17:03,949 --> 00:16:59,639
sent out

454
00:17:06,470 --> 00:17:03,959
uh then it's still possible to stop that

455
00:17:08,990 --> 00:17:06,480
and again is that talking about steps

456
00:17:11,929 --> 00:17:09,000
Way Beyond us sending a few people to

457
00:17:13,669 --> 00:17:11,939
Mars for example absolutely that is you

458
00:17:15,230 --> 00:17:13,679
have to go to other stars

459
00:17:17,569 --> 00:17:15,240
and you have to send something there

460
00:17:19,309 --> 00:17:17,579
that when it gets there could start a

461
00:17:21,529 --> 00:17:19,319
new civilization there

462
00:17:23,929 --> 00:17:21,539
that's a lot more than just a metal box

463
00:17:26,329 --> 00:17:23,939

that takes some pictures

464

00:17:28,610 --> 00:17:26,339

interesting do you think in sending out

465

00:17:30,650 --> 00:17:28,620

these probes in radio waves that we do

466

00:17:32,210 --> 00:17:30,660

to the solar system do you think that's

467

00:17:34,430 --> 00:17:32,220

a wise idea

468

00:17:37,669 --> 00:17:34,440

and announcing ourselves to the you know

469

00:17:42,590 --> 00:17:40,070

I would be cautious about that but my

470

00:17:45,470 --> 00:17:42,600

grabby aliens analysis says it probably

471

00:17:47,690 --> 00:17:45,480

won't hurt once you see the conclusions

472

00:17:50,570 --> 00:17:47,700

of our analysis I'll just tell you they

473

00:17:53,029 --> 00:17:50,580

basic we basically estimate that

474

00:17:54,590 --> 00:17:53,039

you know intelligent aliens that can

475

00:17:56,630 --> 00:17:54,600

become gravity and that do become

476

00:17:58,669 --> 00:17:56,640

gravity appear roughly once per million

477

00:18:00,110 --> 00:17:58,679

galaxies

478

00:18:01,730 --> 00:18:00,120

and

479

00:18:03,770 --> 00:18:01,740

they are at the moment filling up

480

00:18:05,330 --> 00:18:03,780

roughly half the universe we can't see

481

00:18:08,630 --> 00:18:05,340

them because they're expanding at almost

482

00:18:10,490 --> 00:18:08,640

the speed of light and once we get into

483

00:18:12,710 --> 00:18:10,500

a similar mode we would meet them in

484

00:18:14,570 --> 00:18:12,720

roughly a billion years

485

00:18:16,789 --> 00:18:14,580

that's the parameters we're talking

486

00:18:19,970 --> 00:18:16,799

about so the nearest ones according to

487

00:18:22,370 --> 00:18:19,980

this Theory are a really long way away

488

00:18:24,890 --> 00:18:22,380

now those those Advanced aliens that are

489

00:18:26,810 --> 00:18:24,900

expanding there's a quote at the top of

490

00:18:29,510 --> 00:18:26,820

the page if you go to grabit aliens.com

491

00:18:31,610 --> 00:18:29,520

which says Advanced aliens really are

492

00:18:33,470 --> 00:18:31,620

out there and we have enough data to see

493

00:18:36,289 --> 00:18:33,480

roughly where they are in space and time

494

00:18:38,690 --> 00:18:36,299

and when we will see or meet them that's

495

00:18:40,370 --> 00:18:38,700

a very confident statement what makes

496

00:18:41,990 --> 00:18:40,380

you so confident that you know that

497

00:18:44,690 --> 00:18:42,000

especially those first words Advanced

498

00:18:47,750 --> 00:18:44,700

aliens really are out there

499

00:18:50,330 --> 00:18:47,760

so it's a more likely than not level of

500

00:18:53,930 --> 00:18:50,340

confidence which I think is news it's

501
00:18:55,130 --> 00:18:53,940
not a 99.99 level of confidence just to

502
00:18:58,070 --> 00:18:55,140
be clear

503
00:18:59,510 --> 00:18:58,080
I I'd say what we have is a three

504
00:19:01,549 --> 00:18:59,520
parameter model

505
00:19:02,450 --> 00:19:01,559
where each of the parameters is fit to

506
00:19:05,990 --> 00:19:02,460
data

507
00:19:07,730 --> 00:19:06,000
that suggests you need to believe in

508
00:19:09,890 --> 00:19:07,740
this model

509
00:19:12,169 --> 00:19:09,900
and that key piece of data is our

510
00:19:15,230 --> 00:19:12,179
current date

511
00:19:17,390 --> 00:19:15,240
so to elaborate

512
00:19:19,730 --> 00:19:17,400
um if you just think about

513
00:19:21,909 --> 00:19:19,740

Advance life like us appearing on a

514

00:19:24,529 --> 00:19:21,919

planet like ours or any sort of planet

515

00:19:26,750 --> 00:19:24,539

we have a simple statistical model that

516

00:19:29,150 --> 00:19:26,760

we can use to predict when that would

517

00:19:31,190 --> 00:19:29,160

happen in the history of the universe

518

00:19:33,230 --> 00:19:31,200

the simple statistical model says that

519

00:19:34,730 --> 00:19:33,240

it's more likely to happen on long-lived

520

00:19:36,890 --> 00:19:34,740

planets

521

00:19:39,409 --> 00:19:36,900

and much more likely to happen near the

522

00:19:41,870 --> 00:19:39,419

end of the lifetime of those planets in

523

00:19:46,270 --> 00:19:41,880

fact there's a power law that suggests

524

00:19:50,090 --> 00:19:46,280

you know toward the last 10 or something

525

00:19:51,350 --> 00:19:50,100

most stars in the universe will last for

526
00:19:53,450 --> 00:19:51,360
trillions of years

527
00:19:55,610 --> 00:19:53,460
the the average lifespan is like five

528
00:19:58,730 --> 00:19:55,620
trillion years so the average Planet

529
00:20:02,390 --> 00:19:58,740
lifetime is like five trillion years

530
00:20:05,690 --> 00:20:02,400
we are now at 14 billion years a tiny

531
00:20:07,310 --> 00:20:05,700
fraction of that average time so the The

532
00:20:09,770 --> 00:20:07,320
Simple Theory we have about when

533
00:20:12,350 --> 00:20:09,780
Advanced life should appear

534
00:20:13,310 --> 00:20:12,360
would be trillions of years in the

535
00:20:15,310 --> 00:20:13,320
future

536
00:20:17,810 --> 00:20:15,320
but here we are appearing very early

537
00:20:20,270 --> 00:20:17,820
that says something is wrong about that

538
00:20:22,070 --> 00:20:20,280

simple analysis and we say the key thing

539

00:20:23,870 --> 00:20:22,080

that we think is wrong is that that

540

00:20:27,110 --> 00:20:23,880

analysis assumes the universe would sit

541

00:20:29,090 --> 00:20:27,120

and stay empty and wait until some

542

00:20:31,730 --> 00:20:29,100

Advanced life finally appeared

543

00:20:33,710 --> 00:20:31,740

we say that instead Advanced life is

544

00:20:35,390 --> 00:20:33,720

popping up all the time right now and is

545

00:20:37,370 --> 00:20:35,400

filling the universe and within a

546

00:20:39,770 --> 00:20:37,380

billion or so Years it'll all be full

547

00:20:42,590 --> 00:20:39,780

and then it's too late to appear

548

00:20:44,810 --> 00:20:42,600

so we had to appear now early because we

549

00:20:46,789 --> 00:20:44,820

had to appear before the deadline

550

00:20:48,590 --> 00:20:46,799

you can only appear before the deadline

551
00:20:50,149 --> 00:20:48,600
and that's why we are here now but

552
00:20:51,529 --> 00:20:50,159
that's why we have to believe they're

553
00:20:54,590 --> 00:20:51,539
out there right now

554
00:20:56,390 --> 00:20:54,600
the clock date the date on the clock

555
00:20:57,950 --> 00:20:56,400
with respect to the immerse is the piece

556
00:21:00,110 --> 00:20:57,960
of evidence that tells you they're out

557
00:21:02,810 --> 00:21:00,120
there because otherwise we wouldn't be

558
00:21:05,390 --> 00:21:02,820
here now we'd be here much later

559
00:21:07,669 --> 00:21:05,400
and those Advanced civilizations again

560
00:21:09,230 --> 00:21:07,679
you mentioned it it's towards the end of

561
00:21:11,630 --> 00:21:09,240
their planet's potentially habitable

562
00:21:13,610 --> 00:21:11,640
time would it be then that it was

563
00:21:16,010 --> 00:21:13,620

necessity that potentially drives these

564

00:21:17,930 --> 00:21:16,020

civilizations to to expanding out into

565

00:21:21,169 --> 00:21:17,940

the stars as much as it would be

566

00:21:23,630 --> 00:21:21,179

technological capabilities

567

00:21:27,169 --> 00:21:23,640

so the key assumption is just some

568

00:21:30,649 --> 00:21:27,179

fraction of civilizations do expand

569

00:21:35,149 --> 00:21:30,659

so we don't need really to say why

570

00:21:37,490 --> 00:21:35,159

we can say some things about why uh the

571

00:21:39,770 --> 00:21:37,500

most the simplest reason why they might

572

00:21:42,230 --> 00:21:39,780

expand is that they do not have a center

573

00:21:44,450 --> 00:21:42,240

that controls them so if they are

574

00:21:48,289 --> 00:21:44,460

decentralized composed of many parts

575

00:21:49,970 --> 00:21:48,299

then if any one part expands the net

576

00:21:53,029 --> 00:21:49,980

effect is expansion

577

00:21:55,490 --> 00:21:53,039

so in order to not expand they really

578

00:21:57,529 --> 00:21:55,500

need to prevent all of their parts from

579

00:21:59,450 --> 00:21:57,539

expanding and the more advanced they are

580

00:22:01,250 --> 00:21:59,460

the more parts those are

581

00:22:02,810 --> 00:22:01,260

you know and early on there might be 10

582

00:22:04,310 --> 00:22:02,820

parts any which could do it later on

583

00:22:05,810 --> 00:22:04,320

there might be a trillion Parts any

584

00:22:07,789 --> 00:22:05,820

which could do it

585

00:22:09,770 --> 00:22:07,799

so the simplest story about why

586

00:22:11,990 --> 00:22:09,780

expansion would happen is just because

587

00:22:13,430 --> 00:22:12,000

it only takes one part

588

00:22:16,070 --> 00:22:13,440

to make it happen

589

00:22:18,890 --> 00:22:16,080

uh so if if our descendants say fill the

590

00:22:20,690 --> 00:22:18,900

solar system with a vast economy and it

591

00:22:22,669 --> 00:22:20,700

only takes one part and a trillion of

592

00:22:24,770 --> 00:22:22,679

that economy to send off a probe to

593

00:22:26,930 --> 00:22:24,780

another star and that's enough to start

594

00:22:30,169 --> 00:22:26,940

this expansion this colonization wave

595

00:22:32,029 --> 00:22:30,179

then in order for it not to happen our

596

00:22:35,810 --> 00:22:32,039

civilization has to find a way to

597

00:22:37,669 --> 00:22:35,820

prevent any part from doing that

598

00:22:39,289 --> 00:22:37,679

and that's the simplest reason why they

599

00:22:41,029 --> 00:22:39,299

might now of course they might want to

600

00:22:44,210 --> 00:22:41,039

and then choose to

601
00:22:46,669 --> 00:22:44,220
or they might want not to but just fail

602
00:22:48,649 --> 00:22:46,679
to work hard enough to prevent it

603
00:22:50,330 --> 00:22:48,659
but it's really hard to prevent it once

604
00:22:52,430 --> 00:22:50,340
you're big enough

605
00:22:55,430 --> 00:22:52,440
no I heard you use the example and

606
00:22:57,169 --> 00:22:55,440
discuss about pants panspermia siblings

607
00:22:58,850 --> 00:22:57,179
yes and you've mentioned the word

608
00:23:00,830 --> 00:22:58,860
descendants there can you just tell us

609
00:23:02,750 --> 00:23:00,840
about the term panspermia siblings and

610
00:23:04,430 --> 00:23:02,760
what that could mean

611
00:23:06,830 --> 00:23:04,440
well so the key ideas in our simple

612
00:23:09,470 --> 00:23:06,840
Rabbi aliens model the nearest aliens

613
00:23:10,850 --> 00:23:09,480

are far away they appear once per

614

00:23:13,010 --> 00:23:10,860

million galaxies

615

00:23:15,049 --> 00:23:13,020

and that makes it crazy unlikely that

616

00:23:16,970 --> 00:23:15,059

there's anybody nearby

617

00:23:18,950 --> 00:23:16,980

so in order to actually make it

618

00:23:22,190 --> 00:23:18,960

believable that there are aliens nearby

619

00:23:23,630 --> 00:23:22,200

we need to change this model to create

620

00:23:26,870 --> 00:23:23,640

correlation

621

00:23:29,450 --> 00:23:26,880

so that aliens appear near each other

622

00:23:31,909 --> 00:23:29,460

and a simple way to produce correlation

623

00:23:33,350 --> 00:23:31,919

is to say we have siblings

624

00:23:36,409 --> 00:23:33,360

that is

625

00:23:40,549 --> 00:23:36,419

life started in our galaxy on some other

626
00:23:44,990 --> 00:23:43,490
many long ago so our sun started roughly

627
00:23:47,149 --> 00:23:45,000
four and a half billion years ago and

628
00:23:49,130 --> 00:23:47,159
that's when our earth started but since

629
00:23:50,990 --> 00:23:49,140
the universe is 14 billion years that

630
00:23:52,490 --> 00:23:51,000
was almost 10 billion years after the

631
00:23:55,190 --> 00:23:52,500
start of the universe

632
00:23:57,230 --> 00:23:55,200
so you might say well 5 billion years

633
00:23:59,450 --> 00:23:57,240
after the start of the universe say some

634
00:24:02,210 --> 00:23:59,460
other star was formed and around that

635
00:24:04,549 --> 00:24:02,220
some other planet an Eden and life

636
00:24:06,649 --> 00:24:04,559
started on that planet

637
00:24:09,049 --> 00:24:06,659
10 billion years ago

638
00:24:11,090 --> 00:24:09,059

and then life evolved on that planet for

639

00:24:14,510 --> 00:24:11,100

maybe five billion years

640

00:24:16,310 --> 00:24:14,520

and then some rock flew down smashed

641

00:24:18,110 --> 00:24:16,320

into that planet smashed up some other

642

00:24:20,870 --> 00:24:18,120

rocks into the sky and some of those

643

00:24:23,990 --> 00:24:20,880

pieces of rocks had life on them and

644

00:24:26,510 --> 00:24:24,000

those rocks drifted and then landed in

645

00:24:29,029 --> 00:24:26,520

this in the Stellar Nursery that our son

