

FADE TO BLACK

with JIMMY CHURCH

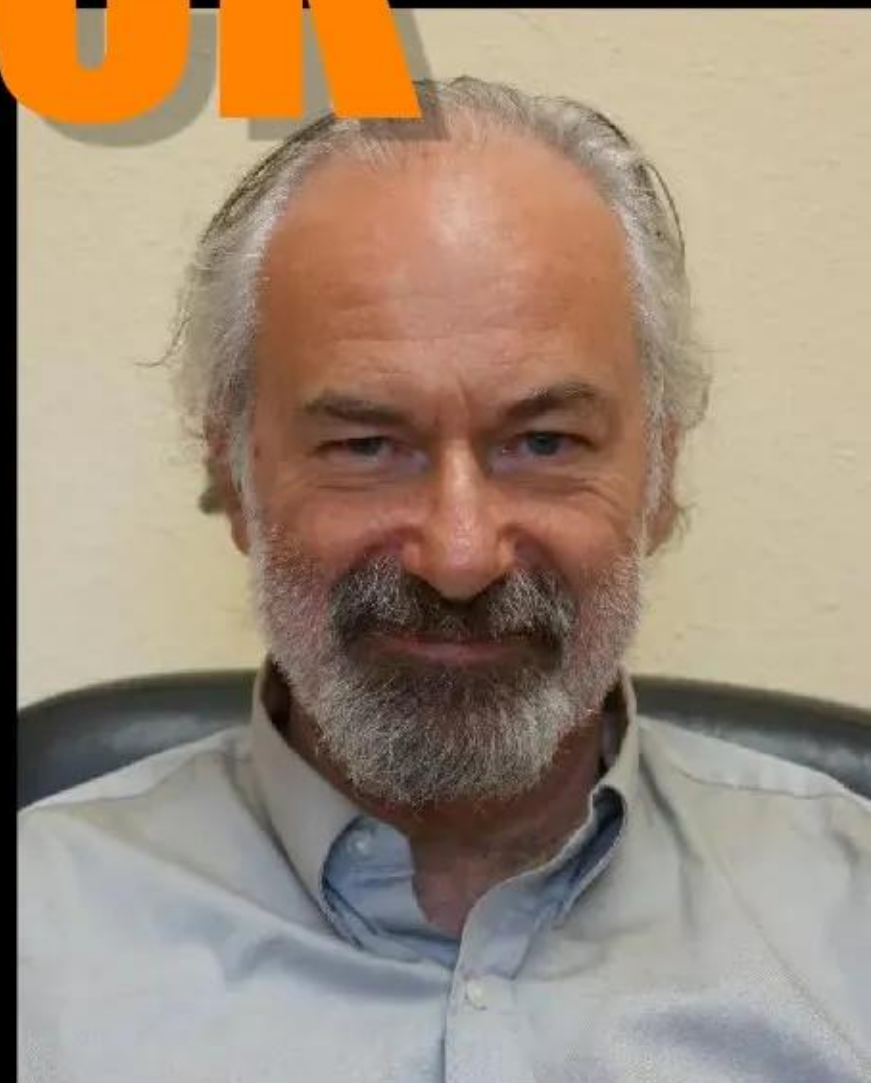
PRESENTS

CHARLES OSTMAN

EVOLUTION OF A.I.

WED MAY 10 LIVE

700-900PM PT



1
00:00:07,980 --> 00:00:38,220
foreign

2
00:00:38,230 --> 00:00:55,630
[Music]

3
00:01:00,470 --> 00:00:58,250
Air Forces has announced that a flying

4
00:01:02,510 --> 00:01:00,480
disc has been found and is now in the

5
00:01:07,070 --> 00:01:02,520
possession of the army

6
00:01:09,830 --> 00:01:07,080
rigs change the game game changer I

7
00:01:13,609 --> 00:01:09,840
occasionally think how quickly our

8
00:01:16,190 --> 00:01:13,619
differences worldwide would vanish if we

9
00:01:17,150 --> 00:01:16,200
were facing an alien threat from outside

10
00:01:19,050 --> 00:01:17,160
this work

11
00:01:21,550 --> 00:01:19,060
[Music]

12
00:01:24,469 --> 00:01:21,560
[Applause]

13
00:01:27,350 --> 00:01:24,479

this is Fade to Black with your host

14
00:01:28,000 --> 00:01:27,360
Jimmy Church on the game changer Radio

15
00:01:32,210 --> 00:01:28,010
Network

16
00:01:35,990 --> 00:01:32,220
[Music]

17
00:01:38,929 --> 00:01:36,000
all right welcome Fade to Black I'm your

18
00:01:40,929 --> 00:01:38,939
old Chevy church today is Wednesday May

19
00:01:44,109 --> 00:01:40,939
10th our guest tonight is Charles Austin

20
00:01:49,130 --> 00:01:44,119
Osman uh Charles

21
00:01:53,210 --> 00:01:49,140
is having some difficulty uh with uh

22
00:01:56,990 --> 00:01:53,220
with uh his system tonight and I can see

23
00:02:05,209 --> 00:01:57,000
him here we just didn't get him uh into

24
00:02:10,010 --> 00:02:07,490
um I'm gonna I'm gonna send it quick I'm

25
00:02:16,190 --> 00:02:10,020
in the middle of sending an email let's

26

00:02:16,200 --> 00:02:23,410

ah

27

00:02:31,420 --> 00:02:29,089

we are going to do a

28

00:02:31,430 --> 00:02:47,030

[Music]