646

00:24:30,830 --> 00:24:29,039

was born in so all stars are basically

647

00:24:33,110 --> 00:24:30,840

born in nurseries

648

00:24:35,269 --> 00:24:33,120

whole clumps of hundreds and thousands

649

00:24:37,130 --> 00:24:35,279

of stars all born at the same place in

650

00:24:39,649 --> 00:24:37,140

the same time close together

651
00:24:41,990 --> 00:24:39,659
and if this rock had seeded had flown

652
00:24:43,909 --> 00:24:42,000
into our Stellar Nursery

653
00:24:45,890 --> 00:24:43,919
that not only could it have landed on

654
00:24:47,570 --> 00:24:45,900
Earth and seeded life on Earth but there

655
00:24:49,610 --> 00:24:47,580
were so many rocks flying around so

656
00:24:51,230 --> 00:24:49,620
close to each other right then that it

657
00:24:52,909 --> 00:24:51,240
plausibly would have been seeded many

658
00:24:55,789 --> 00:24:52,919
other

659
00:24:58,669 --> 00:24:55,799
stars and the planets around them at

660
00:25:00,230 --> 00:24:58,679
that same time in that same place

661
00:25:02,090 --> 00:25:00,240
and then over the last five billion

662
00:25:03,890 --> 00:25:02,100
years those Stars drifted apart and are

663
00:25:05,710 --> 00:25:03,900

now spread all around a ring around the

664

00:25:08,750 --> 00:25:05,720

Galaxy

665

00:25:10,850 --> 00:25:08,760

but that means there's a few thousand

666

00:25:12,470 --> 00:25:10,860

other stars out there that might be

667

00:25:15,110 --> 00:25:12,480

seated with life

668

00:25:17,750 --> 00:25:15,120

from the same source that we got it and

669

00:25:20,570 --> 00:25:17,760

they would be our panspermia siblings

670

00:25:23,210 --> 00:25:20,580

and then one of those could have

671

00:25:24,769 --> 00:25:23,220

achieved our level of Technology before

672

00:25:29,450 --> 00:25:24,779

us

673

00:25:31,430 --> 00:25:29,460

Source where aliens might be coming from

674

00:25:33,769 --> 00:25:31,440

to visit us

675

00:25:35,990 --> 00:25:33,779

while still explaining why the rest of

676
00:25:37,250 --> 00:25:36,000
the universe looks completely empty

677
00:25:39,230 --> 00:25:37,260
so

678
00:25:40,970 --> 00:25:39,240
if we're going to try to explain how it

679
00:25:42,110 --> 00:25:40,980
is that there might be aliens visiting

680
00:25:44,149 --> 00:25:42,120
us now

681
00:25:45,110 --> 00:25:44,159
we have a number of puzzling things to

682
00:25:47,870 --> 00:25:45,120
explain

683
00:25:49,789 --> 00:25:47,880
one of which is if there's aliens out

684
00:25:52,010 --> 00:25:49,799
there that close to us in space and time

685
00:25:54,049 --> 00:25:52,020
why isn't the universe full of them why

686
00:25:56,149 --> 00:25:54,059
does everything look so dead and empty

687
00:25:58,190 --> 00:25:56,159
so one way to do that is to create this

688
00:26:02,450 --> 00:25:58,200

correlation yes life appears very rarely

689

00:26:05,269 --> 00:26:02,460

but it appears in little chunks

690

00:26:07,730 --> 00:26:05,279

or life is in several places at the same

691

00:26:10,909 --> 00:26:07,740

time and place because it has a common

692

00:26:12,769 --> 00:26:10,919

origin so panspermia siblings would be a

693

00:26:16,490 --> 00:26:12,779

key hypothesis we would need to invoke

694

00:26:18,350 --> 00:26:16,500

to explain say UFOs as aliens the idea

695

00:26:20,330 --> 00:26:18,360

that even though we look out and we see

696

00:26:22,190 --> 00:26:20,340

all this dead empty Universe millions

697

00:26:24,769 --> 00:26:22,200

and trillions of galaxies all empty as

698

00:26:26,330 --> 00:26:24,779

far as we can see now

699

00:26:29,029 --> 00:26:26,340

that's consistent with there being

700

00:26:31,130 --> 00:26:29,039

aliens near us now because they had a

701
00:26:33,529 --> 00:26:31,140
common origin with us so there aren't

702
00:26:35,330 --> 00:26:33,539
very many of them there's just maybe one

703
00:26:37,190 --> 00:26:35,340
maybe in the next million galaxies

704
00:26:38,450 --> 00:26:37,200
there's just this one other alien

705
00:26:40,789 --> 00:26:38,460
civilization

706
00:26:43,549 --> 00:26:40,799
the ones that are visiting

707
00:26:46,430 --> 00:26:43,559
and you also discussed the idea that if

708
00:26:49,010 --> 00:26:46,440
that was the case potentially these

709
00:26:52,269 --> 00:26:49,020
civilizations albeit having the ability

710
00:26:55,070 --> 00:26:52,279
to travel could be coming to other quiet

711
00:26:57,110 --> 00:26:55,080
civilizations and encouraging us to stay

712
00:27:01,070 --> 00:26:57,120
quiet

713
00:27:03,230 --> 00:27:01,080

well so we have to ask what else do we

714

00:27:05,029 --> 00:27:03,240

need to assume to make this hypothesis

715

00:27:07,730 --> 00:27:05,039

work so first of all we assume

716

00:27:10,610 --> 00:27:07,740

panspermia siblings secondly we assume

717

00:27:13,789 --> 00:27:10,620

that one of those planets achieved our

718

00:27:15,769 --> 00:27:13,799

level of civilization before us

719

00:27:17,510 --> 00:27:15,779

from that we have to guess it's probably

720

00:27:19,010 --> 00:27:17,520

at least 100 million years ago that

721

00:27:21,769 --> 00:27:19,020

happened

722

00:27:24,470 --> 00:27:21,779

and so they've been at our level of

723

00:27:25,970 --> 00:27:24,480

technology for 100 million years within

724

00:27:27,950 --> 00:27:25,980

our same galaxy

725

00:27:30,710 --> 00:27:27,960

and right there that makes a problem

726

00:27:32,750 --> 00:27:30,720

which is it would have only taken them a

727

00:27:34,970 --> 00:27:32,760

million years at most to fill our galaxy

728

00:27:36,830 --> 00:27:34,980

and change it all if they had been so

729

00:27:40,430 --> 00:27:36,840

unlocked

730

00:27:42,649 --> 00:27:40,440

but by assumption they didn't do that

731

00:27:46,730 --> 00:27:42,659

so we'll need to add to the scenario one

732

00:27:49,909 --> 00:27:46,740

more element which is they chose not to

733

00:27:52,370 --> 00:27:49,919

they for some reason decided not to

734

00:27:55,250 --> 00:27:52,380

expand and fill the Galaxy and change it

735

00:27:57,169 --> 00:27:55,260

they had an ecological or religious or

736

00:27:58,850 --> 00:27:57,179

other concerns we could talk about that

737

00:28:01,370 --> 00:27:58,860

more if you want why a civilization

738

00:28:03,649 --> 00:28:01,380

might not want to allow expansion but

739

00:28:05,870 --> 00:28:03,659

they chose not to allow their

740

00:28:08,029 --> 00:28:05,880

civilization to expand

741

00:28:10,250 --> 00:28:08,039

and they succeeded at that

742

00:28:12,830 --> 00:28:10,260

actually pretty difficult task

743

00:28:14,570 --> 00:28:12,840

yet they survived so one way to succeed

744

00:28:16,730 --> 00:28:14,580

is just kill themselves and they did not

745

00:28:20,110 --> 00:28:16,740

kill themselves they did not expand they

746

00:28:22,850 --> 00:28:20,120

succeeded at keeping themselves Limited

747

00:28:24,289 --> 00:28:22,860

and preventing this vast expansion and

748

00:28:26,090 --> 00:28:24,299

change that so something else we'll have

749

00:28:27,830 --> 00:28:26,100

to assume about them in order to make

750

00:28:29,990 --> 00:28:27,840

the scenario work

751
00:28:32,330 --> 00:28:30,000
panspermia siblings Plus

752
00:28:35,269 --> 00:28:32,340
a anti-growth

753
00:28:37,430 --> 00:28:35,279
you know policy of the aliens

754
00:28:40,310 --> 00:28:37,440
but once we assume that they were

755
00:28:42,590 --> 00:28:40,320
anti-growth then for free we get an

756
00:28:44,990 --> 00:28:42,600
explanation for why they're here

757
00:28:46,549 --> 00:28:45,000
right because they have this policy

758
00:28:47,810 --> 00:28:46,559
against growth they have been preventing

759
00:28:50,570 --> 00:28:47,820
people going out from their own

760
00:28:53,090 --> 00:28:50,580
civilization to cause growth and now

761
00:28:55,250 --> 00:28:53,100
they see us in their telescopes

762
00:28:57,169 --> 00:28:55,260
and they can draw the conclusion we

763
00:28:59,810 --> 00:28:57,179

might violate the rule

764

00:29:01,909 --> 00:28:59,820

we are on a path to choosing to expand

765

00:29:04,490 --> 00:29:01,919

that might be one of the things we do

766

00:29:06,590 --> 00:29:04,500

and if they have this rule that prevents

767

00:29:09,350 --> 00:29:06,600

them from expanding then they will want

768

00:29:11,930 --> 00:29:09,360

this rule applied to us they want us to

769

00:29:14,330 --> 00:29:11,940

not expand as well otherwise we

770

00:29:16,370 --> 00:29:14,340

you know prove we you know make

771

00:29:19,490 --> 00:29:16,380

irrelevant to their rule

772

00:29:21,529 --> 00:29:19,500

if we don't follow the same rule so then

773

00:29:23,630 --> 00:29:21,539

we can add explanation for why they are

774

00:29:25,010 --> 00:29:23,640

here they made an exception for their

775

00:29:26,570 --> 00:29:25,020

General policy or expanding I mean

776

00:29:28,490 --> 00:29:26,580

wherever they came from It's a Long Way

777

00:29:30,049 --> 00:29:28,500

to come here they surely can't be

778

00:29:31,909 --> 00:29:30,059

allowing very many trips like that or

779

00:29:34,669 --> 00:29:31,919

that would risk breaking their rule

780

00:29:37,789 --> 00:29:34,679

right any one vacationing trip along the

781

00:29:39,590 --> 00:29:37,799

way could somehow uh you know go Rogue

782

00:29:41,389 --> 00:29:39,600

and fill the universe

783

00:29:43,310 --> 00:29:41,399

so they must not allow very many

784

00:29:45,710 --> 00:29:43,320

vacationing trips from their Origins

785

00:29:47,510 --> 00:29:45,720

right but this one Expedition they have

786

00:29:49,789 --> 00:29:47,520

apparently allowed and this would be a

787

00:29:53,029 --> 00:29:49,799

reason this is an unusual priority

788

00:29:55,490 --> 00:29:53,039

Because unless they come here they they

789

00:29:57,950 --> 00:29:55,500

may not you know succeed in keeping this

790

00:29:59,630 --> 00:29:57,960

Rule now we could also conclude they

791

00:30:01,730 --> 00:29:59,640

have a simple way to make this rule be

792

00:30:04,190 --> 00:30:01,740

enforced is just to destroy us

793

00:30:05,930 --> 00:30:04,200

no doubt 100 million years more advanced

794

00:30:07,130 --> 00:30:05,940

than us that would have been easy they

795

00:30:09,710 --> 00:30:07,140

could have just sent something here to

796

00:30:12,049 --> 00:30:09,720

blow us up wipe us out fold on full stop

797

00:30:14,450 --> 00:30:12,059

right so but we can look around and see

798

00:30:16,130 --> 00:30:14,460

we are not destroyed so we can add one

799

00:30:19,010 --> 00:30:16,140

more thing we know about them they are

800

00:30:22,010 --> 00:30:19,020

reluctant to just kill us off

801

00:30:25,070 --> 00:30:22,020

they'd rather we adopted

802

00:30:28,190 --> 00:30:25,080

this policy voluntarily

803

00:30:31,070 --> 00:30:28,200

uh without muscle fuss or struggle

804

00:30:35,630 --> 00:30:31,080

so they're here to persuade us

805

00:30:38,570 --> 00:30:35,640

not just force us to follow their rule

806

00:30:40,490 --> 00:30:38,580

and as a hypothesis as to why that would

807

00:30:43,190 --> 00:30:40,500

be because as a species we always think

808

00:30:44,810 --> 00:30:43,200

about advancement and growth and we want

809

00:30:46,370 --> 00:30:44,820

to get to this planet and then from that

810

00:30:48,110 --> 00:30:46,380

planet to this you know outside the

811

00:30:49,430 --> 00:30:48,120

solar system then into other as you say

812

00:30:51,409 --> 00:30:49,440

Interstellar travel would be an

813

00:30:54,350 --> 00:30:51,419

incredible dream to achieve

814

00:30:56,029 --> 00:30:54,360

why would a civilization in your opinion

815

00:30:58,310 --> 00:30:56,039

What's the hypothesis that they would

816

00:31:01,130 --> 00:30:58,320

get to a point and think no we have to

817

00:31:03,169 --> 00:31:01,140

stop here well we can already now see

818

00:31:05,870 --> 00:31:03,179

when people discuss this idea of

819

00:31:08,870 --> 00:31:05,880

interstellar colonization many of us

820

00:31:10,909 --> 00:31:08,880

have doubts and concerns and advise

821

00:31:13,370 --> 00:31:10,919

against it that's something we already

822

00:31:16,850 --> 00:31:13,380

see now so we don't have to hypothesize

823

00:31:20,930 --> 00:31:16,860

it we can just ask why are people now

824

00:31:23,690 --> 00:31:20,940

warning us against allowing expansion

825

00:31:26,509 --> 00:31:23,700

so there are several different reasons

826

00:31:28,850 --> 00:31:26,519

so one is that

827

00:31:32,990 --> 00:31:28,860

this expansion would

828

00:31:36,649 --> 00:31:33,000

continue competition and conflict

829

00:31:38,870 --> 00:31:36,659

and that would produce Evolution and so

830

00:31:41,870 --> 00:31:38,880

our descendants in this process would

831

00:31:45,049 --> 00:31:41,880

change they would no longer be like us

832

00:31:46,610 --> 00:31:45,059

so you might dislike this idea that our

833

00:31:47,990 --> 00:31:46,620

distant descendants would become very

834

00:31:50,210 --> 00:31:48,000

different from us

835

00:31:52,130 --> 00:31:50,220

you could think they are then aliens and

836

00:31:54,350 --> 00:31:52,140

of no value and and

837

00:31:56,509 --> 00:31:54,360

I'll think that we should disown them

838

00:31:59,389 --> 00:31:56,519

and you might think well we want to

839

00:32:01,789 --> 00:31:59,399

prevent our descendants from

840

00:32:04,009 --> 00:32:01,799

um coming so alien

841

00:32:06,169 --> 00:32:04,019

and so one way to do that would be to

842

00:32:07,789 --> 00:32:06,179

control reproduction and prevent

843

00:32:11,509 --> 00:32:07,799

expansion

844

00:32:13,549 --> 00:32:11,519

so we may want to both limit who could

845

00:32:15,529 --> 00:32:13,559

leave the solar system and also limit

846

00:32:16,850 --> 00:32:15,539

the kind of changes that can happen here

847

00:32:19,009 --> 00:32:16,860

within the solar system people are

848

00:32:21,529 --> 00:32:19,019

already thinking about some people say

849

00:32:23,149 --> 00:32:21,539

nuts become transhumanous let's change

850

00:32:24,350 --> 00:32:23,159

our minds and change our body and other

851
00:32:26,330 --> 00:32:24,360
people are saying no no that would be

852
00:32:27,889 --> 00:32:26,340
terrible let's make laws against those

853
00:32:29,570 --> 00:32:27,899
sorts of changes

854
00:32:32,509 --> 00:32:29,580
but you couldn't enforce laws against

855
00:32:34,130 --> 00:32:32,519
those changes unless you also limited

856
00:32:35,389 --> 00:32:34,140
where people could go because otherwise

857
00:32:37,130 --> 00:32:35,399
they could just go far away and then

858
00:32:38,509 --> 00:32:37,140
change there and then after they changed

859
00:32:42,409 --> 00:32:38,519
there they would come back here and

860
00:32:44,990 --> 00:32:42,419
contest with us about control over here

861
00:32:48,889 --> 00:32:45,000
uh and a related thing is just this idea

862
00:32:51,430 --> 00:32:48,899
that we have over time been acquiring

863
00:32:55,370 --> 00:32:51,440

more of a world mob or World community

864

00:32:57,230 --> 00:32:55,380

that has suppressed competition and War

865

00:32:59,029 --> 00:32:57,240

and conflict in many ways that people

866

00:33:01,070 --> 00:32:59,039

enjoy and approve

867

00:33:04,310 --> 00:33:01,080

so you know thousands of years ago the

868

00:33:06,649 --> 00:33:04,320

world was full of Warring Empires

869

00:33:09,110 --> 00:33:06,659

you know with enormous destruction of

870

00:33:11,090 --> 00:33:09,120

constantly fighting each other and in

871

00:33:13,130 --> 00:33:11,100

the last century we have created more of

872

00:33:15,649 --> 00:33:13,140

a world community and now we actually

873

00:33:17,990 --> 00:33:15,659

substantially suppress suppress conflict

874

00:33:20,210 --> 00:33:18,000

suppress War but we also suppress many

875

00:33:22,009 --> 00:33:20,220

kinds of business competition

876

00:33:24,830 --> 00:33:22,019

regulations of business are pretty

877

00:33:26,570 --> 00:33:24,840

similar worldwide regulation of

878

00:33:28,669 --> 00:33:26,580

telecommunications and nuclear energy

879

00:33:31,130 --> 00:33:28,679

and transportation and a wide range of

880

00:33:33,230 --> 00:33:31,140

other things are actually

881

00:33:35,570 --> 00:33:33,240

pretty much the same the whole world

882

00:33:37,610 --> 00:33:35,580

over in ways that greatly limit changes

883

00:33:39,830 --> 00:33:37,620

in those areas too many people's

884

00:33:41,630 --> 00:33:39,840

satisfaction they like the idea that we

885

00:33:44,389 --> 00:33:41,640

aren't allowing organ sales or we aren't

886

00:33:45,950 --> 00:33:44,399

allowing just Rogue nuclear reactors Etc

887

00:33:49,250 --> 00:33:45,960

around the world

888

00:33:51,049 --> 00:33:49,260

and people will in the future even more

889

00:33:53,149 --> 00:33:51,059

like what we've done with the world

890

00:33:55,310 --> 00:33:53,159

governance and the world mobs that we

891

00:33:57,169 --> 00:33:55,320

have created even today people are

892

00:33:58,850 --> 00:33:57,179

talking about how we could deal with

893

00:34:00,470 --> 00:33:58,860

inequality how we could deal with global

894

00:34:02,990 --> 00:34:00,480

warming if we have enough World

895

00:34:05,029 --> 00:34:03,000

community and World coordination

896

00:34:06,529 --> 00:34:05,039

and we will succeed more of that and we

897

00:34:09,169 --> 00:34:06,539

will have more of that coordination and

898

00:34:11,930 --> 00:34:09,179

all of that would be at risk as soon as

899

00:34:14,450 --> 00:34:11,940

colonists leave here for other stars

900

00:34:16,250 --> 00:34:14,460

we would no longer be able to have a

901
00:34:18,889 --> 00:34:16,260
civilization-wide governance that

902
00:34:21,409 --> 00:34:18,899
imposes its will on all of us

903
00:34:23,629 --> 00:34:21,419
uh we would then have competitors who

904
00:34:26,030 --> 00:34:23,639
leave out to distant stars in a few

905
00:34:28,310 --> 00:34:26,040
thousand years later come back with new

906
00:34:30,230 --> 00:34:28,320
technologies new ways of thinking and

907
00:34:31,970 --> 00:34:30,240
contest with us for our control over

908
00:34:34,790 --> 00:34:31,980
here

909
00:34:38,030 --> 00:34:34,800
so it's almost like a fragile ecosystem

910
00:34:40,490 --> 00:34:38,040
or fragile hierarchy they are the bear

911
00:34:42,050 --> 00:34:40,500
as you say they don't want to see us

912
00:34:44,210 --> 00:34:42,060
have that change that we could then

913
00:34:45,349 --> 00:34:44,220

change them or impose ourselves on our

914

00:34:47,690 --> 00:34:45,359

civilization

915

00:34:50,030 --> 00:34:47,700

but again hopefully I'm thinking about

916

00:34:51,950 --> 00:34:50,040

this the right way if one of those

917

00:34:54,649 --> 00:34:51,960

civilizations again wanted us to stay

918

00:34:57,050 --> 00:34:54,659

quiet how would we as a younger

919

00:35:00,250 --> 00:34:57,060

civilization and far more naive and less

920

00:35:02,089 --> 00:35:00,260

Advanced know to trust that

921

00:35:04,010 --> 00:35:02,099

persuasiveness because like you say

922

00:35:05,990 --> 00:35:04,020

they're reluctant to Destroyers

923

00:35:07,849 --> 00:35:06,000

but how make that look that you have to

924

00:35:10,310 --> 00:35:07,859

then trust

925

00:35:12,470 --> 00:35:10,320

what's so the key question is they're

926
00:35:14,810 --> 00:35:12,480
here to persuade us how do they plan to

927
00:35:17,270 --> 00:35:14,820
persuade us what is their persuasion

928
00:35:20,450 --> 00:35:17,280
strategy and this is where I think I'll

929
00:35:23,390 --> 00:35:20,460
add the third element of my hypothesis

930
00:35:25,910 --> 00:35:23,400
to explain UFOs is alien so remember the

931
00:35:27,410 --> 00:35:25,920
first part there is panzerbian Siblings

932
00:35:28,849 --> 00:35:27,420
out there one of which had reached our

933
00:35:31,069 --> 00:35:28,859
level before us

934
00:35:32,870 --> 00:35:31,079
the second part is they chose a

935
00:35:34,970 --> 00:35:32,880
non-growth strategy

936
00:35:36,470 --> 00:35:34,980
had a rule internally against that which

937
00:35:38,210 --> 00:35:36,480
explains why they're here

938
00:35:40,069 --> 00:35:38,220

and of course they also reluctant

939

00:35:42,050 --> 00:35:40,079

destroy us because they haven't

940

00:35:44,030 --> 00:35:42,060

and now we have to ask okay but what's

941

00:35:46,250 --> 00:35:44,040

their plan how will they convince us

942

00:35:50,329 --> 00:35:46,260

then to not expand

943

00:35:53,030 --> 00:35:50,339

and here I'm going to go on a very

944

00:35:56,210 --> 00:35:53,040

common observation among social species

945

00:35:59,569 --> 00:35:56,220

is that pretty much all social species

946

00:36:01,490 --> 00:35:59,579

have a status hierarchy a pecking order

947

00:36:03,589 --> 00:36:01,500

there's the high and the low

948

00:36:05,089 --> 00:36:03,599

and a very common feature is the low

949

00:36:07,490 --> 00:36:05,099

defer to the high

950

00:36:10,550 --> 00:36:07,500

the low copy the high the higher in

951
00:36:12,829 --> 00:36:10,560
charge the low go along

952
00:36:14,510 --> 00:36:12,839
this is very robust across animal

953
00:36:16,790 --> 00:36:14,520
species here on Earth and we might

954
00:36:20,270 --> 00:36:16,800
postulate that it's also robust among

955
00:36:23,210 --> 00:36:20,280
animal species where they came from

956
00:36:26,390 --> 00:36:23,220
so their strategy is simply to be our

957
00:36:27,950 --> 00:36:26,400
high so the way humans have domesticated

958
00:36:29,930 --> 00:36:27,960
most other animals that we have

959
00:36:31,790 --> 00:36:29,940
domesticated is that they have a status

960
00:36:33,650 --> 00:36:31,800
hierarchy and we have just slipped in as

961
00:36:35,510 --> 00:36:33,660
the top of their hierarchy

962
00:36:39,230 --> 00:36:35,520
the way we domesticate dogs is we

963
00:36:41,150 --> 00:36:39,240

convince the dogs we are the top dog

964

00:36:44,750 --> 00:36:41,160

and that's why they should do what we

965

00:36:48,410 --> 00:36:44,760

say it's a very common standard strategy

966

00:36:49,670 --> 00:36:48,420

to domesticate a species you become

967

00:36:52,010 --> 00:36:49,680

their top dog

968

00:36:54,290 --> 00:36:52,020

so that's the alien strategy they are

969

00:36:56,750 --> 00:36:54,300

going to domesticate Us by being our

970

00:37:00,109 --> 00:36:56,760

highest status members

971

00:37:01,430 --> 00:37:00,119

so the simple strategy is to be here not

972

00:37:02,630 --> 00:37:01,440

out there if they did very impressive

973

00:37:04,370 --> 00:37:02,640

things way out there in the universe

974

00:37:05,930 --> 00:37:04,380

they would be them and not us so they

975

00:37:06,770 --> 00:37:05,940

have to be part of us they have to be

976
00:37:08,450 --> 00:37:06,780
here

977
00:37:10,130 --> 00:37:08,460
and then they just have to be more

978
00:37:11,390 --> 00:37:10,140
impressive than the rest of us so you

979
00:37:13,790 --> 00:37:11,400
know all through history even in human

980
00:37:15,410 --> 00:37:13,800
civilization the emperor wants you to

981
00:37:16,849 --> 00:37:15,420
convince them to bow down and obey the

982
00:37:18,589 --> 00:37:16,859
emperor then the emperor just has to be

983
00:37:20,990 --> 00:37:18,599
more impressive than you in a great many

984
00:37:24,829 --> 00:37:21,000
ways a bigger Palace a bigger Chariot

985
00:37:28,370 --> 00:37:24,839
bigger Crown bigger Entourage you know

986
00:37:31,190 --> 00:37:28,380
handsome strong knowledgeable witty they

987
00:37:33,410 --> 00:37:31,200
just have to be the top right

988
00:37:36,230 --> 00:37:33,420

so the alien strategy is to come here

989

00:37:38,690 --> 00:37:36,240

and be our top say to be the most

990

00:37:41,630 --> 00:37:38,700

impressive thing around that we can see

991

00:37:43,910 --> 00:37:41,640

now they have one key problem with this

992

00:37:46,490 --> 00:37:43,920

so if you think about how humans have

993

00:37:48,710 --> 00:37:46,500

reacted to other alien sorry other

994

00:37:52,250 --> 00:37:48,720

foreign civilizations

995

00:37:53,569 --> 00:37:52,260

on Earth are still pretty similar to us

996

00:37:54,710 --> 00:37:53,579

I mean they're the same species they're

997

00:37:56,690 --> 00:37:54,720

only a little bit different but

998

00:37:58,490 --> 00:37:56,700

nevertheless we have often found ways to

999

00:38:00,230 --> 00:37:58,500

be horrified by these small differences

1000

00:38:01,849 --> 00:38:00,240

that exist

1001

00:38:04,190 --> 00:38:01,859

and that's a problem

1002

00:38:06,050 --> 00:38:04,200

so a foreigner who comes and tries to be

1003

00:38:07,609 --> 00:38:06,060

the top of your civilization that's a

1004

00:38:09,950 --> 00:38:07,619

problem if we see them as the Foreigner

1005

00:38:11,569 --> 00:38:09,960

instead of as one of us

1006

00:38:12,170 --> 00:38:11,579

and so

1007

00:38:14,210 --> 00:38:12,180

um

1008

00:38:17,390 --> 00:38:14,220

the aliens have a simple fix for that

1009

00:38:18,950 --> 00:38:17,400

which is not to show much about them

1010

00:38:21,109 --> 00:38:18,960

if they were to land on the White House

1011

00:38:22,550 --> 00:38:21,119

lawn and start to talk a lot about their

1012

00:38:24,109 --> 00:38:22,560

civilization where they came from and

1013

00:38:25,310 --> 00:38:24,119

how they do things and their various

1014

00:38:27,950 --> 00:38:25,320

customs and

1015

00:38:29,990 --> 00:38:27,960

principles we would almost surely find

1016

00:38:32,990 --> 00:38:30,000

something we hated maybe they eat babies

1017

00:38:35,030 --> 00:38:33,000

who knows to them it's not a problem to

1018

00:38:36,589 --> 00:38:35,040

us it's terrible right they can't

1019

00:38:38,210 --> 00:38:36,599

predict which things will hate but they

1020

00:38:40,190 --> 00:38:38,220

can be pretty sure that if they tell us

1021

00:38:42,170 --> 00:38:40,200

a lot of things we're going to hate a

1022

00:38:43,790 --> 00:38:42,180

couple of them and that then the whole

1023

00:38:45,829 --> 00:38:43,800

plan is off right then we're not going

1024

00:38:48,770 --> 00:38:45,839

to see them as the top one of us and

1025

00:38:51,589 --> 00:38:48,780

we're going to reject them so they have

1026
00:38:54,710 --> 00:38:51,599
to be here be really impressive but not

1027