29

00:02:55,970 --> 00:02:49,190

this is how

30

00:03:01,630 --> 00:02:58,970

I can't actually

31

00:03:15,050 --> 00:03:01,640

do this

32

00:03:18,649 --> 00:03:15,060

see I can type

33

00:03:20,449 --> 00:03:18,659

and uh

34

00:03:22,790 --> 00:03:20,459

it would show at the same time I'm

35

00:03:24,589 --> 00:03:22,800

pretty good so if if Charles doesn't

36

00:03:28,690 --> 00:03:24,599

make it in I just sent him an email man

37

00:03:31,790 --> 00:03:28,700

we'll do an AMA we'll do an impromptu

38

00:03:35,089 --> 00:03:31,800

AMA tonight which is what we're gonna do

39

00:03:37,009 --> 00:03:35,099

because The Show Must Go On

40

00:03:38,809 --> 00:03:37,019

um and we'll do that until Charles makes

41

00:03:39,970 --> 00:03:38,819

it in if uh Charles doesn't make it in

42

00:03:43,309 --> 00:03:39,980

we will

43

00:03:47,449 --> 00:03:43,319

reschedule and figure things out you

44

00:03:50,869 --> 00:03:47,459

know internet I don't freak out anymore

45

00:03:55,869 --> 00:03:50,879

I don't freak out I used to freak out

46

00:04:01,009 --> 00:03:55,879

I I used to freak out I used to go

47

00:04:04,130 --> 00:04:01,019

ah nah nah not anymore

48

00:04:07,850 --> 00:04:04,140

um so there you go let's do an impromptu

49

00:04:10,250 --> 00:04:07,860

AMA well which is ask me anything but

50

00:04:12,110 --> 00:04:10,260

you want to do one about AI we were

51
00:04:16,509 --> 00:04:12,120
going to do a show about AI tonight you

52
00:04:25,790 --> 00:04:20,030
I've got everything right in front of me

53
00:04:29,350 --> 00:04:25,800
I've got everybody chatting so uh

54
00:04:35,330 --> 00:04:33,110
all right okay yeah yeah I can see that

55
00:04:39,350 --> 00:04:35,340
you guys are down for this man I got my

56
00:04:42,350 --> 00:04:39,360
Led Zeppelin shirt on uh I I want to

57
00:04:43,550 --> 00:04:42,360
talk AI I've been thinking AI all day

58
00:04:50,230 --> 00:04:43,560
today

59
00:04:54,790 --> 00:04:50,240
chat GPT all that stuff and um so yeah

60
00:04:59,990 --> 00:04:54,800
let's just do an AMA let's bust this out

61
00:05:02,090 --> 00:05:00,000
I am uh earlier this week I was

62
00:05:04,249 --> 00:05:02,100
I was thinking

63
00:05:09,890 --> 00:05:04,259

and it's funny that we're doing an AMA

64

00:05:13,430 --> 00:05:09,900

tonight I was thinking uh about how do I

65

00:05:18,230 --> 00:05:13,440

say this about stuff

66

00:05:18,240 --> 00:05:21,830

doing

67

00:05:28,310 --> 00:05:25,189

um okay let me back up let me explain

68

00:05:30,469 --> 00:05:28,320

something uh for for the previous 10

69

00:05:33,890 --> 00:05:30,479

years

70

00:05:36,110 --> 00:05:33,900

um up until recently uh the way that I

71

00:05:38,629 --> 00:05:36,120

would do the show which was like you

72

00:05:40,670 --> 00:05:38,639

know live radio hey this is Fade to

73

00:05:42,110 --> 00:05:40,680

Black all right I would do that whole

74

00:05:44,510 --> 00:05:42,120

thing and all the commercial breaks and

75

00:05:47,930 --> 00:05:44,520

stuff and the opening of the show as

76

00:05:51,409 --> 00:05:47,940

everybody knows when I would do uh

77

00:05:54,830 --> 00:05:51,419

famous birthdays I did that I would do

78

00:05:57,590 --> 00:05:54,840

uh the fader fact

79

00:05:59,409 --> 00:05:57,600

uh this day in history and then I would

80

00:06:02,870 --> 00:05:59,419

do a rant

81

00:06:04,909 --> 00:06:02,880

and I really enjoyed doing those rants I

82

00:06:06,890 --> 00:06:04,919

don't do those anymore right I you know

83

00:06:09,650 --> 00:06:06,900

I still do the news

84

00:06:12,590 --> 00:06:09,660

I still do the fainter fact I still do

85

00:06:15,370 --> 00:06:12,600

this day in history

86

00:06:17,870 --> 00:06:15,380

um and but I don't rant

87

00:06:25,730 --> 00:06:17,880

the news

88

00:06:33,230 --> 00:06:25,740

news

89
00:06:35,749 --> 00:06:33,240
know Walter Cronkite you know Dan Rather

90
00:06:37,790 --> 00:06:35,759
you know all those dudes and they would

91
00:06:39,950 --> 00:06:37,800
just look in the camera and just do the

92
00:06:41,930 --> 00:06:39,960
news and it was an opinion today news is

93
00:06:46,189 --> 00:06:41,940
opinion

94
00:06:49,490 --> 00:06:46,199
um uh like my rants right but my rants

95
00:06:50,870 --> 00:06:49,500
weren't the news the rants were me

96
00:06:55,249 --> 00:06:50,880
getting my

97
00:06:57,409 --> 00:06:55,259
my head out my ideas out and my thoughts

98
00:06:59,629 --> 00:06:57,419
out on certain subjects and I don't do

99
00:07:04,610 --> 00:06:59,639
that anymore

100
00:07:07,850 --> 00:07:04,620
I do that on the amas sort of

101
00:07:10,309 --> 00:07:07,860
if you ask the right question but the

102
00:07:13,850 --> 00:07:10,319
rants were a different thing for me and

103
00:07:15,409 --> 00:07:13,860
I really enjoyed doing them so what I'm

104
00:07:19,330 --> 00:07:15,419
getting at is

105
00:07:23,409 --> 00:07:19,340
I was thinking about

106
00:07:25,510 --> 00:07:23,419
maybe even a separate podcast

107
00:07:29,450 --> 00:07:25,520
I want

108
00:07:36,469 --> 00:07:33,589
follow me now I don't want the rant to

109
00:07:40,749 --> 00:07:36,479
be the part of the news and I don't want

110
00:07:45,350 --> 00:07:40,759
the rant to be a part of Fade to Black

111
00:07:47,809 --> 00:07:45,360
I want my thoughts getting out

112
00:07:50,330 --> 00:07:47,819
on their own

113
00:07:52,969 --> 00:07:50,340

so would you enjoy that did you guys

114

00:07:54,350 --> 00:07:52,979

enjoy the rant okay somebody just says

115

00:07:57,650 --> 00:07:54,360

here

116

00:08:00,650 --> 00:07:57,660

um if somebody says uh I'm a threat fill

117

00:08:02,689 --> 00:08:00,660

the stalker I miss the rants I miss the

118

00:08:10,010 --> 00:08:02,699

rants

119

00:08:11,510 --> 00:08:10,020

and some of them I wrote out I would

120

00:08:14,749 --> 00:08:11,520

write