00:38:57,890 --> 00:38:54,720
reveal very much about themselves

1028
00:38:59,930 --> 00:38:57,900
so this is the explanation then for why

1029
00:39:01,849 --> 00:38:59,940
they hang out at the edge of our vision

1030
00:39:03,349 --> 00:39:01,859
because there's this key puzzle that

1031
00:39:05,450 --> 00:39:03,359
many people have noted about this idea

1032
00:39:07,130 --> 00:39:05,460
that UFOs might be aliens look if

1033
00:39:08,630 --> 00:39:07,140
they're 100 million years more advanced

1034
00:39:10,730 --> 00:39:08,640
than us than they could have either a

1035
00:39:11,990 --> 00:39:10,740
made themselves really obvious and

1036
00:39:13,490 --> 00:39:12,000
visible you know

1037
00:39:16,190 --> 00:39:13,500
White House lawn

1038
00:39:17,750 --> 00:39:16,200

and putting out a hand talking you know

1039

00:39:18,890 --> 00:39:17,760

being really impressive just being

1040

00:39:21,410 --> 00:39:18,900

really obvious that would have been

1041

00:39:24,109 --> 00:39:21,420

really possible or they could have been

1042

00:39:25,849 --> 00:39:24,119

completely invisible there's no reason

1043

00:39:27,589 --> 00:39:25,859

why if they wanted to track an observist

1044

00:39:29,270 --> 00:39:27,599

they would need to be at all visible in

1045

00:39:31,490 --> 00:39:29,280

the sky they could have some completely

1046

00:39:33,829 --> 00:39:31,500

black satellites orbiting hundreds of

1047

00:39:36,170 --> 00:39:33,839

miles above that we would never see

1048

00:39:37,550 --> 00:39:36,180

with powerful telescopes they could

1049

00:39:38,510 --> 00:39:37,560

observe pretty much anything they wanted

1050

00:39:40,069 --> 00:39:38,520

down here

1051

00:39:41,930 --> 00:39:40,079

there's no reason for them to be

1052

00:39:45,050 --> 00:39:41,940

flashing around in the sky in ways that

1053

00:39:47,750 --> 00:39:45,060

we would see so one last puzzle about

1054

00:39:50,210 --> 00:39:47,760

UFOs as aliens is why are they hanging

1055

00:39:52,190 --> 00:39:50,220

out at the edge of our vision

1056

00:39:53,810 --> 00:39:52,200

somewhat visible but not very visible

1057

00:39:55,970 --> 00:39:53,820

showing a few things about themselves

1058

00:39:58,010 --> 00:39:55,980

but not much

1059

00:39:59,810 --> 00:39:58,020

and the hypothesis here is that's

1060

00:40:02,329 --> 00:39:59,820

because this is their safest strategy

1061

00:40:03,950 --> 00:40:02,339

for being our top dog

1062

00:40:06,410 --> 00:40:03,960

eventually we'll be convinced they're

1063

00:40:07,970 --> 00:40:06,420

there we'll be really impressed and we

1064

00:40:09,770 --> 00:40:07,980

can figure out their agenda just from

1065

00:40:11,690 --> 00:40:09,780

that they don't need to tell us anything

1066

00:40:13,370 --> 00:40:11,700

you and I have just discussed we can

1067

00:40:15,290 --> 00:40:13,380

figure out why they're here we can

1068

00:40:17,089 --> 00:40:15,300

figure out what they want

1069

00:40:19,130 --> 00:40:17,099

let me ask that that's really really

1070

00:40:20,990 --> 00:40:19,140

interesting and I often use analogies

1071

00:40:23,510 --> 00:40:21,000

about fish when I talk about you know

1072

00:40:25,849 --> 00:40:23,520

aliens UFOs sightings and how that might

1073

00:40:27,710 --> 00:40:25,859

work with two different species

1074

00:40:29,630 --> 00:40:27,720

the the assumption is that we're

1075

00:40:32,630 --> 00:40:29,640

technologically advanced enough to this

1076

00:40:34,010 --> 00:40:32,640

higher civilization that they they feel

1077

00:40:35,510 --> 00:40:34,020

comfortable that they can have a level

1078

00:40:37,910 --> 00:40:35,520

of communication

1079

00:40:40,309 --> 00:40:37,920

but for example we wouldn't compare

1080

00:40:42,950 --> 00:40:40,319

ourselves to a fish in the ocean and a

1081

00:40:44,630 --> 00:40:42,960

fish would see the bottom of a boat at

1082

00:40:45,890 --> 00:40:44,640

being on the edge of their their site

1083

00:40:47,450 --> 00:40:45,900

and they see the kind of shimmering

1084

00:40:49,730 --> 00:40:47,460

light around the boat and the bottom of

1085

00:40:51,410 --> 00:40:49,740

the boat having no comprehension of

1086

00:40:52,730 --> 00:40:51,420

what's on the boat the species on the

1087

00:40:53,690 --> 00:40:52,740

boat or what they're doing or why

1088

00:40:56,210 --> 00:40:53,700

they're there

1089

00:40:57,950 --> 00:40:56,220

is it possible that these UFOs that we

1090

00:40:59,690 --> 00:40:57,960

do see in the sky and let's for a moment

1091

00:41:01,490 --> 00:40:59,700

assume we are seeing let's go with the

1092

00:41:03,290 --> 00:41:01,500

classic Flying Saucer Shiny Bright

1093

00:41:06,130 --> 00:41:03,300

Lights all that kind of stuff

1094

00:41:08,450 --> 00:41:06,140

is it possible that we're so

1095

00:41:10,190 --> 00:41:08,460

inefficiently Advanced to these other

1096

00:41:12,650 --> 00:41:10,200

civilizations that are visiting here

1097

00:41:15,290 --> 00:41:12,660

potentially that they see us in the same

1098

00:41:16,910 --> 00:41:15,300

way we would see a fish so to them that

1099

00:41:18,650 --> 00:41:16,920

we are not announcing ourselves to the

1100

00:41:20,990 --> 00:41:18,660

fish we just happen to be at the top of

1101

00:41:23,089 --> 00:41:21,000

you know the ocean and these other

1102

00:41:26,870 --> 00:41:23,099

saucers and other craft are here because

1103

00:41:28,730 --> 00:41:26,880

they just see a planet and we're so so

1104

00:41:30,589 --> 00:41:28,740

far down the pecking order so to speak

1105

00:41:32,329 --> 00:41:30,599

that we're not even at the point of you

1106

00:41:34,250 --> 00:41:32,339

know being the dog to be stroked and

1107

00:41:38,210 --> 00:41:34,260

domesticated and we're just something

1108

00:41:44,450 --> 00:41:40,910

so the more you know

1109

00:41:46,670 --> 00:41:44,460

the more ways you can be puzzled

1110

00:41:48,290 --> 00:41:46,680

a young child looks at strange things

1111

00:41:50,089 --> 00:41:48,300

and doesn't know they're strange and

1112

00:41:52,730 --> 00:41:50,099

isn't puzzled

1113

00:41:55,370 --> 00:41:52,740

it's when you have stronger expectations

1114

00:41:57,349 --> 00:41:55,380

that then Things become puzzling and

1115

00:41:59,750 --> 00:41:57,359

even unlikely seeming

1116

00:42:01,550 --> 00:41:59,760

so when you're constructing a scenario

1117

00:42:03,950 --> 00:42:01,560

you have to look at the whole scenario

1118

00:42:06,470 --> 00:42:03,960

in order to see how plausible it is so

1119

00:42:08,150 --> 00:42:06,480

if you just say assume they are really

1120

00:42:11,450 --> 00:42:08,160

Advanced so Advanced they don't care

1121

00:42:13,130 --> 00:42:11,460

much about us and then you ask would

1122

00:42:14,809 --> 00:42:13,140

they be you know communicating with us

1123

00:42:17,030 --> 00:42:14,819

or explaining themselves to us you might

1124

00:42:19,550 --> 00:42:17,040

say no given that assumption that

1125

00:42:21,890 --> 00:42:19,560

particular implication isn't problematic

1126

00:42:24,050 --> 00:42:21,900

however that assumption is problematic

1127

00:42:25,370 --> 00:42:24,060

with respect to other things we see so

1128

00:42:27,530 --> 00:42:25,380

the key point is

1129

00:42:29,030 --> 00:42:27,540

if there are aliens so common in the

1130

00:42:30,710 --> 00:42:29,040

universe that they just happen to be

1131

00:42:32,990 --> 00:42:30,720

here at the moment then what they would

1132

00:42:34,849 --> 00:42:33,000

pretty much happen to be everywhere

1133

00:42:36,710 --> 00:42:34,859

and if they were that common that they

1134

00:42:38,210 --> 00:42:36,720

happen to be everywhere then why does it

1135

00:42:42,349 --> 00:42:38,220

all look so empty

1136

00:42:45,890 --> 00:42:42,359

why is the universe so unused so dead

1137

00:42:49,010 --> 00:42:45,900

uh aliens that were that common and had

1138

00:42:51,589 --> 00:42:49,020

any substantial aspirations to do stuff

1139

00:42:52,849 --> 00:42:51,599

well they would have been doing stuff a

1140

00:42:54,109 --> 00:42:52,859

long time ago and they would have done a

1141

00:42:56,930 --> 00:42:54,119

lot and then when we looked up we would

1142

00:42:58,910 --> 00:42:56,940

see a lot right so

1143

00:43:00,890 --> 00:42:58,920

look if you show up in the middle of a

1144

00:43:03,710 --> 00:43:00,900

city

1145

00:43:05,150 --> 00:43:03,720

and stand on a corner you shouldn't be

1146

00:43:07,970 --> 00:43:05,160

surprised if everybody just walks past

1147

00:43:10,069 --> 00:43:07,980

you and nobody says hi

1148

00:43:11,390 --> 00:43:10,079

but you should notice that you're in a

1149

00:43:12,589 --> 00:43:11,400

city you would it would look different

1150

00:43:14,510 --> 00:43:12,599

than if you were in the middle of the

1151

00:43:16,910 --> 00:43:14,520

ocean or in the forest or in a desert

1152

00:43:18,829 --> 00:43:16,920

the city would look different that would

1153

00:43:21,050 --> 00:43:18,839

be your clue that there was something

1154

00:43:22,910 --> 00:43:21,060

going on not their interest in you not

1155

00:43:25,250 --> 00:43:22,920

how they communicated with you with just

1156

00:43:28,190 --> 00:43:25,260

the stuff you saw around you

1157

00:43:30,230 --> 00:43:28,200

so our first thing we need to explain is

1158

00:43:31,910 --> 00:43:30,240

why does the universe look so empty and

1159

00:43:33,349 --> 00:43:31,920

dead

1160

00:43:35,089 --> 00:43:33,359

and of course the simplest explanation

1161

00:43:37,490 --> 00:43:35,099

of that is because it is empty and dead

1162

00:43:39,410 --> 00:43:37,500

there isn't anybody else out there right

1163

00:43:40,910 --> 00:43:39,420

and now we say oh but there's some

1164

00:43:42,530 --> 00:43:40,920

aliens visiting and now we've got a

1165

00:43:45,050 --> 00:43:42,540

problem

1166

00:43:46,309 --> 00:43:45,060

because now we're postulating both that

1167

00:43:48,170 --> 00:43:46,319

there are Advanced creatures who are

1168

00:43:50,530 --> 00:43:48,180

capable of enormous things and perhaps

1169

00:43:52,910 --> 00:43:50,540

have enormous damn missions and yet

1170

00:43:55,069 --> 00:43:52,920

everything's dead and empty that's the

1171

00:43:56,510 --> 00:43:55,079

puzzle

1172

00:43:58,370 --> 00:43:56,520

and I suppose that's where the

1173

00:44:00,770 --> 00:43:58,380

conversation many would take down the

1174

00:44:02,210 --> 00:44:00,780

root of alternate Dimensions different

1175

00:44:04,970 --> 00:44:02,220

realities

1176

00:44:06,829 --> 00:44:04,980

that doesn't help like find there's

1177

00:44:08,809 --> 00:44:06,839

other places they could go but here's a

1178

00:44:10,550 --> 00:44:08,819

place why aren't they here doing stuff

1179

00:44:13,190 --> 00:44:10,560

with this stuff

1180

00:44:15,130 --> 00:44:13,200

is that not though again it's not part

1181

00:44:18,230 --> 00:44:15,140

of your model obviously but I'm curious

1182

00:44:20,089 --> 00:44:18,240

why why is that problematic because to

1183

00:44:21,890 --> 00:44:20,099

many and many people who listen to this

1184

00:44:23,990 --> 00:44:21,900

podcast I've got different opinions on

1185

00:44:26,329 --> 00:44:24,000

where these things may be from and to

1186

00:44:28,970 --> 00:44:26,339

many it's now too too simple to expect

1187

00:44:31,309 --> 00:44:28,980

aliens coming from Mars for example and

1188

00:44:33,950 --> 00:44:31,319

people talk about higher beings levels

1189

00:44:36,109 --> 00:44:33,960

of consciousness why is that problematic

1190

00:44:38,270 --> 00:44:36,119

to things

1191

00:44:40,490 --> 00:44:38,280

maybe I'm not understanding you but if

1192

00:44:42,109 --> 00:44:40,500

you look at life on Earth and you go to

1193

00:44:45,470 --> 00:44:42,119

a desert and you say

1194

00:44:47,089 --> 00:44:45,480

why why is this desert empty of life

1195

00:44:49,010 --> 00:44:47,099

well first of all you look closely it

1196

00:44:50,930 --> 00:44:49,020

isn't empty but to a first cut it looks

1197

00:44:52,550 --> 00:44:50,940

kind of empty right now you might say

1198

00:44:54,950 --> 00:44:52,560

well because the life that could have

1199

00:44:56,450 --> 00:44:54,960

come to the desert it's now in the

1200

00:44:58,849 --> 00:44:56,460

Amazon

1201
00:45:00,710 --> 00:44:58,859
well that's not an answer because the

1202
00:45:01,609 --> 00:45:00,720
point is life spreads everywhere it can

1203
00:45:03,410 --> 00:45:01,619
go

1204
00:45:05,089 --> 00:45:03,420
wherever life started it went to the

1205
00:45:06,470 --> 00:45:05,099
Amazon and it went to the ocean and it

1206
00:45:08,569 --> 00:45:06,480
went to the polls and it went to the

1207
00:45:10,609 --> 00:45:08,579
mountains right you look at any one

1208
00:45:12,050 --> 00:45:10,619
place and you don't say why why is there

1209
00:45:14,030 --> 00:45:12,060
no life here an explanation is because

1210
00:45:15,710 --> 00:45:14,040
it wanted to go elsewhere because life

1211
00:45:17,390 --> 00:45:15,720
just goes everywhere am it doesn't

1212
00:45:18,230 --> 00:45:17,400
choose one place to go it goes

1213
00:45:19,910 --> 00:45:18,240