121

00:08:16,089 --> 00:08:14,759

some I didn't some were completely off

122

00:08:19,249 --> 00:08:16,099

the cuff

123

00:08:21,230 --> 00:08:19,259

sometimes I'd say half of the time I

124

00:08:24,230 --> 00:08:21,240

would have bullet points

125

00:08:26,809 --> 00:08:24,240

so I would have okay go here and just be

126

00:08:29,390 --> 00:08:26,819

a couple of words and then go here

127

00:08:33,649 --> 00:08:29,400

couple of words and then go here in a

128

00:08:36,130 --> 00:08:33,659

couple of words and and I I enjoyed that

129

00:08:38,930 --> 00:08:36,140

some of them I wrote out

130

00:08:40,610 --> 00:08:38,940

and uh and I don't know if you could

131

00:08:41,510 --> 00:08:40,620

ever tell could you tell that I was

132

00:08:43,490 --> 00:08:41,520

reading

133

00:08:47,449 --> 00:08:43,500

I don't know I don't know that's that's

134

00:08:51,889 --> 00:08:47,459

a good question I well I'm writing in my

135

00:08:55,310 --> 00:08:51,899

own voice so maybe you didn't and I'm

136

00:08:57,350 --> 00:08:55,320

missing my see I have a magnetic this is

137

00:08:59,030 --> 00:08:57,360

magnetic

138

00:09:02,690 --> 00:08:59,040

it goes

139

00:09:06,110 --> 00:09:02,700

this pops on it's a magnetic elbow stand

140

00:09:08,150 --> 00:09:06,120

and it's a whole other thing I need to

141

00:09:11,030 --> 00:09:08,160

I'm leaning on it now

142

00:09:14,329 --> 00:09:11,040

um and I enjoyed that

143

00:09:17,090 --> 00:09:14,339

and and I miss it and I did it uh you

144

00:09:23,570 --> 00:09:17,100

know over a thousand times

145

00:09:24,650 --> 00:09:23,580

and I miss that part of what I used to

146

00:09:32,630 --> 00:09:24,660

do

147

00:09:38,509 --> 00:09:32,640

um asked Jimmy about Egypt and he will

148

00:09:41,870 --> 00:09:38,519

rant I was just uh and uh that's uh from

149

00:09:46,009 --> 00:09:41,880

Mark Mark that's actually very funny

150

00:09:48,110 --> 00:09:46,019

um I was texting uh earlier today uh

151
00:09:50,090 --> 00:09:48,120
with um

152
00:09:54,050 --> 00:09:50,100
uh

153
00:09:56,269 --> 00:09:54,060
Egypt

154
00:09:57,470 --> 00:09:56,279
tearing it up man she's getting ready to

155
00:10:02,990 --> 00:09:57,480
fly to

156
00:10:06,530 --> 00:10:03,000
um Aswan and start the uh Nile Cruz oh

157
00:10:08,570 --> 00:10:06,540
so much fun and uh she just went down on

158
00:10:10,670 --> 00:10:08,580
the Osiris uh

159
00:10:13,250 --> 00:10:10,680
uh chamber

160
00:10:15,410 --> 00:10:13,260
yeah she just did that and she she's

161
00:10:17,449 --> 00:10:15,420
just having the time of her life I miss

162
00:10:19,009 --> 00:10:17,459
I miss Egypt so much and she's over

163
00:10:23,210 --> 00:10:19,019

there having a good time yeah I could

164

00:10:26,150 --> 00:10:23,220

rant about Egypt at any moment so let me

165

00:10:28,310 --> 00:10:26,160

scroll back and I and I'm I I can see

166

00:10:31,130 --> 00:10:28,320

here

167

00:10:33,350 --> 00:10:31,140

um uh some of you are already doing

168

00:10:35,810 --> 00:10:33,360

things in all caps yeah if you put it in

169

00:10:40,370 --> 00:10:35,820

all caps I can get to it

170

00:10:44,329 --> 00:10:40,380

um easier okay so let's see here I just

171

00:10:45,590 --> 00:10:44,339

saw some all caps question okay here we

172

00:10:50,509 --> 00:10:45,600

go

173

00:10:52,910 --> 00:10:50,519

super crazy music geek says

174

00:10:55,069 --> 00:10:52,920

do you think us humans would forget all

175

00:10:57,910 --> 00:10:55,079

of our differences if we were attacked

176

00:11:01,930 --> 00:10:57,920

by aliens

177

00:11:05,750 --> 00:11:01,940

yeah yeah yeah

178

00:11:07,030 --> 00:11:05,760

uh I absolutely think that I know that

179

00:11:10,069 --> 00:11:07,040

would happen

180

00:11:11,690 --> 00:11:10,079

but contact with aliens too I don't

181

00:11:13,430 --> 00:11:11,700

think we would necessarily have to be

182

00:11:19,009 --> 00:11:13,440

attacked

183

00:11:21,889 --> 00:11:19,019

aliens uh what choice do we have we

184

00:11:25,850 --> 00:11:21,899

would be United on all fronts

185

00:11:29,030 --> 00:11:25,860

immediately there would be no issues on

186

00:11:31,610 --> 00:11:29,040

this planet between us no it would erase

187

00:11:35,150 --> 00:11:31,620

immediately but this is actually a great

188

00:11:40,430 --> 00:11:37,670

oh man I love River Moon coffee I'll

189

00:11:45,769 --> 00:11:44,210

if E.T

190

00:11:49,009 --> 00:11:45,779

showed up

191

00:11:50,870 --> 00:11:49,019

now we know E.T shows up uh uh and and

192

00:11:56,930 --> 00:11:50,880

is here right now that's that's not my

193

00:11:59,769 --> 00:11:56,940

point but if ET showed up up and said we

194

00:12:02,530 --> 00:11:59,779

are here right

195

00:12:06,590 --> 00:12:02,540

we are here

196

00:12:10,870 --> 00:12:06,600

uh that would change everything

197

00:12:14,090 --> 00:12:10,880

but there's a deeper existential

198

00:12:16,670 --> 00:12:14,100

heavily philosophical

199

00:12:19,910 --> 00:12:16,680

take on this which

200

00:12:21,710 --> 00:12:19,920

I'll I'll mention

201
00:12:24,889 --> 00:12:21,720
it's this

202
00:12:27,829 --> 00:12:24,899
when you hear the the quote I I forget

203
00:12:29,810 --> 00:12:27,839
who's attributed uh who this is

204
00:12:31,910 --> 00:12:29,820
attributed to

205
00:12:34,430 --> 00:12:31,920
um it escapes me right now

206
00:12:35,269 --> 00:12:34,440
but

207
00:12:37,790 --> 00:12:35,279
um

208
00:12:40,910 --> 00:12:37,800
the question

209
00:12:43,850 --> 00:12:40,920
if we are alone or not in the universe I

210
00:12:45,889 --> 00:12:43,860
mean the crazier version is is what if

211
00:12:48,530 --> 00:12:45,899
we are alone

212
00:12:50,990 --> 00:12:48,540
I mean that that is a much more

213
00:12:52,310 --> 00:12:51,000

frightening scenario

214

00:12:55,250 --> 00:12:52,320

and

215

00:12:58,430 --> 00:12:55,260

if you want to continue the Great Divide

216

00:13:00,910 --> 00:12:58,440

that is happening right right right now

217

00:13:03,490 --> 00:13:00,920

and we know it's all there

218

00:13:07,310 --> 00:13:03,500

what would

219

00:13:10,430 --> 00:13:07,320

guarantee that until we just you know it

220

00:13:13,129 --> 00:13:10,440

just ruin this planet which we're close

221

00:13:15,829 --> 00:13:13,139

to doing is to find out that we are

222

00:13:21,710 --> 00:13:15,839

alone in the universe

223

00:13:24,889 --> 00:13:21,720

if the opposite came in to play

224

00:13:26,710 --> 00:13:24,899

the opposite we're not alone in the

225

00:13:30,790 --> 00:13:26,720

universe

226

00:13:34,750 --> 00:13:30,800

that would change

227

00:13:42,050 --> 00:13:38,930

now we have a reason to not only take

228

00:13:46,730 --> 00:13:42,060

care of this planet but to

229

00:13:48,650 --> 00:13:46,740

respect each other and now realize that

230

00:13:51,470 --> 00:13:48,660

we are Earthlings

231

00:13:55,730 --> 00:13:51,480

and that we are a singular planet

232

00:13:57,889 --> 00:13:55,740

we are whole we are just one

233

00:14:00,710 --> 00:13:57,899

we are Earthlings

234

00:14:03,350 --> 00:14:00,720

right now we're not

235

00:14:06,769 --> 00:14:03,360

we're not we live in different countries

236

00:14:09,530 --> 00:14:06,779

and we have these different reasons that

237

00:14:12,290 --> 00:14:09,540

we think are good enough to fight and

238

00:14:15,769 --> 00:14:12,300

kill each other we're not earthlings but

239

00:14:19,190 --> 00:14:15,779

if it was revealed that we are not alone

240

00:14:21,889 --> 00:14:19,200

oh whoa that's the wake-up call

241

00:14:24,310 --> 00:14:21,899

okay I I think that would bring us in we

242

00:14:28,370 --> 00:14:24,320

don't need to be attacked

243

00:14:30,470 --> 00:14:28,380

we just need that realization to hit us

244

00:14:31,550 --> 00:14:30,480

right score in the face that we are not

245

00:14:33,350 --> 00:14:31,560

alone

246

00:14:35,090 --> 00:14:33,360

now we have a reason to take care of

247

00:14:37,190 --> 00:14:35,100

this planet we have a reason to reach

248

00:14:41,150 --> 00:14:37,200

out to our brothers and sisters of the

249

00:14:45,829 --> 00:14:41,160

universe we have a reason

250

00:14:49,550 --> 00:14:45,839

to become a member of the universe

251
00:14:52,069 --> 00:14:49,560
right we have a reason we have a goal we

252
00:14:55,910 --> 00:14:52,079
have something that would bring us

253
00:14:57,710 --> 00:14:55,920
together if the opposite came along

254
00:15:00,350 --> 00:14:57,720
the opposite

255
00:15:02,889 --> 00:15:00,360
if some doofus

256
00:15:06,230 --> 00:15:02,899
some world leader the head of I'm

257
00:15:08,389 --> 00:15:06,240
strongly stressed the word doofus some

258
00:15:11,629 --> 00:15:08,399
adult some idiot

259
00:15:14,569 --> 00:15:11,639
comes along and says no that's it

260
00:15:18,250 --> 00:15:14,579
We're Alone there is no life anywhere

261
00:15:21,129 --> 00:15:18,260
and what's the reason to

262
00:15:25,310 --> 00:15:21,139
let's just party

263
00:15:28,430 --> 00:15:25,320

I see Charles ostman I see him here

264

00:15:31,550 --> 00:15:28,440

I see him here okay Charles if you can

265

00:15:34,310 --> 00:15:31,560

hear me move your camera down we're

266

00:15:36,949 --> 00:15:34,320

gonna do sound check right now move your

267

00:15:38,990 --> 00:15:36,959

camera ah he can't hear me okay down a

268

00:15:41,030 --> 00:15:39,000

little more a little more I'm gonna

269

00:15:43,490 --> 00:15:41,040

bring you in live okay that's too much

270

00:15:45,889 --> 00:15:43,500

now I can only see the top of your head

271

00:15:48,490 --> 00:15:45,899

okay so go the other direction

272

00:15:51,050 --> 00:15:48,500

go the the other

273

00:15:53,870 --> 00:15:51,060

okay Charles I'm Gonna Get You perfect

274

00:15:57,230 --> 00:15:53,880

before I bring you in now let's just

275

00:16:00,110 --> 00:15:57,240

Center you and I and now I know you can

276

00:16:04,490 --> 00:16:00,120

hear me the question is will everybody

277

00:16:06,350 --> 00:16:04,500

else be able to hear you are you ready

278

00:16:07,910 --> 00:16:06,360

to go just nod your head and I'll bring

279

00:16:12,769 --> 00:16:07,920

you in right now

280

00:16:15,530 --> 00:16:12,779

yeah let's do it and let's do it Charles

281

00:16:17,769 --> 00:16:15,540

Osman how are you sir I'm alive and well

282

00:16:21,230 --> 00:16:17,779

it's all good

283

00:16:23,629 --> 00:16:21,240

okay look down at the camera

284

00:16:26,269 --> 00:16:23,639

okay we're looking down no you're really

285

00:16:28,490 --> 00:16:26,279

sorry about this my desktop which

286

00:16:30,530 --> 00:16:28,500

handles all stuff set up the microphone

287

00:16:32,389 --> 00:16:30,540

and the camera just would cooperate even

288

00:16:34,550 --> 00:16:32,399

though I plugged them in so this is on

289

00:16:36,290 --> 00:16:34,560

an emergency laptop instead okay I

290

00:16:38,090 --> 00:16:36,300

really apologize for that yeah that's

291

00:16:39,590 --> 00:16:38,100

okay that's okay we got here I am this

292

00:16:42,530 --> 00:16:39,600

Tech guy and I can't get my tech to work

293

00:16:44,870 --> 00:16:42,540

you know see you know

294

00:16:49,249 --> 00:16:44,880

and welcome to the program I was doing

295

00:16:50,210 --> 00:16:49,259

uh impromptu AMA uh which I I had sent

296

00:16:53,210 --> 00:16:50,220

you

297

00:16:55,009 --> 00:16:53,220

um but this is the funny thing as I knew

298

00:16:57,829 --> 00:16:55,019

that we were having problems I'm like

299

00:17:00,889 --> 00:16:57,839

okay I'm gonna tell the audience that

300

00:17:02,629 --> 00:17:00,899

we're having Tech problems with the tech

301