everywhere

1214

00:45:21,710 --> 00:45:19,920

so if you look at a place on Earth you

1215

00:45:23,210 --> 00:45:21,720

have to say because life can't go here

1216

00:45:24,710 --> 00:45:23,220

that has to be the reason why you don't

1217

00:45:26,569 --> 00:45:24,720

see life here is because

1218

00:45:29,030 --> 00:45:26,579

it just couldn't get here it can't

1219

00:45:31,910 --> 00:45:29,040

Thrive here it's you know too hot too

1220

00:45:34,250 --> 00:45:31,920

too dry too cold whatever it is it can't

1221

00:45:36,349 --> 00:45:34,260

work here that's your explanation

1222

00:45:38,569 --> 00:45:36,359

uh for life on Earth so that would

1223

00:45:40,849 --> 00:45:38,579

similarly have to be the explanation for

1224

00:45:42,710 --> 00:45:40,859

a dead empty Universe you can't say well

1225

00:45:44,930 --> 00:45:42,720

life isn't here because it decided to go

1226
00:45:47,150 --> 00:45:44,940
somewhere else life would decide to go

1227
00:45:48,650 --> 00:45:47,160
everywhere it could if this is a place

1228
00:45:52,690 --> 00:45:48,660
it could go and it's not here you have

1229
00:45:58,130 --> 00:45:56,210
let me ask on these different sightings

1230
00:45:59,990 --> 00:45:58,140
that people have and I know you've said

1231
00:46:01,550 --> 00:46:00,000
before that you don't look at specific

1232
00:46:03,349 --> 00:46:01,560
reports and you would have to look at

1233
00:46:05,450 --> 00:46:03,359
atmospheric phenomena and various other

1234
00:46:08,210 --> 00:46:05,460
aspects of different sightings but

1235
00:46:10,250 --> 00:46:08,220
people do report seeing various

1236
00:46:13,010 --> 00:46:10,260
different shapes of objects

1237
00:46:14,690 --> 00:46:13,020
some of them being bright and shiny you

1238
00:46:16,190 --> 00:46:14,700

know classic flying saucers you hear

1239

00:46:19,069 --> 00:46:16,200

about triangles

1240

00:46:21,109 --> 00:46:19,079

Battleship size craft the the more

1241

00:46:22,790 --> 00:46:21,119

common or newer object discussed

1242

00:46:25,130 --> 00:46:22,800

especially with the Navy Pilots have

1243

00:46:28,010 --> 00:46:25,140

been tic-tac-shaped objects or maybe

1244

00:46:30,050 --> 00:46:28,020

classic cigar shapes would that suggest

1245

00:46:31,490 --> 00:46:30,060

to you that I know these objects you've

1246

00:46:35,030 --> 00:46:31,500

described as puzzling

1247

00:46:36,950 --> 00:46:35,040

that they are all of different origin or

1248

00:46:38,329 --> 00:46:36,960

do you think that these objects not

1249

00:46:40,970 --> 00:46:38,339

necessarily assuming they're coming from

1250

00:46:42,530 --> 00:46:40,980

far away or that far away that they are

1251

00:46:45,349 --> 00:46:42,540

all of the same origin but for different

1252

00:46:50,210 --> 00:46:48,109

again the key thing is to generate a

1253

00:46:52,849 --> 00:46:50,220

whole scenario and then ask how

1254

00:46:54,829 --> 00:46:52,859

believable is that entire scenario

1255

00:46:56,270 --> 00:46:54,839

so given that there would be multiple

1256

00:46:58,790 --> 00:46:56,280

origins of course it wouldn't be

1257

00:47:00,170 --> 00:46:58,800

puzzling that they look different but it

1258

00:47:01,370 --> 00:47:00,180

is puzzling that there would be multiple

1259

00:47:04,010 --> 00:47:01,380

Origins

1260

00:47:07,069 --> 00:47:04,020

because remember if the universe is dead

1261

00:47:08,510 --> 00:47:07,079

and empty that's at odds with it all

1262

00:47:11,089 --> 00:47:08,520

being full of life

1263

00:47:12,890 --> 00:47:11,099

so one way to solve that is the pens for

1264

00:47:15,410 --> 00:47:12,900

Mia siblings where there's only a small

1265

00:47:18,650 --> 00:47:15,420

number of other aliens out there

1266

00:47:20,870 --> 00:47:18,660

maybe only one and then they're here

1267

00:47:23,150 --> 00:47:20,880

the more other ones there are the more

1268

00:47:24,950 --> 00:47:23,160

puzzling this gets right yeah what if

1269

00:47:27,530 --> 00:47:24,960

you postulate there's a hundred pins

1270

00:47:30,530 --> 00:47:27,540

from your siblings right

1271

00:47:32,750 --> 00:47:30,540

well now you have to have imagine this

1272

00:47:34,130 --> 00:47:32,760

first civilization going out and taming

1273

00:47:35,510 --> 00:47:34,140

all of them and making sure they all

1274

00:47:37,490 --> 00:47:35,520

follow the rule

1275

00:47:39,230 --> 00:47:37,500

but somehow this rule that they're all

1276

00:47:40,910 --> 00:47:39,240

following is allowing them all to visit

1277

00:47:43,190 --> 00:47:40,920

here

1278

00:47:44,630 --> 00:47:43,200

you know how are they going to enforce

1279

00:47:45,950 --> 00:47:44,640

this rule if they're allowing that many

1280

00:47:48,410 --> 00:47:45,960

different visitors to go that many

1281

00:47:49,609 --> 00:47:48,420

different places you see the problem

1282

00:47:52,010 --> 00:47:49,619

that is

1283

00:47:54,530 --> 00:47:52,020

each new place that shows up they need

1284

00:47:56,150 --> 00:47:54,540

to send somebody there to make sure they

1285

00:47:58,190 --> 00:47:56,160

follow the rules but they don't need a

1286

00:48:00,650 --> 00:47:58,200

whole bunch of different people all you

1287

00:48:03,049 --> 00:48:00,660

know doing different things going there

1288

00:48:04,790 --> 00:48:03,059

that seems a recipe for breaking the

1289

00:48:06,470 --> 00:48:04,800

rules if you allow that many different

1290

00:48:08,089 --> 00:48:06,480

exceptions you're not going to keep this

1291

00:48:09,530 --> 00:48:08,099

thing going for 100 million years

1292

00:48:12,890 --> 00:48:09,540

remember that's what we're postulating

1293

00:48:14,990 --> 00:48:12,900

they chose to not expand and to not

1294

00:48:17,630 --> 00:48:15,000

allow any part of them to do that they

1295

00:48:19,430 --> 00:48:17,640

lasted for 100 million years and they

1296

00:48:20,930 --> 00:48:19,440

succeeded in preventing any part of them

1297

00:48:22,490 --> 00:48:20,940

from doing that

1298

00:48:24,109 --> 00:48:22,500

if there are now other alien

1299

00:48:26,329 --> 00:48:24,119

civilizations out there that appeared

1300

00:48:28,490 --> 00:48:26,339

between the first and us

1301
00:48:30,290 --> 00:48:28,500
they would have to make sure all of them

1302
00:48:33,170 --> 00:48:30,300
followed the rule

1303
00:48:35,450 --> 00:48:33,180
but that has to mean not very many

1304
00:48:37,190 --> 00:48:35,460
things going around doing stuff

1305
00:48:38,630 --> 00:48:37,200
which means that the minimal strategy

1306
00:48:41,210 --> 00:48:38,640
for dealing with us would just be to

1307
00:48:43,190 --> 00:48:41,220
have one group come to us

1308
00:48:45,170 --> 00:48:43,200
so it makes much more sense than that

1309
00:48:47,870 --> 00:48:45,180
this one group is just expressing itself

1310
00:48:49,069 --> 00:48:47,880
with different shapes than that these

1311
00:48:50,930 --> 00:48:49,079
shapes are coming from different places

1312
00:48:52,309 --> 00:48:50,940
because it's just hard to believe that

1313
00:48:54,290 --> 00:48:52,319

you would allow this many different

1314

00:48:57,170 --> 00:48:54,300

places to come here in order to explain

1315

00:48:59,210 --> 00:48:57,180

this idea that there's just you know one

1316

00:49:01,490 --> 00:48:59,220

group that wants to stop us

1317

00:49:03,410 --> 00:49:01,500

and as you see it's still the idea that

1318

00:49:04,849 --> 00:49:03,420

if there were multiple groups there's

1319

00:49:06,349 --> 00:49:04,859

still going to be a hierarchy because

1320

00:49:08,329 --> 00:49:06,359

there would have been that first group

1321

00:49:10,309 --> 00:49:08,339

that's always going to be further ahead

1322

00:49:12,589 --> 00:49:10,319

and more advanced

1323

00:49:14,210 --> 00:49:12,599

it somehow would have made sure the

1324

00:49:16,309 --> 00:49:14,220

other ones followed the rule and then

1325

00:49:19,130 --> 00:49:16,319

created some integrated policing

1326

00:49:21,349 --> 00:49:19,140

structure that that guaranteed that

1327

00:49:22,849 --> 00:49:21,359

okay that would be pretty hard but

1328

00:49:24,589 --> 00:49:22,859

that's what we have to postulate to look

1329

00:49:26,210 --> 00:49:24,599

up in the universe and say it's all

1330

00:49:29,030 --> 00:49:26,220

empty nobody's doing anything that we

1331

00:49:31,730 --> 00:49:29,040

can see how does that make any sense

1332

00:49:33,290 --> 00:49:31,740

so so again the key idea is any one

1333

00:49:34,910 --> 00:49:33,300

piece can make sense but when you put

1334

00:49:36,109 --> 00:49:34,920

all the pieces together then they can

1335

00:49:37,609 --> 00:49:36,119

have conflicts with each other when

1336

00:49:39,470 --> 00:49:37,619

you're trying to create a scenario that

1337

00:49:41,210 --> 00:49:39,480

makes sense

1338

00:49:42,170 --> 00:49:41,220

let me ask you to Robin in the time of

1339

00:49:44,210 --> 00:49:42,180

what left because you've been really

1340

00:49:46,549 --> 00:49:44,220

generous so far and I really do hope to

1341

00:49:49,069 --> 00:49:46,559

yourself and the listeners I've managed

1342

00:49:51,290 --> 00:49:49,079

to make some sense of the conversation

1343

00:49:53,510 --> 00:49:51,300

um it's it's a fascinating discussion

1344

00:49:55,549 --> 00:49:53,520

and hopefully I've kept at my end to

1345

00:49:57,230 --> 00:49:55,559

some degree with you Robin

1346

00:49:59,750 --> 00:49:57,240

um I want to ask about the the James

1347

00:50:01,849 --> 00:49:59,760

Webb images we saw the other day I think

1348

00:50:04,849 --> 00:50:01,859

it's very timely given what you talk

1349

00:50:06,290 --> 00:50:04,859

about and what the paper proposes that

1350

00:50:09,230 --> 00:50:06,300

we've just seen some incredible images

1351
00:50:11,210 --> 00:50:09,240
dating back 13 billion years into the

1352
00:50:13,370 --> 00:50:11,220
universe what were your first thoughts

1353
00:50:15,950 --> 00:50:13,380
when you when you saw those images

1354
00:50:19,130 --> 00:50:15,960
well pretty

1355
00:50:21,530 --> 00:50:19,140
uh with respect to aliens uh you know in

1356
00:50:24,589 --> 00:50:21,540
our analysis of gravity aliens what we

1357
00:50:26,349 --> 00:50:24,599
say is that how many alien civilizations

1358
00:50:28,670 --> 00:50:26,359
you might expect to see out there

1359
00:50:30,290 --> 00:50:28,680
depends on this key parameter of how

1360
00:50:32,870 --> 00:50:30,300
fast they expand

1361
00:50:35,569 --> 00:50:32,880
if they would expand slowly that we

1362
00:50:37,069 --> 00:50:35,579
should see hundreds of vast alien

1363
00:50:38,270 --> 00:50:37,079

spheres of control out there in the

1364

00:50:40,490 --> 00:50:38,280

universe

1365

00:50:42,829 --> 00:50:40,500

if they expand fast enough then we

1366

00:50:46,010 --> 00:50:42,839

should expect to see Zero of them

1367

00:50:47,990 --> 00:50:46,020

but even if we only saw one or two the

1368

00:50:50,390 --> 00:50:48,000

model predicts they would be enormous in

1369

00:50:52,309 --> 00:50:50,400

the sky much larger than the full moon

1370

00:50:54,650 --> 00:50:52,319

so that means you don't really need to

1371

00:50:56,390 --> 00:50:54,660

look a long way off at fine details to

1372

00:50:58,849 --> 00:50:56,400

distinguish these theories

1373

00:51:00,829 --> 00:50:58,859

if you want to say are the aliens out

1374

00:51:03,170 --> 00:51:00,839

there expanding fast or slow you just

1375

00:51:05,089 --> 00:51:03,180

say do I see any enormous fears in the

1376

00:51:06,049 --> 00:51:05,099

sky that look different than the regions

1377

00:51:09,109 --> 00:51:06,059

around them

1378

00:51:10,670 --> 00:51:09,119

and for that again even our naked eye is

1379

00:51:13,130 --> 00:51:10,680

good enough as long as we're looking in

1380

00:51:15,650 --> 00:51:13,140

the right sort of frequencies to tell

1381

00:51:17,390 --> 00:51:15,660

the difference so here you've got this

1382

00:51:19,430 --> 00:51:17,400

enormously sophisticated telescope that

1383

00:51:21,349 --> 00:51:19,440

can look even more finely all the way

1384

00:51:23,150 --> 00:51:21,359

across the universe and very tiny

1385

00:51:26,930 --> 00:51:23,160

angular scales

1386

00:51:29,450 --> 00:51:26,940

but we don't need that in order to

1387

00:51:31,609 --> 00:51:29,460

judge this basic fact are there enormous

1388

00:51:34,849 --> 00:51:31,619

fears in the sky or not

1389

00:51:36,230 --> 00:51:34,859

uh so for the basic purpose of you know

1390

00:51:37,730 --> 00:51:36,240

figuring out where we are in the

1391

00:51:40,490 --> 00:51:37,740

universe and what the aliens are like

1392

00:51:42,589 --> 00:51:40,500

the detail this telescope is showing us

1393

00:51:44,270 --> 00:51:42,599

isn't very relevant

1394

00:51:45,829 --> 00:51:44,280

it's pretty and hopefully we'll learn a

1395

00:51:48,589 --> 00:51:45,839

lot of other things about the nature of

1396

00:51:50,990 --> 00:51:48,599

galaxies and the natures of other things

1397

00:51:53,089 --> 00:51:51,000

one of the things they showed is uh you

1398

00:51:56,150 --> 00:51:53,099

know oxygen in the atmosphere of a

1399

00:51:58,549 --> 00:51:56,160