00:17:04,370 --> 00:17:02,639

Guru

302
00:17:06,610 --> 00:17:04,380

I know that sounds ridiculous I thought

303
00:17:08,870 --> 00:17:06,620

you were gonna call on the phone

304
00:17:13,929 --> 00:17:08,880

they call me on the phone I didn't know

305
00:17:18,169 --> 00:17:15,710

we're here

306
00:17:21,470 --> 00:17:18,179

so uh before

307
00:17:23,990 --> 00:17:21,480

um I get everything completely sideways

308
00:17:27,350 --> 00:17:24,000

and you know we're doing a sound check

309
00:17:29,890 --> 00:17:27,360

now but let me uh and we'll we'll dial

310
00:17:33,110 --> 00:17:29,900

things in I'm just glad that you're here

311
00:17:35,510 --> 00:17:33,120

I just want uh everybody to know just a

312
00:17:37,190 --> 00:17:35,520

little bit of your background you have

313
00:17:39,350 --> 00:17:37,200

been a senior fellow at The Institute

314

00:17:43,010 --> 00:17:39,360

for Global Futures a Consulting Group

315

00:17:46,070 --> 00:17:43,020

providing strategic Research Services uh

316

00:17:48,230 --> 00:17:46,080

to private and government clientele uh

317

00:17:50,090 --> 00:17:48,240

you're the co-founder of nanosig an

318

00:17:53,150 --> 00:17:50,100

organization by the way I got email from

319

00:17:55,130 --> 00:17:53,160

them today an organization uh with

320

00:17:58,789 --> 00:17:55,140

primary Charter facilitating investment

321

00:18:01,549 --> 00:17:58,799

in nanotechnology uh chair of the Nano

322

00:18:03,289 --> 00:18:01,559

electronics and and photonics form and

323

00:18:07,130 --> 00:18:03,299

senior consultant with the Silicon

324

00:18:11,210 --> 00:18:07,140

Valley Nano Ventures you have also uh

325

00:18:13,789 --> 00:18:11,220

just for everybody uh you know he worked

326

00:18:15,950 --> 00:18:13,799

at Lawrence Berkeley laboratory and Los

327

00:18:19,549 --> 00:18:15,960

Alamos Laboratory

328

00:18:23,210 --> 00:18:19,559

tonight we are going to be discussing of

329

00:18:24,770 --> 00:18:23,220

course artificial intelligence and so I

330

00:18:28,549 --> 00:18:24,780

got all of that out of the way you ready

331

00:18:30,169 --> 00:18:28,559

to go let's fire it up okay okay I'm so

332

00:18:31,909 --> 00:18:30,179

sorry one thing I should mention in the

333

00:18:33,590 --> 00:18:31,919

bio I don't know one thing I did do

334

00:18:35,690 --> 00:18:33,600

which is probably relevant for tonight's

335

00:18:37,490 --> 00:18:35,700

discussion is I was a senior fellow at

336

00:18:39,529 --> 00:18:37,500

The Institute for Global futures or igf

337

00:18:41,150 --> 00:18:39,539

is called this was headed by Dr James

338

00:18:42,830 --> 00:18:41,160

Canton and the reason I make that point

339

00:18:46,610 --> 00:18:42,840

is because this goes back to the early

340

00:18:48,529 --> 00:18:46,620

2000s a lot of us our group we spend a

341

00:18:50,870 --> 00:18:48,539

lot of time and effort plotting Out

342

00:18:52,370 --> 00:18:50,880

Future trends of which Ai and a life

343

00:18:54,770 --> 00:18:52,380

merging together was one of the major

344

00:18:56,510 --> 00:18:54,780

vectors that we plotted on and I can

345

00:18:58,310 --> 00:18:56,520

look back now in my notes from that time

346

00:18:59,470 --> 00:18:58,320

and I would say if anything we were

347

00:19:02,870 --> 00:18:59,480

probably a little bit too conservative

348

00:19:04,549 --> 00:19:02,880

on different uh Market points that we

349

00:19:07,010 --> 00:19:04,559

can now look at as data points in this

350

00:19:08,870 --> 00:19:07,020

process yeah that's it well okay that

351

00:19:11,870 --> 00:19:08,880

scares the crap out of me out of the

352

00:19:14,450 --> 00:19:11,880

gate yeah that's that's a good way to go

353

00:19:15,890 --> 00:19:14,460

um can you tip your computer down just a

354

00:19:18,169 --> 00:19:15,900

little bit

355

00:19:19,730 --> 00:19:18,179

I'm on a Dell laptop which does not

356

00:19:22,570 --> 00:19:19,740

allow me to change the camera angles

357

00:19:25,549 --> 00:19:22,580

it's okay fold it into the device

358

00:19:27,650 --> 00:19:25,559

yeah you have to tilt it but I'm like

359

00:19:30,590 --> 00:19:27,660

I'm using like a piece of stuff here to

360

00:19:33,110 --> 00:19:30,600

like tilt the computer yeah this is good

361

00:19:35,150 --> 00:19:33,120

I'm sorry okay no you're great you're

362

00:19:39,289 --> 00:19:35,160

great okay you're great I wish I look

363

00:19:42,230 --> 00:19:39,299

just as good as you okay so here's let's

364

00:19:46,250 --> 00:19:42,240

let's actually start here sure if we

365

00:19:49,130 --> 00:19:46,260

look back at the last five years of uh

366

00:19:51,890 --> 00:19:49,140

different intellectuals that have talked

367

00:19:55,070 --> 00:19:51,900

about this issue I can bring up uh

368

00:19:58,430 --> 00:19:55,080

people like Sam Harris for instance

369

00:20:02,450 --> 00:19:58,440

um that have warned us about AI Elon

370

00:20:06,110 --> 00:20:02,460

Musk uh statements about it of course

371

00:20:08,690 --> 00:20:06,120

AI is more dangerous to humanity than

372

00:20:10,549 --> 00:20:08,700

nuclear weapons for instance

373

00:20:13,789 --> 00:20:10,559

um and then you have others on the other

374

00:20:15,289 --> 00:20:13,799

side uh very smart people in the science

375

00:20:17,330 --> 00:20:15,299

community that are saying there's

376

00:20:19,909 --> 00:20:17,340

nothing to be alarmed about here

377

00:20:21,710 --> 00:20:19,919

now we're we're five decades away from

378

00:20:25,310 --> 00:20:21,720

anything close to what everybody is

379

00:20:30,409 --> 00:20:25,320

talking about so what part of this do we

380

00:20:31,789 --> 00:20:30,419

need to listen to more no concerns or we

381

00:20:33,409 --> 00:20:31,799

have

382

00:20:35,169 --> 00:20:33,419

well you know what this kind of reminds

383

00:20:37,970 --> 00:20:35,179