planet a few hundred light years away

1400

00:52:00,530 --> 00:51:58,559

and that's interesting from the point of

1401
00:52:02,690 --> 00:52:00,540
view of asking how many planets out

1402
00:52:04,849 --> 00:52:02,700
there might have life on them at very

1403
00:52:08,030 --> 00:52:04,859
early stages

1404
00:52:10,250 --> 00:52:08,040
but the key thing we know is that you

1405
00:52:12,410 --> 00:52:10,260
know there is almost no

1406
00:52:15,470 --> 00:52:12,420
vast civilizations out there

1407
00:52:17,329 --> 00:52:15,480
so the more planets we see what

1408
00:52:19,970 --> 00:52:17,339
plausibly have life in earlier stages

1409
00:52:21,829 --> 00:52:19,980
than the the more we have to expect

1410
00:52:23,630 --> 00:52:21,839
difficulties later on in the process

1411
00:52:27,770 --> 00:52:23,640
because the one thing we can be pretty

1412
00:52:31,190 --> 00:52:27,780
confident of is getting to our level or

1413
00:52:32,990 --> 00:52:31,200

even a bit further is extremely rare

1414

00:52:34,910 --> 00:52:33,000

so there has to be what I've called a

1415

00:52:36,890 --> 00:52:34,920

great filter some process that makes it

1416

00:52:38,569 --> 00:52:36,900

very difficult to go from simple dead

1417

00:52:40,609 --> 00:52:38,579

matter all the way up to where we are

1418

00:52:42,170 --> 00:52:40,619

and then all the way to be very visible

1419

00:52:45,589 --> 00:52:42,180

in the universe

1420

00:52:47,329 --> 00:52:45,599

so if we actually saw say

1421

00:52:49,430 --> 00:52:47,339

oxygen in the atmosphere of a planet

1422

00:52:51,710 --> 00:52:49,440

such that we believe that was because of

1423

00:52:54,290 --> 00:52:51,720

Life on that planet

1424

00:52:56,450 --> 00:52:54,300

well that suggests that the great filter

1425

00:52:58,130 --> 00:52:56,460

is not at the very first stage of having

1426

00:53:00,170 --> 00:52:58,140

life exist at all

1427

00:53:02,870 --> 00:53:00,180

it's at some later stage in the process

1428

00:53:05,150 --> 00:53:02,880

before you get to where we are

1429

00:53:06,349 --> 00:53:05,160

and you have to worry then it's after

1430

00:53:09,650 --> 00:53:06,359

Where We Are

1431

00:53:11,690 --> 00:53:09,660

that is what we look up as we see no

1432

00:53:13,730 --> 00:53:11,700

huge civilizations out there but we're

1433

00:53:15,829 --> 00:53:13,740

not quite there yet and there could be

1434

00:53:17,329 --> 00:53:15,839

more obstacles between where we are and

1435

00:53:20,809 --> 00:53:17,339

to get to that stage

1436

00:53:22,910 --> 00:53:20,819

and the in order to sort of save the

1437

00:53:24,470 --> 00:53:22,920

theory that it's easy going from here on

1438

00:53:26,089 --> 00:53:24,480

you have to believe that all the tough

1439

00:53:28,549 --> 00:53:26,099

going was in the past

1440

00:53:30,829 --> 00:53:28,559

but the more you see earlier stages

1441

00:53:32,390 --> 00:53:30,839

where it doesn't look so hard the more

1442

00:53:34,069 --> 00:53:32,400

you have to worry that the tough goings

1443

00:53:36,230 --> 00:53:34,079

in our future

1444

00:53:39,049 --> 00:53:36,240

and that's bad news

1445

00:53:40,430 --> 00:53:39,059

you mentioned that James Webb isn't

1446

00:53:42,349 --> 00:53:40,440

necessarily going to show us those

1447

00:53:44,030 --> 00:53:42,359

things that we could be looking for much

1448

00:53:46,250 --> 00:53:44,040

closer to home

1449

00:53:48,049 --> 00:53:46,260

the Galileo project is that something

1450

00:53:50,870 --> 00:53:48,059

you're aware of that's spearheaded by

1451

00:53:53,210 --> 00:53:50,880

Avi loib

1452

00:53:55,609 --> 00:53:53,220

I I know that there's some project to

1453

00:53:57,470 --> 00:53:55,619

just take pictures in our atmosphere of

1454

00:53:59,150 --> 00:53:57,480

unusual phenomena and then maybe catch

1455

00:54:01,190 --> 00:53:59,160

something interesting so that's what

1456

00:54:02,569 --> 00:54:01,200

we're talking about yes uh they're

1457

00:54:03,950 --> 00:54:02,579

looking to put up several different

1458

00:54:05,690 --> 00:54:03,960

telescopes and different equipment

1459

00:54:08,630 --> 00:54:05,700

around the planet various differently

1460

00:54:10,370 --> 00:54:08,640

seems like a relatively cheap way to

1461

00:54:13,730 --> 00:54:10,380

maybe find something interesting I'm

1462

00:54:15,349 --> 00:54:13,740

happy to support it but you know the key

1463

00:54:18,530 --> 00:54:15,359

under the scenario that I've talked

1464

00:54:20,690 --> 00:54:18,540

about you know they're going to adjust

1465

00:54:22,490 --> 00:54:20,700

to our Behavior to still stay at the

1466

00:54:25,549 --> 00:54:22,500

edge of our visibility

1467

00:54:26,930 --> 00:54:25,559

so the prediction would be we would get

1468

00:54:28,790 --> 00:54:26,940

more confident that there's something

1469

00:54:30,589 --> 00:54:28,800

really there going on but we wouldn't

1470

00:54:32,089 --> 00:54:30,599

actually learn that much more about them

1471

00:54:32,990 --> 00:54:32,099

we would just learned they really are

1472

00:54:35,390 --> 00:54:33,000

there

1473

00:54:37,730 --> 00:54:35,400

because under this hypothesis they're

1474

00:54:39,289 --> 00:54:37,740

trying to convince us they're there and

1475

00:54:41,390 --> 00:54:39,299

that they're impressive but not reveal

1476

00:54:43,190 --> 00:54:41,400

very much more

1477

00:54:44,630 --> 00:54:43,200

and then that's what we could hopefully

1478

00:54:46,549 --> 00:54:44,640

learn to be finally convinced they

1479

00:54:48,710 --> 00:54:46,559

really are there

1480

00:54:51,470 --> 00:54:48,720

and they really are accelerating an

1481

00:54:53,270 --> 00:54:51,480

enormous you know capabilities they

1482

00:54:55,490 --> 00:54:53,280

really have amazing

1483

00:54:57,770 --> 00:54:55,500

things we can't do they really deserve

1484

00:54:59,569 --> 00:54:57,780

to be seen as our top dog

1485

00:55:01,130 --> 00:54:59,579

it's dangling the carrot on the

1486

00:55:02,270 --> 00:55:01,140

treadmill or I don't suppose you want a

1487

00:55:03,470 --> 00:55:02,280

carrot on the treadmill probably the

1488

00:55:05,390 --> 00:55:03,480

chocolate bar if you're if you're

1489

00:55:07,970 --> 00:55:05,400

running towards a treat but like you say

1490

00:55:10,069 --> 00:55:07,980

it's always just one two one step too

1491

00:55:13,250 --> 00:55:10,079

far ahead of us and it's always going to

1492

00:55:15,530 --> 00:55:13,260

be there that they show us what we need

1493

00:55:17,690 --> 00:55:15,540

to see but not necessarily what we want

1494

00:55:18,890 --> 00:55:17,700

to see would that be right

1495

00:55:21,770 --> 00:55:18,900

well they don't want to show us many

1496

00:55:23,809 --> 00:55:21,780

details again anything we would hate

1497

00:55:26,150 --> 00:55:23,819

can't let us see the meeting babies or

1498

00:55:27,109 --> 00:55:26,160

whatever it is okay so they're not gonna

1499

00:55:29,450 --> 00:55:27,119

like

1500

00:55:31,130 --> 00:55:29,460

you send us the galactic Encyclopedia of

1501

00:55:33,650 --> 00:55:31,140

their history

1502

00:55:36,770 --> 00:55:33,660

right not going to hand us you know

1503

00:55:39,170 --> 00:55:36,780

technology for Fusion right unless they

1504

00:55:40,849 --> 00:55:39,180

can do that without saying much but

1505

00:55:42,710 --> 00:55:40,859

under this hypothesis we would

1506

00:55:44,450 --> 00:55:42,720

eventually be convinced yeah it's really

1507

00:55:46,010 --> 00:55:44,460

going on it's really there

1508

00:55:48,710 --> 00:55:46,020

it's really happening

1509

00:55:50,450 --> 00:55:48,720

and that's and that's worth knowing but

1510

00:55:52,250 --> 00:55:50,460

so interestingly under this hypothesis

1511

00:55:54,650 --> 00:55:52,260

they don't think they're much of a rust

1512

00:55:57,109 --> 00:55:54,660

persuadess of this they got a lot of

1513

00:55:58,190 --> 00:55:57,119

time so therefore we're not almost at

1514

00:56:00,530 --> 00:55:58,200

this point where they're worried about

1515

00:56:01,849 --> 00:56:00,540

us right so presumably they've got a

1516

00:56:03,230 --> 00:56:01,859

button somewhere and if we get too

1517

00:56:04,789 --> 00:56:03,240

uppity they push the button and we're

1518

00:56:07,670 --> 00:56:04,799

gone

1519

00:56:09,950 --> 00:56:07,680

and so the reset button yeah well you

1520

00:56:12,650 --> 00:56:09,960

know thing that erases us but you know

1521

00:56:15,470 --> 00:56:12,660

if we got too threatening to them to a

1522

00:56:17,089 --> 00:56:15,480

too capable of say finding them and

1523

00:56:18,710 --> 00:56:17,099

destroying them or expanding without

1524

00:56:21,230 --> 00:56:18,720

them being able to stop us than before

1525

00:56:23,930 --> 00:56:21,240

we got to that point they would be able

1526

00:56:25,069 --> 00:56:23,940

to just stop us right that has to be

1527

00:56:27,890 --> 00:56:25,079

true they have to have such a thing

1528

00:56:29,210 --> 00:56:27,900

ready and plausibly they they don't

1529

00:56:31,930 --> 00:56:29,220

think we're close

1530

00:56:33,829 --> 00:56:31,940

they're not in a rush right because

1531

00:56:35,210 --> 00:56:33,839

otherwise they would be a little more

1532

00:56:36,650 --> 00:56:35,220

aggressive about showing themselves to

1533

00:56:38,270 --> 00:56:36,660

make sure we saw them right and they're

1534

00:56:40,069 --> 00:56:38,280

not that aggressive they're hanging out

1535

00:56:42,289 --> 00:56:40,079

at the edge and they're they seem to be

1536

00:56:44,089 --> 00:56:42,299

okay with that they seem to be okay with

1537

00:56:45,589 --> 00:56:44,099

letting it take us a while to figure it

1538

00:56:47,750 --> 00:56:45,599

out

1539

00:56:49,250 --> 00:56:47,760

and another effort I want to get your

1540

00:56:51,589 --> 00:56:49,260

thoughts on that's just been announced

1541

00:56:54,829 --> 00:56:51,599

recently was NASA's own independent

1542

00:56:57,289 --> 00:56:54,839

study into UFOs how do you see that

1543

00:56:58,730 --> 00:56:57,299

playing out and is that potentially

1544

00:57:00,829 --> 00:56:58,740

something again that could bear any

1545

00:57:02,450 --> 00:57:00,839

fruit

1546

00:57:05,210 --> 00:57:02,460

so

1547

00:57:07,730 --> 00:57:05,220

you know I'm a futurist in many ways and

1548

00:57:09,230 --> 00:57:07,740

in the futurist world there's a lot of

1549

00:57:11,030 --> 00:57:09,240

people who pay attention to every new

1550

00:57:12,589 --> 00:57:11,040

news release about somebody who's got

1551
00:57:14,750 --> 00:57:12,599
some new thing that might be a new

1552
00:57:16,730 --> 00:57:14,760
Gadget right and I tend to think

1553
00:57:18,890 --> 00:57:16,740
look if you're going to focus on long

1554
00:57:20,690 --> 00:57:18,900
time scales that don't get lost in every

1555
00:57:22,549 --> 00:57:20,700
day's news fluctuations

1556
00:57:23,569 --> 00:57:22,559
look at the long-term trends and focus

1557
00:57:25,609 --> 00:57:23,579
on that

1558
00:57:27,589 --> 00:57:25,619
so assembly I would say look if you

1559
00:57:29,390 --> 00:57:27,599
think that UFOs might be aliens we're

1560
00:57:31,670 --> 00:57:29,400
talking a long-term game here a

1561
00:57:34,010 --> 00:57:31,680
long-term situation you know we've gone

1562
00:57:36,230 --> 00:57:34,020
at least 70 years with people making

1563
00:57:37,730 --> 00:57:36,240

reports it's mostly been treated

1564

00:57:40,849 --> 00:57:37,740

skeptically

1565

00:57:42,530 --> 00:57:40,859

opinion is evolving only very slowly at

1566

00:57:44,089 --> 00:57:42,540

the moment among most you know

1567

00:57:47,210 --> 00:57:44,099

prestigious intellectuals it's still

1568

00:57:49,490 --> 00:57:47,220

pretty Taboo it's still pretty ridiculed

1569

00:57:50,210 --> 00:57:49,500

that's likely to stay that way for a

1570

00:57:52,609 --> 00:57:50,220

while

1571

00:57:54,289 --> 00:57:52,619

it may slowly change and come over but

1572

00:57:57,170 --> 00:57:54,299

you're talking many decades we're not

1573

00:58:01,849 --> 00:57:59,690

so I think you just have to think of

1574

00:58:04,609 --> 00:58:01,859

this as an interesting fluctuation in

1575

00:58:06,530 --> 00:58:04,619

the short term that might you know push

1576

00:58:07,910 --> 00:58:06,540

things a bit in the right direction in

1577

00:58:09,410 --> 00:58:07,920

the long term but you can't get too

1578

00:58:10,430 --> 00:58:09,420

excited about each short-term

1579

00:58:12,470 --> 00:58:10,440

fluctuation

1580

00:58:15,289 --> 00:58:12,480

right because again this is a long game

1581

00:58:17,030 --> 00:58:15,299

we've had a hundred thousand UFO reports

1582

00:58:19,250 --> 00:58:17,040

out there written down

1583

00:58:20,990 --> 00:58:19,260

over the last 70 years

1584

00:58:22,130 --> 00:58:21,000

one or two more aren't going to make

1585

00:58:25,069 --> 00:58:22,140

that much difference

1586

00:58:26,750 --> 00:58:25,079

they slowly add another study another

1587

00:58:28,309 --> 00:58:26,760

group it isn't going to make that much

1588

00:58:30,530 --> 00:58:28,319

difference because you know I can just

1589