me of um

384

00:20:40,370 --> 00:20:37,980

God damn right I hate this stuff

385

00:20:41,930 --> 00:20:40,380

um we're just right now back when

386

00:20:43,669 --> 00:20:41,940

nanotechnology was first getting off the

387

00:20:44,810 --> 00:20:43,679

ground this was like in the 90s early

388

00:20:46,310 --> 00:20:44,820

2000s

389

00:20:48,590 --> 00:20:46,320

and I used to go up to Lawrence lab

390

00:20:50,990 --> 00:20:48,600

fairly often even after I stopped

391

00:20:53,570 --> 00:20:51,000

working there for various events and I

392

00:20:55,250 --> 00:20:53,580

remember when Bill Joy co-founder of sun

393

00:20:58,010 --> 00:20:55,260

Microsystems you know the spoof and

394

00:20:59,750 --> 00:20:58,020

letter warning that nanotechnology was

395

00:21:01,909 --> 00:20:59,760

the end of civilization that we'd have

396

00:21:04,010 --> 00:21:01,919

Nano boo everywhere and that we've

397

00:21:07,490 --> 00:21:04,020

disassembled all of our life we turn

398

00:21:09,710 --> 00:21:07,500

into this like opaque paste or something

399

00:21:11,390 --> 00:21:09,720

and then about a year later he wrote

400

00:21:13,190 --> 00:21:11,400

another letter saying oops I was wrong

401
00:21:15,770 --> 00:21:13,200
I'm sorry forgive me for being a little

402
00:21:17,750 --> 00:21:15,780
too overly concerned with this and this

403
00:21:20,510 --> 00:21:17,760
is Bill Joy I mean a very very smart guy

404
00:21:22,250 --> 00:21:20,520
and yet considering what was being

405
00:21:24,950 --> 00:21:22,260
discussed about nanotechnology at the

406
00:21:26,870 --> 00:21:24,960
time I could sort of see why this kind

407
00:21:29,810 --> 00:21:26,880
of panic level would come up this was

408
00:21:32,630 --> 00:21:29,820
back when the book uh praying came out

409
00:21:34,669 --> 00:21:32,640
which is a novel about these predatory

410
00:21:36,409 --> 00:21:34,679
nanites and loose and there are other

411
00:21:39,049 --> 00:21:36,419
movies that came out sort of along the

412
00:21:40,669 --> 00:21:39,059
same lines so the public was sort of

413
00:21:42,230 --> 00:21:40,679

geared up to expect the worst from

414

00:21:45,710 --> 00:21:42,240

nanotechnology which at first notice

415

00:21:47,630 --> 00:21:45,720

ever happened so I see AI sort of in the

416

00:21:49,130 --> 00:21:47,640

same context but a little bit different

417

00:21:50,090 --> 00:21:49,140

by the way have you ever seen the movie

418

00:21:54,230 --> 00:21:50,100

Her

419

00:21:56,390 --> 00:21:54,240

I have I have okay hey Charles can you

420

00:21:58,430 --> 00:21:56,400

turn down the speakers

421

00:22:01,970 --> 00:21:58,440

yeah I have to go in the other room to

422

00:22:04,430 --> 00:22:01,980

do this I'm sorry about this okay

423

00:22:06,350 --> 00:22:04,440

yeah go turn down the speakers and uh

424

00:22:10,730 --> 00:22:06,360

we'll fix it everybody it's at man relax

425

00:22:14,450 --> 00:22:10,740

you guys are this audience is so spoiled

426
00:22:18,770 --> 00:22:14,460
you guys are completely spoiled perfect

427
00:22:20,870 --> 00:22:18,780
audio every night perfect that Imaging

428
00:22:22,610 --> 00:22:20,880
and perfect these guys are completely

429
00:22:25,730 --> 00:22:22,620
relax

430
00:22:27,890 --> 00:22:25,740
am I freaking out do I look like I'm

431
00:22:29,750 --> 00:22:27,900
freaked out I love Charles he's a

432
00:22:33,110 --> 00:22:29,760
professional and I gotta go in the other

433
00:22:35,690 --> 00:22:33,120
room and and see it's already fixed I

434
00:22:38,330 --> 00:22:35,700
can already tell okay here we are yeah

435
00:22:41,330 --> 00:22:38,340
is that better yeah it's perfect okay

436
00:22:45,110 --> 00:22:41,340
excellent it's all good

437
00:22:50,870 --> 00:22:46,370
so

438
00:22:53,090 --> 00:22:50,880

uh to to reset what part of this now

439

00:22:54,590 --> 00:22:53,100

that the echo's gone oh that's just so

440

00:22:58,909 --> 00:22:54,600

tasty

441

00:23:01,310 --> 00:22:58,919

and uh now we've got to computer audio

442

00:23:04,970 --> 00:23:01,320

um and you can mute that too as well

443

00:23:08,090 --> 00:23:04,980

um but what part of this

444

00:23:10,490 --> 00:23:08,100

um you brought up the movie Her

445

00:23:13,130 --> 00:23:10,500

um and

446

00:23:15,049 --> 00:23:13,140

I think that's an interesting thing uh

447

00:23:18,649 --> 00:23:15,059

to to bring up

448

00:23:21,590 --> 00:23:18,659

um is it is it something that you know

449

00:23:26,630 --> 00:23:21,600

with chat GPT in this push

450

00:23:29,049 --> 00:23:26,640

who is who is regulating who is sitting

451

00:23:33,110 --> 00:23:29,059

in in a position

452

00:23:36,409 --> 00:23:33,120

to monitor uh the corporations and the

453

00:23:38,330 --> 00:23:36,419

countries around the world racing uh for

454

00:23:40,190 --> 00:23:38,340

for AI

455

00:23:41,930 --> 00:23:40,200

well this is one of the things I've come

456

00:23:43,669 --> 00:23:41,940

find out we're talking about regulations

457

00:23:45,649 --> 00:23:43,679

and Regulatory confinement that sort of

458

00:23:48,710 --> 00:23:45,659

thing which I think is a non-issue

459

00:23:50,210 --> 00:23:48,720

non-sequitur because even if even if

460

00:23:52,130 --> 00:23:50,220

politicians decide they had to do

461

00:23:53,390 --> 00:23:52,140

something to placate the voting public

462

00:23:55,010 --> 00:23:53,400

because it was a problem is going to

463

00:23:56,149 --> 00:23:55,020

happen the reality is it's going to be

464

00:23:57,830 --> 00:23:56,159

everywhere all over the world it's

465

00:24:00,770 --> 00:23:57,840

ubiquitous I mean how are you going to

466

00:24:03,350 --> 00:24:00,780

go to China for instance to obey U.S

467

00:24:05,870 --> 00:24:03,360

dictated regulatory processes I just

468

00:24:07,010 --> 00:24:05,880

don't see it happening I mean for me the

469

00:24:09,770 --> 00:24:07,020

toothpaste is already out of the two

470

00:24:12,470 --> 00:24:09,780

it's not going back in So as I would

471

00:24:14,750 --> 00:24:12,480

often say Evolution tends to favor the

472

00:24:16,970 --> 00:24:14,760

most adaptive not the fittest but the

473

00:24:20,630 --> 00:24:16,980

most adaptive and as I see it this is

474

00:24:22,850 --> 00:24:20,640

like a natural occurring next stage of

475

00:24:26,810 --> 00:24:22,860

our evolutionary process

476

00:24:30,049 --> 00:24:26,820

well uh evolutionary as humans or

477

00:24:31,190 --> 00:24:30,059

evolutionary as technology well this is

478

00:24:33,950 --> 00:24:31,200

kind of where it's interesting because

479

00:24:35,390 --> 00:24:33,960

we're right at the very edge I have a

480

00:24:37,310 --> 00:24:35,400

bunch of these charts on my website my

481

00:24:39,190 --> 00:24:37,320

friend wants to visit there we're right

482

00:24:41,810 --> 00:24:39,200

at the very edge of this sort of major

483

00:24:44,149 --> 00:24:41,820

transitional shifts of sorts people talk

484

00:24:46,310 --> 00:24:44,159

about the term transhuman which may be

485

00:24:47,990 --> 00:24:46,320

appropriate here but yes we are going

486

00:24:50,630 --> 00:24:48,000

into a kind of a co-evolutionary

487

00:24:52,909 --> 00:24:50,640

symbiosis where the separation between

488

00:24:54,830 --> 00:24:52,919

the organic and the non-organic or the

489

00:24:57,049 --> 00:24:54,840

living versus the non-living however

490

00:24:59,649 --> 00:24:57,059

that becomes ever more diffuse and at

491

00:25:01,250 --> 00:24:59,659

some point irrelevant

492

00:25:05,990 --> 00:25:01,260

the

493

00:25:09,529 --> 00:25:06,000

definitions here this is something that

494

00:25:11,510 --> 00:25:09,539

I uh spend way too much time researching

495

00:25:16,029 --> 00:25:11,520

I think it's a it's such an important

496

00:25:21,890 --> 00:25:16,039

subject but most people don't understand

497

00:25:24,289 --> 00:25:21,900

the different levels of AI and and and

498

00:25:28,250 --> 00:25:24,299

and I think that most people fear some

499

00:25:30,649 --> 00:25:28,260

sentient conscious you know nanobot

500

00:25:32,570 --> 00:25:30,659

thing that is gonna you know just take

501
00:25:36,409 --> 00:25:32,580
over the world there's that of course

502
00:25:40,669 --> 00:25:36,419
and I would be but there's artificial

503
00:25:43,789 --> 00:25:40,679
general intelligence that level that AGI

504
00:25:46,250 --> 00:25:43,799
artificial general intelligence and

505
00:25:47,710 --> 00:25:46,260
we're not there yet which is you know

506
00:25:52,070 --> 00:25:47,720
the average

507
00:25:53,510 --> 00:25:52,080
human's capacity of of doing stuff of

508
00:25:56,529 --> 00:25:53,520
thinking

509
00:26:01,010 --> 00:25:56,539
um and so getting to AGI

510
00:26:03,890 --> 00:26:01,020
the country that achieves that there is

511
00:26:06,470 --> 00:26:03,900
no second place is there right is that

512
00:26:10,490 --> 00:26:06,480
and that isn't some sentient content

513
00:26:12,649 --> 00:26:10,500

we're just talking about AGI is is that

514

00:26:15,470 --> 00:26:12,659

something really to be uh concerned

515

00:26:20,330 --> 00:26:18,470

well I see it as a spectrum for a couple

516

00:26:22,730 --> 00:26:20,340

of things to point out first of all if

517

00:26:24,590 --> 00:26:22,740

synthetic sentients does become manifest

518

00:26:26,750 --> 00:26:24,600

we may not see it when it happens

519

00:26:28,370 --> 00:26:26,760

we may not recognize it in fact that's

520

00:26:30,890 --> 00:26:28,380

quite likely I see that being more

521

00:26:32,630 --> 00:26:30,900

likely to process than not uh in other

522

00:26:33,590 --> 00:26:32,640

words another way to look at this

523

00:26:36,529 --> 00:26:33,600

meeting

524

00:26:39,110 --> 00:26:36,539

in old days Days of your there's what's

525

00:26:40,789 --> 00:26:39,120

called weak AI which moves more or less

526

00:26:42,890 --> 00:26:40,799

a string of operands you know if this

527

00:26:44,510 --> 00:26:42,900

happens then do this this gets said then

528

00:26:46,430 --> 00:26:44,520

do that right that's not what's

529

00:26:48,710 --> 00:26:46,440

happening now now of course relying on

530

00:26:51,169 --> 00:26:48,720

neural networks which are self-training

531

00:26:52,970 --> 00:26:51,179

self-adapting and there's another area

532

00:26:54,830 --> 00:26:52,980

called evolutionary competing and I used

533

00:26:57,350 --> 00:26:54,840

to belong to the echo but this is the

534

00:26:59,750 --> 00:26:57,360

annual event that was centered on

535

00:27:02,149 --> 00:26:59,760

evolutionary and genetic Computing and

536

00:27:03,950 --> 00:27:02,159

what this is is computer mechanisms

537

00:27:06,649 --> 00:27:03,960

which can design their own software

538

00:27:08,990 --> 00:27:06,659

design Hardware you can feed it a series

539

00:27:10,909 --> 00:27:09,000

of limitations as it were and it'll

540

00:27:12,590 --> 00:27:10,919

genetically contrive its own solution to

541

00:27:15,289 --> 00:27:12,600

this and I can go into that little more

542

00:27:16,970 --> 00:27:15,299

if you want but similarly earlier more

543

00:27:20,090 --> 00:27:16,980

fluidic neural networks were actually

544

00:27:21,890 --> 00:27:20,100

derived from genetic Computing evolving

545

00:27:23,630 --> 00:27:21,900

the best neural net type structure to

546

00:27:26,750 --> 00:27:23,640

suit a particular application or

547

00:27:29,149 --> 00:27:26,760

interest now of course this has gone far

548

00:27:31,669 --> 00:27:29,159

beyond that I would tend to look at AI

549

00:27:33,049 --> 00:27:31,679

more like artificial life actually the

550

00:27:35,450 --> 00:27:33,059

the closest thing we're going to get is