00:58:33,109 --> 00:58:30,540

tell you from the inside of knowing

1590

00:58:35,270 --> 00:58:33,119

prestigious intellectuals especially

1591

00:58:37,490 --> 00:58:35,280

those in the fields most sought it seen

1592

00:58:39,890 --> 00:58:37,500

as expertly close to this

1593

00:58:41,450 --> 00:58:39,900

it's a strong consensus that this stuff

1594

00:58:43,789 --> 00:58:41,460

is silly

1595

00:58:45,530 --> 00:58:43,799

and should just not be taken very

1596

00:58:47,690 --> 00:58:45,540

seriously and that's just going to take

1597

00:58:50,210 --> 00:58:47,700

a long time to change

1598

00:58:52,309 --> 00:58:50,220

that's just the facts so I can't give

1599

00:58:55,010 --> 00:58:52,319

you very much optimism about fast

1600

00:58:56,569 --> 00:58:55,020

short-term progress sorry that's okay

1601
00:58:58,010 --> 00:58:56,579
everyone's a lot of their opinion and

1602
00:58:59,990 --> 00:58:58,020
that's it you've put it across really

1603
00:59:01,849 --> 00:59:00,000
well I want to ask you just a couple of

1604
00:59:03,230 --> 00:59:01,859
listener questions to finish off in the

1605
00:59:05,870 --> 00:59:03,240
time we've got

1606
00:59:08,210 --> 00:59:05,880
um question from Matt he asks where

1607
00:59:09,650 --> 00:59:08,220
where does religion play a part in your

1608
00:59:12,589 --> 00:59:09,660
theory

1609
00:59:17,450 --> 00:59:15,049
so I just got a question like this

1610
00:59:19,130 --> 00:59:17,460
yesterday on a different podcast

1611
00:59:21,490 --> 00:59:19,140
somebody asked about what about what

1612
00:59:26,030 --> 00:59:21,500
about all the Paranormal stuff reported

1613
00:59:28,730 --> 00:59:26,040

with you know UFO reports so

1614

00:59:31,069 --> 00:59:28,740

the theory I gave you is a theory where

1615

00:59:32,930 --> 00:59:31,079

all the usual scientific theories are

1616

00:59:35,630 --> 00:59:32,940

basically right

1617

00:59:37,490 --> 00:59:35,640

and yet even so here there are aliens

1618

00:59:39,770 --> 00:59:37,500

visiting us and it took a bit of work to

1619

00:59:40,910 --> 00:59:39,780

put together a scenario like that and I

1620

00:59:42,890 --> 00:59:40,920

would actually say there's a prior

1621

00:59:45,770 --> 00:59:42,900

probability of one in a thousand on that

1622

00:59:46,970 --> 00:59:45,780

scenario which is high enough to be

1623

00:59:48,770 --> 00:59:46,980

worth looking at the evidence because

1624

00:59:50,390 --> 00:59:48,780

say in a typical murder trial the prior

1625

00:59:54,049 --> 00:59:50,400

might be one in a million that any one

1626
00:59:59,270 --> 00:59:57,349
so um that's my best guess but now if

1627
01:00:01,309 --> 00:59:59,280
you want to add into the hypothesis oh

1628
01:00:03,230 --> 01:00:01,319
and we're wrong about a bunch of very

1629
01:00:05,990 --> 01:00:03,240
basic theories about how things work

1630
01:00:07,609 --> 01:00:06,000
they really are ghosts and fairies

1631
01:00:10,309 --> 01:00:07,619
and ESP

1632
01:00:12,470 --> 01:00:10,319
and somehow the aliens find in their

1633
01:00:14,630 --> 01:00:12,480
interest to use that stuff

1634
01:00:16,069 --> 01:00:14,640
I struggle to come up with a hypothesis

1635
01:00:17,870 --> 01:00:16,079
that makes sense of that where I don't

1636
01:00:19,309 --> 01:00:17,880
have to have a much lower probability

1637
01:00:22,010 --> 01:00:19,319
right

1638
01:00:24,049 --> 01:00:22,020

uh and so if you throw in some sort of

1639

01:00:25,309 --> 01:00:24,059

religion hypothesis I'm gonna have to do

1640

01:00:27,170 --> 01:00:25,319

the same

1641

01:00:29,329 --> 01:00:27,180

I'm gonna have to say look

1642

01:00:31,490 --> 01:00:29,339

I'm going to buy into the usual

1643

01:00:32,690 --> 01:00:31,500

scientific consensus theories on most

1644

01:00:34,789 --> 01:00:32,700

things

1645

01:00:36,410 --> 01:00:34,799

and I'm going to try to ask how within

1646

01:00:38,750 --> 01:00:36,420

the space of our usual way of thinking

1647

01:00:40,670 --> 01:00:38,760

of us could maybe there be aliens around

1648

01:00:42,770 --> 01:00:40,680

who are looking like UFOs and I can come

1649

01:00:44,270 --> 01:00:42,780

up with something like that

1650

01:00:46,069 --> 01:00:44,280

do a little work so I have to give it

1651
01:00:48,470 --> 01:00:46,079
maybe a one on a thousand prior which

1652
01:00:50,630 --> 01:00:48,480
isn't you know huge but it's good enough

1653
01:00:52,730 --> 01:00:50,640
to make you look at the evidence but

1654
01:00:55,010 --> 01:00:52,740
again if you if you throw more things

1655
01:00:57,170 --> 01:00:55,020
into the next you say okay but now there

1656
01:00:59,329 --> 01:00:57,180
really is ESP

1657
01:01:01,670 --> 01:00:59,339
and now there really are ghosts and now

1658
01:01:03,770 --> 01:01:01,680
explain why the aliens want to make a

1659
01:01:05,510 --> 01:01:03,780
sea ghost I'm gonna go

1660
01:01:07,490 --> 01:01:05,520
first of all I think it's pretty

1661
01:01:09,410 --> 01:01:07,500
unlikely there are ghosts and second of

1662
01:01:11,750 --> 01:01:09,420
all why would the aliens need to make a

1663
01:01:13,789 --> 01:01:11,760

sea ghost I don't get it how does that

1664

01:01:15,530 --> 01:01:13,799

achieve their purposes like under the

1665

01:01:17,870 --> 01:01:15,540

scenario we know why they're here they

1666

01:01:20,150 --> 01:01:17,880

don't want us to expand the ghost thing

1667

01:01:21,950 --> 01:01:20,160

doesn't seem to help

1668

01:01:24,109 --> 01:01:21,960

so I don't get it right so I can't make

1669

01:01:26,569 --> 01:01:24,119

sense doesn't mean it might not be true

1670

01:01:29,450 --> 01:01:26,579

it just means it's not fitting for me in

1671

01:01:31,910 --> 01:01:29,460

my most likely scenario I can construct

1672

01:01:35,089 --> 01:01:31,920

and Matt had a follow-up that in that

1673

01:01:37,670 --> 01:01:35,099

model is there a room or place for alien

1674

01:01:40,490 --> 01:01:37,680

abduction to play a part in this or any

1675

01:01:42,890 --> 01:01:40,500

kind of alien contact

1676

01:01:44,990 --> 01:01:42,900

well again again you know think about

1677

01:01:46,250 --> 01:01:45,000

the simplest theory of why they would be

1678

01:01:48,410 --> 01:01:46,260

here and what they would what's the

1679

01:01:49,670 --> 01:01:48,420

purpose right their simple purpose is to

1680

01:01:52,309 --> 01:01:49,680

be our top dog

1681

01:01:54,890 --> 01:01:52,319

to convince us that they exist and that

1682

01:01:57,890 --> 01:01:54,900

they are more impressive than us

1683

01:01:59,150 --> 01:01:57,900

so how would abducting people help with

1684

01:02:02,029 --> 01:01:59,160

that

1685

01:02:03,529 --> 01:02:02,039

it looks a lot more risky

1686

01:02:05,270 --> 01:02:03,539

they're risking a lot more close contact

1687

01:02:07,430 --> 01:02:05,280

a lot more ways we could find details

1688

01:02:10,250 --> 01:02:07,440

about them

1689

01:02:13,010 --> 01:02:10,260

they're doing it in ways that like don't

1690

01:02:15,950 --> 01:02:13,020

make other people believe it very easily

1691

01:02:17,990 --> 01:02:15,960

right like showing on a producing

1692

01:02:20,569 --> 01:02:18,000

people in Times Square

1693

01:02:23,210 --> 01:02:20,579

is doing it off on the edge and so I

1694

01:02:25,609 --> 01:02:23,220

just don't see how it achieves the

1695

01:02:27,710 --> 01:02:25,619

plausible purpose of impressing us

1696

01:02:29,390 --> 01:02:27,720

in ways that convinces they exist and

1697

01:02:30,890 --> 01:02:29,400

that they're friendly and high so you

1698

01:02:32,329 --> 01:02:30,900

know in fact also one of the key

1699

01:02:34,730 --> 01:02:32,339

criteria is they need to not be

1700

01:02:35,990 --> 01:02:34,740

threatening and what in fact UFO reports

1701

01:02:37,910 --> 01:02:36,000

do seem to be consistently not

1702

01:02:40,130 --> 01:02:37,920

threatening in terms of they don't seem

1703

01:02:41,690 --> 01:02:40,140

to run up and attack a fighter plane or

1704

01:02:43,490 --> 01:02:41,700

something and they don't destroy things

1705

01:02:45,109 --> 01:02:43,500

whereas they obviously could

1706

01:02:47,630 --> 01:02:45,119

and that would be one key thing about

1707

01:02:50,029 --> 01:02:47,640

being our top dog and when we of course

1708

01:02:53,390 --> 01:02:50,039

you know are the top dog for horses or

1709

01:02:55,010 --> 01:02:53,400

dogs we we use a little bit of violence

1710

01:02:56,450 --> 01:02:55,020

and harm to discipline them but we make

1711

01:02:57,529 --> 01:02:56,460

it clear that's just because they're

1712

01:02:59,150 --> 01:02:57,539

being punished for something but

1713

01:03:01,130 --> 01:02:59,160

otherwise we're mostly their friends and

1714

01:03:02,930 --> 01:03:01,140

their supporters and we are trying to

1715

01:03:04,609 --> 01:03:02,940

help them right

1716

01:03:05,870 --> 01:03:04,619

well that's what they would need to be

1717

01:03:08,089 --> 01:03:05,880

doing with us seeming to be

1718

01:03:09,349 --> 01:03:08,099

unthreatening so the abductions look

1719

01:03:11,210 --> 01:03:09,359

kind of threatening

1720

01:03:14,270 --> 01:03:11,220

they don't look so friendly

1721

01:03:16,609 --> 01:03:14,280

this this doesn't seem a wise move

1722

01:03:17,990 --> 01:03:16,619

right it doesn't communicate the thing

1723

01:03:20,870 --> 01:03:18,000

they're trying to communicate and it

1724

01:03:23,450 --> 01:03:20,880

doesn't make them seem you know friendly

1725

01:03:26,089 --> 01:03:23,460

I'm just not seeing how it makes sense

1726

01:03:28,130 --> 01:03:26,099

as as a strategy

1727

01:03:29,870 --> 01:03:28,140

and let me ask one final question from

1728

01:03:31,309 --> 01:03:29,880

Newman I'll ask the question and then

1729

01:03:32,750 --> 01:03:31,319

I'll give you the context he's given me

1730

01:03:34,789 --> 01:03:32,760

behind it as well

1731

01:03:37,010 --> 01:03:34,799

um Newman asks what kind of

1732

01:03:39,109 --> 01:03:37,020

relationships amongst Intergalactic

1733

01:03:40,970 --> 01:03:39,119

Empires would the grab it alien model

1734

01:03:43,190 --> 01:03:40,980

imply would it be similar to

1735

01:03:45,650 --> 01:03:43,200

Intergalactic cold war or Colonial

1736

01:03:48,470 --> 01:03:45,660

politics he gives the context of in

1737

01:03:50,029 --> 01:03:48,480

ufology a frequently propagated claim is

1738

01:03:51,829 --> 01:03:50,039

that Earth is a theater stage of

1739

01:03:54,230 --> 01:03:51,839

Intergalactic cold war between different

1740

01:03:56,390 --> 01:03:54,240

species for the control of our genetic

1741

01:03:59,450 --> 01:03:56,400

and Spiritual Development we've got tall

1742

01:04:01,789 --> 01:03:59,460

Grays tall whites and palladians if they

1743

01:04:04,970 --> 01:04:01,799

really exist the behavior might stem

1744

01:04:08,510 --> 01:04:04,980

from them just being grabby aliens

1745

01:04:10,490 --> 01:04:08,520

so under the gravity aliens model

1746

01:04:12,109 --> 01:04:10,500

again this is without panspermia

1747

01:04:14,450 --> 01:04:12,119

siblings this is just a simple model

1748

01:04:15,410 --> 01:04:14,460

they appear roughly once per million

1749

01:04:17,690 --> 01:04:15,420

galaxies

1750

01:04:19,309 --> 01:04:17,700

they expand near the speed of light and

1751

01:04:20,329 --> 01:04:19,319

they keep expanding until they meet each

1752

01:04:21,770 --> 01:04:20,339

other

1753

01:04:23,870 --> 01:04:21,780

and that would be in roughly a billion

1754

01:04:26,510 --> 01:04:23,880

years from now if we did that

1755

01:04:28,430 --> 01:04:26,520

at that point they meet each other and

1756

01:04:30,230 --> 01:04:28,440

then they may or may not have conflicts

1757

01:04:32,450 --> 01:04:30,240

at those borders

1758

01:04:36,589 --> 01:04:32,460

but until then they just are having

1759

01:04:40,309 --> 01:04:36,599

internal expansion and uh creation so

1760

01:04:43,190 --> 01:04:40,319

by assumption we are not now within the

1761

01:04:44,930 --> 01:04:43,200

sphere of control of grammy aliens that

1762

01:04:47,210 --> 01:04:44,940

is the point is they would be very

1763

01:04:50,029 --> 01:04:47,220

visible and obvious

1764

01:04:52,370 --> 01:04:50,039

so that means we can't now be within the

1765

01:04:54,710 --> 01:04:52,380

sphere of conflict of two

1766

01:04:57,170 --> 01:04:54,720

sets of gravity aliens because that

1767

01:04:59,809 --> 01:04:57,180

would be even more obvious right

1768

01:05:02,150 --> 01:04:59,819

uh so

1769

01:05:05,750 --> 01:05:02,160

the simplest version of the theory says

1770

01:05:07,370 --> 01:05:05,760

that that's just not apply now we can

1771

01:05:09,710 --> 01:05:07,380

start to make variations one variation

1772

01:05:11,150 --> 01:05:09,720

would be somehow what they're doing in

1773

01:05:13,069 --> 01:05:11,160

Reverse they're changing things but

1774

01:05:14,329 --> 01:05:13,079

somehow in a way it doesn't make a

1775

01:05:15,770 --> 01:05:14,339

visible difference somehow we're just

1776

01:05:18,650 --> 01:05:15,780

not looking at the right sort of thing

1777

01:05:20,270 --> 01:05:18,660

to be able to see the difference

1778

01:05:21,289 --> 01:05:20,280

it's hard for me to believe but at least

1779

01:05:23,270 --> 01:05:21,299

that would be a variation you could

1780

01:05:24,650 --> 01:05:23,280

think of but now again

1781

01:05:29,150 --> 01:05:24,660

um

1782

01:05:30,170 --> 01:05:29,160

be powerful enough to be worth fighting

1783

01:05:32,150 --> 01:05:30,180

over

1784

01:05:33,829 --> 01:05:32,160

they could simply come here and take

1785

01:05:35,510 --> 01:05:33,839

over if they just arrived here they

1786

01:05:37,970 --> 01:05:35,520

could just you know in a short time

1787

01:05:41,210 --> 01:05:37,980

change everything here to their liking

1788

01:05:44,809 --> 01:05:41,220

we have little to offer them in terms of

1789

01:05:47,510 --> 01:05:44,819

direct power so now but there is a way

1790

01:05:50,569 --> 01:05:47,520

that quiet alien civilizations can serve

1791

01:05:53,990 --> 01:05:50,579

the purposes of

1792

01:05:56,029 --> 01:05:54,000

um loud ones so

1793

01:05:58,069 --> 01:05:56,039

um the idea would be there's a lot more

1794

01:06:00,109 --> 01:05:58,079

quiet ones than loud ones

1795

01:06:01,670 --> 01:06:00,119

and Loud ones are thinking a lot about

1796

01:06:02,450 --> 01:06:01,680

what happens when they meet the other

1797

01:06:05,450 --> 01:06:02,460

loud

1798

01:06:07,670 --> 01:06:05,460

and they want to collect data about what

1799

01:06:09,230 --> 01:06:07,680

are all civilizations like because

1800

01:06:11,210 --> 01:06:09,240

they're trying to guess what will these

1801
01:06:12,950 --> 01:06:11,220
aliens be like when we meet them they're

1802
01:06:15,170 --> 01:06:12,960
going to be really eager for data like

1803
01:06:16,970 --> 01:06:15,180
that and when they finally meet one

1804
01:06:18,529 --> 01:06:16,980
other grabby alien civilization they

1805
01:06:20,990 --> 01:06:18,539
will at that point in space-time they

1806
01:06:23,150 --> 01:06:21,000
will have never met any others before

1807
01:06:25,849 --> 01:06:23,160
so they're only data they have about

1808
01:06:26,870 --> 01:06:25,859
aliens is The Quiet Ones they meet along

1809
01:06:28,970 --> 01:06:26,880
the way

1810
01:06:30,950 --> 01:06:28,980
they may come across the ruins of quiet

1811
01:06:33,890 --> 01:06:30,960
ones or quiet ones that are just

1812
01:06:35,750 --> 01:06:33,900
long-lived but stay very local and that

1813
01:06:37,910 --> 01:06:35,760

data would be very valuable to them they

1814

01:06:39,829 --> 01:06:37,920

want to know what are quiet alien

1815

01:06:42,230 --> 01:06:39,839

civilizations like as a way to guess

1816

01:06:44,029 --> 01:06:42,240

what will these grabby ones be like when

1817

01:06:46,130 --> 01:06:44,039

we meet them

1818

01:06:48,589 --> 01:06:46,140

that isn't necessarily consistent with

1819

01:06:49,910 --> 01:06:48,599

them being peaceful they may come and

1820

01:06:51,589 --> 01:06:49,920

disassemble everyone and take all the

1821

01:06:54,410 --> 01:06:51,599

data that way but

1822

01:06:56,270 --> 01:06:54,420

still they would the you know the

1823

01:06:57,349 --> 01:06:56,280

quality of civilizations per gram or

1824

01:07:00,049 --> 01:06:57,359

something would just be much more

1825

01:07:02,170 --> 01:07:00,059

valuable as data than just as raw

1826

01:07:04,309 --> 01:07:02,180

material to make stuff because again

1827

01:07:07,510 --> 01:07:04,319

moving across

1828

01:07:11,930 --> 01:07:07,520

billions of light years to finally meet

1829

01:07:13,670 --> 01:07:11,940

uh aliens they will have vast stars and

1830

01:07:15,170 --> 01:07:13,680

planets and everything to use to do

1831

01:07:16,069 --> 01:07:15,180

things but they'll only meet maybe a

1832

01:07:18,410 --> 01:07:16,079

couple

1833

01:07:20,450 --> 01:07:18,420

quiet alien civilizations

1834

01:07:22,730 --> 01:07:20,460

and those would then be enormously

1835

01:07:26,329 --> 01:07:22,740

valuable as data

1836

01:07:28,430 --> 01:07:26,339

so if for some reason some gravityland

1837

01:07:29,690 --> 01:07:28,440

civilization came past here and is

1838

01:07:32,089 --> 01:07:29,700

expanding out and somehow we didn't

1839

01:07:33,829 --> 01:07:32,099

notice them

1840

01:07:36,710 --> 01:07:33,839

the thing we would conclude is that they

1841

01:07:38,930 --> 01:07:36,720

are they study us very carefully

1842

01:07:41,270 --> 01:07:38,940

not because they're afraid of us not

1843

01:07:43,309 --> 01:07:41,280

because we can do much for them just

1844

01:07:44,750 --> 01:07:43,319

because we're their best data about

1845

01:07:46,130 --> 01:07:44,760

these strange aliens they're going to

1846

01:07:47,630 --> 01:07:46,140

meet in the future

1847

01:07:49,490 --> 01:07:47,640

they just want to know what are aliens

1848

01:07:50,930 --> 01:07:49,500

like

1849

01:07:52,549 --> 01:07:50,940

it would certainly put us in our

1850

01:07:54,170 --> 01:07:52,559

Intergalactic place in the universe

1851
01:07:56,150 --> 01:07:54,180
wouldn't it to know that we were just a

1852
01:07:57,650 --> 01:07:56,160
data sample for some other species it

1853
01:07:58,849 --> 01:07:57,660
was so much in addition to it in a

1854
01:08:01,190 --> 01:07:58,859
sample we can also be a coordination

1855
01:08:04,370 --> 01:08:01,200
point so this is kind of interesting

1856
01:08:07,190 --> 01:08:04,380
when two grabby alien civilizations meet

1857
01:08:10,069 --> 01:08:07,200
they may have both gotten data from the

1858
01:08:11,930 --> 01:08:10,079
same quiet alien civilizations

1859
01:08:13,609 --> 01:08:11,940
so those quietals and civilizations

1860
01:08:15,650 --> 01:08:13,619
could be a coordination point when they

1861
01:08:17,990 --> 01:08:15,660
want to know what should we expect them

1862
01:08:19,970 --> 01:08:18,000
to think we can say well they saw the

1863
01:08:22,070 --> 01:08:19,980

same quiet one we did

1864

01:08:23,930 --> 01:08:22,080

so this quiet one could create common

1865

01:08:26,149 --> 01:08:23,940

expectations about what we should both

1866

01:08:28,729 --> 01:08:26,159

expect to happen when we meet

1867

01:08:30,289 --> 01:08:28,739

and so we quiet alien civilizations

1868

01:08:34,189 --> 01:08:30,299

could serve that purpose

1869

01:08:36,229 --> 01:08:34,199

to not just give one an expectation but

1870

01:08:39,530 --> 01:08:36,239

give them both simultaneously the

1871

01:08:42,110 --> 01:08:39,540

expectation of what are aliens like

1872

01:08:43,849 --> 01:08:42,120

we could be their main idea of what what

1873

01:08:45,769 --> 01:08:43,859

each other are like

1874

01:08:48,829 --> 01:08:45,779

they might each assume the other one is

1875

01:08:52,550 --> 01:08:51,229

that's a fascinating idea I want to

1876

01:08:53,990 --> 01:08:52,560

finish just that you mentioned you're

1877

01:08:55,430 --> 01:08:54,000

writing a book currently if you could

1878

01:08:56,870 --> 01:08:55,440

give us a little bit of information on

1879

01:08:58,669 --> 01:08:56,880

the book and obviously when we can

1880

01:09:00,950 --> 01:08:58,679

expect that to be released if you've got

1881

01:09:02,630 --> 01:09:00,960

that information to hand uh if there's

1882

01:09:03,890 --> 01:09:02,640

no date even for releasing is still

1883

01:09:06,050 --> 01:09:03,900

being written

1884

01:09:08,990 --> 01:09:06,060

but the idea is

1885

01:09:11,809 --> 01:09:09,000

we talked about why people might want to

1886

01:09:14,450 --> 01:09:11,819

stay as a quiet alien civilization

1887

01:09:16,309 --> 01:09:14,460

and how difficult that might be

1888

01:09:17,930 --> 01:09:16,319

and therefore how this would be the

1889

01:09:20,209 --> 01:09:17,940

biggest choice we might face in the

1890

01:09:22,849 --> 01:09:20,219

future is whether or not to stay quiet

1891

01:09:25,010 --> 01:09:22,859

or whether to become loud

1892

01:09:26,749 --> 01:09:25,020

and so being is that such an important

1893

01:09:28,669 --> 01:09:26,759

question I want to deframe that question

1894

01:09:30,590 --> 01:09:28,679

and make it Vivid

1895

01:09:33,110 --> 01:09:30,600

that is I want to set up the context of

1896

01:09:36,410 --> 01:09:33,120

grabieliens and quiet versus loud aliens

1897

01:09:38,269 --> 01:09:36,420

and our future and the things that might

1898

01:09:40,070 --> 01:09:38,279

happen to us if we compete or allow

1899

01:09:42,769 --> 01:09:40,080

ourselves to change the kinds of

1900

01:09:44,930 --> 01:09:42,779

coordinations that we might like to do

1901

01:09:45,950 --> 01:09:44,940

set up and make Vivid this choice we

1902

01:09:49,070 --> 01:09:45,960

will have

1903

01:09:52,430 --> 01:09:49,080

between staying quiet and becoming loud

1904

01:09:55,610 --> 01:09:52,440

and I may have an opinion that we should

1905

01:09:57,709 --> 01:09:55,620

become loud but it's not my place to

1906

01:09:59,930 --> 01:09:57,719

beat you over the head with my opinion

1907

01:10:01,790 --> 01:09:59,940

this is a choice that may not be made

1908

01:10:04,070 --> 01:10:01,800

for thousands of years

1909

01:10:06,470 --> 01:10:04,080

and later on when it is made they will

1910

01:10:08,930 --> 01:10:06,480

may know much more than we do now

1911

01:10:11,209 --> 01:10:08,940

so my opinion is less important than

1912

01:10:12,830 --> 01:10:11,219

setting up the question to say let's

1913

01:10:13,610 --> 01:10:12,840

start thinking about this question let's

1914

01:10:15,890 --> 01:10:13,620

start

1915

01:10:18,350 --> 01:10:15,900

collecting opinions and collecting

1916

01:10:20,450 --> 01:10:18,360

considerations to prepare us for the day

1917

01:10:22,910 --> 01:10:20,460

when we may someday want to make this

1918

01:10:26,630 --> 01:10:24,950

Robin it's been fascinating speaking

1919

01:10:29,330 --> 01:10:26,640

with you I really hope I've managed to

1920

01:10:30,950 --> 01:10:29,340

do it justice it's a breath of fresh air

1921

01:10:32,450 --> 01:10:30,960

to discuss different ideas from a

1922

01:10:34,550 --> 01:10:32,460

different perspective as well and the

1923

01:10:36,050 --> 01:10:34,560

model certainly is interesting and when

1924

01:10:37,970 --> 01:10:36,060

that book is released it'd be great to

1925

01:10:38,930 --> 01:10:37,980

have you on to talk about it back on the

1926

01:10:41,630 --> 01:10:38,940

podcast

1927

01:10:43,490 --> 01:10:41,640

be happy to come and if anyone's got any

1928

01:10:45,050 --> 01:10:43,500

follow-up questions for Robin I do

1929

01:10:46,970 --> 01:10:45,060

believe you'll be speaking to Dan

1930

01:10:48,649 --> 01:10:46,980

zettters from down the line for coloring

1931

01:10:50,149 --> 01:10:48,659

outside the lines I think he was

1932

01:10:52,189 --> 01:10:50,159

arranging an interview with you for for

1933

01:10:53,390 --> 01:10:52,199

some time in the near future so that's

1934

01:10:54,950 --> 01:10:53,400

something people could get in touch with

1935

01:10:56,149 --> 01:10:54,960

Dan about if they've got any follow-ups

1936

01:10:58,130 --> 01:10:56,159

as it'll be a different type of

1937

01:10:59,750 --> 01:10:58,140

conversation he has with you I have

1938

01:11:01,910 --> 01:10:59,760

generally just been accepting all

1939

01:11:04,130 --> 01:11:01,920

invitations to do conversations like

1940

01:11:06,169 --> 01:11:04,140

this so if anybody has invited me I've

1941

01:11:08,090 --> 01:11:06,179

probably said yes yeah I think I think

1942

01:11:09,590 --> 01:11:08,100

you have but yeah any questions send it

1943

01:11:10,790 --> 01:11:09,600

send them over to Dan and he will

1944

01:11:12,350 --> 01:11:10,800

certainly get those in there for you

1945

01:11:15,229 --> 01:11:12,360

Robin it's been a pleasure speaking with

1946

01:11:17,149 --> 01:11:15,239

you nice talking to you that is all for

1947

01:11:19,189 --> 01:11:17,159

this week's show thank you very much for

1948

01:11:21,410 --> 01:11:19,199

listening please remember to leave the

1949

01:11:24,709 --> 01:11:21,420

podcast a review on your chosen platform

1950

01:11:26,689 --> 01:11:24,719

you can like retweet And subscribe that

1951

01:11:28,729 --> 01:11:26,699

would all be very much appreciated the

1952

01:11:30,649 --> 01:11:28,739

shows are being uploaded onto YouTube as

1953

01:11:33,229 --> 01:11:30,659

we speak more and more you can sign up

1954

01:11:35,570 --> 01:11:33,239

at patreon.com forward slash that UFO

1955

01:11:37,970 --> 01:11:35,580

podcast access shows ad free as well

1956

01:11:41,030 --> 01:11:37,980

please get in touch on Twitter Facebook

1957

01:11:44,630 --> 01:11:41,040

Instagram that UFO podcast of course on

1958

01:11:46,669 --> 01:11:44,640

Twitter it's at UFO UAP am and again

1959

01:11:52,729 --> 01:11:46,679

folks as always keep looking up you

1960

01:11:52,739 --> 01:12:06,990

champagne

1961

01:12:27,110 --> 01:12:19,370

[Music]

1962

01:12:27,120 --> 01:12:40,970

oh

1963

01:12:40,980 --> 01:12:59,020

definitely kiss myself

1964

01:13:45,630 --> 01:13:04,580

[Music]

1965

01:14:09,650 --> 01:13:45,640

quite a disaster

1966

01:14:43,510 --> 01:14:29,920

[Music]

1967

01:14:50,090 --> 01:14:45,370

very much

1968

01:14:52,390 --> 01:14:52,189

today