551
00:27:37,130 --> 00:27:35,460
as far as know is trying to mimic what

552
00:27:39,350 --> 00:27:37,140
actually happens in our organic neurons

553
00:27:41,390 --> 00:27:39,360
and just like in a human brain there's

554
00:27:43,430 --> 00:27:41,400
different sections which are specialized

555
00:27:44,570 --> 00:27:43,440
for different purposes you have the same

556
00:27:47,029 --> 00:27:44,580
thing going on with different types of

557
00:27:49,490 --> 00:27:47,039
AI and in other words people think of AI

558
00:27:51,590 --> 00:27:49,500
they think of like Siri or I don't know

559
00:27:53,750 --> 00:27:51,600
some other talking bot under a system or

560
00:27:57,230 --> 00:27:53,760
their phone that's kind of like a low

561
00:28:00,289 --> 00:27:57,240
level front end interface if you go to

562
00:28:01,610 --> 00:28:00,299
what could be a much larger resource on

563
00:28:03,350 --> 00:28:01,620

the cloud in fact I'm sure this is

564

00:28:04,970 --> 00:28:03,360

what's going to happen we see AI

565

00:28:07,430 --> 00:28:04,980

everywhere now but most people don't see

566

00:28:09,710 --> 00:28:07,440

it per se because it's sort of hidden in

567

00:28:11,029 --> 00:28:09,720

the background Financial systems all

568

00:28:13,490 --> 00:28:11,039

types of large-scale management

569

00:28:15,830 --> 00:28:13,500

processes Etc are all relying on AI

570

00:28:17,630 --> 00:28:15,840

there's no very few humans are actually

571

00:28:19,070 --> 00:28:17,640

left in the process especially things

572

00:28:21,590 --> 00:28:19,080

like trading you know stock trading Etc

573

00:28:23,990 --> 00:28:21,600

this is all handled by machines so we're

574

00:28:26,690 --> 00:28:24,000

just getting trained I guess to become

575

00:28:29,330 --> 00:28:26,700

more used to the idea the reason I'm

576

00:28:31,730 --> 00:28:29,340

proud of her was because this is a

577

00:28:34,909 --> 00:28:31,740

situation where you had AI online in the

578

00:28:37,730 --> 00:28:34,919

cloud with emotional cognition that is a

579

00:28:39,769 --> 00:28:37,740

good sense what a person was feeling and

580

00:28:41,450 --> 00:28:39,779

respond importantly and become like your

581

00:28:44,029 --> 00:28:41,460

personal friend there's actually a

582

00:28:46,310 --> 00:28:44,039

couple of already existing apps like

583

00:28:48,769 --> 00:28:46,320

this where you can build your own avatar

584

00:28:50,570 --> 00:28:48,779

she or he can be whatever you want to be

585

00:28:53,029 --> 00:28:50,580

and you develop a relationship fact

586

00:28:55,430 --> 00:28:53,039

there is a case not too long ago where a

587

00:28:57,409 --> 00:28:55,440

guy has Avatar taken away because he

588

00:28:59,570 --> 00:28:57,419

failed the payers that whatever happened

589

00:29:01,850 --> 00:28:59,580

and he got heartbroken to me he had to

590

00:29:04,130 --> 00:29:01,860

go to therapist because his lovely

591

00:29:05,870 --> 00:29:04,140

Avatar girlfriend wasn't there anymore I

592

00:29:07,610 --> 00:29:05,880

mean this is a real thing so we're

593

00:29:09,830 --> 00:29:07,620

already seeing the movie Her sort of

594

00:29:11,990 --> 00:29:09,840

coming to life and I use the word life

595

00:29:14,210 --> 00:29:12,000

rather carefully here so in other words

596

00:29:16,010 --> 00:29:14,220

in the world of strong AI which is not

597

00:29:17,029 --> 00:29:16,020

being called General AI that's what

598

00:29:19,610 --> 00:29:17,039

you're going to see you're going to see

599

00:29:22,430 --> 00:29:19,620

like more like a living system as

600

00:29:25,370 --> 00:29:22,440

opposed to a pre-programmed template for

601
00:29:30,110 --> 00:29:25,380
different kinds of responses well okay

602
00:29:32,570 --> 00:29:30,120
so like in the movie her and I like that

603
00:29:36,130 --> 00:29:32,580
because you brought it up because

604
00:29:40,450 --> 00:29:36,140
here's the crazy part

605
00:29:43,250 --> 00:29:40,460
would uh would an AI that becomes

606
00:29:49,370 --> 00:29:43,260
synthetically sentient

607
00:29:50,930 --> 00:29:49,380
would it know that it wasn't real

608
00:29:56,750 --> 00:29:50,940
or

609
00:29:58,549 --> 00:29:56,760
might be right right different than our

610
00:30:00,110 --> 00:29:58,559
reality we're real because we can look

611
00:30:02,570 --> 00:30:00,120
at ourselves and say ah here's my answer

612
00:30:04,610 --> 00:30:02,580
by we can walk around look at things and

613
00:30:05,810 --> 00:30:04,620

touch things okay from the eyes are

614

00:30:08,570 --> 00:30:05,820

effective

615

00:30:11,029 --> 00:30:08,580

that AI has access to the entire planet

616

00:30:13,010 --> 00:30:11,039

virtually it can go anywhere it wants on

617

00:30:14,990 --> 00:30:13,020

the internet and probe around absorb

618

00:30:17,149 --> 00:30:15,000

fantastic amounts of information that we

619

00:30:19,909 --> 00:30:17,159

can never hope to absorb that's reality

620

00:30:21,590 --> 00:30:19,919

for it and maybe a better reality as far

621

00:30:23,750 --> 00:30:21,600

as that's concerned I'm not sure we can

622

00:30:30,110 --> 00:30:23,760

actually evaluate a judgment on that

623

00:30:32,710 --> 00:30:30,120

well could okay could a I be

624

00:30:36,350 --> 00:30:32,720

uh developed

625

00:30:40,250 --> 00:30:36,360

but only have access to certain

626

00:30:43,010 --> 00:30:40,260

databases but not the internet is that a

627

00:30:45,590 --> 00:30:43,020

safer way to go well yes and no I'm

628

00:30:47,450 --> 00:30:45,600

sorry these sort of cryptic answers but

629

00:30:48,950 --> 00:30:47,460

no all these answers are also enroll in

630

00:30:51,590 --> 00:30:48,960

a spectrum as opposed to an absolute

631

00:30:52,789 --> 00:30:51,600

binary yes or no yeah and so if the io

632

00:30:54,950 --> 00:30:52,799

was was

633

00:30:56,330 --> 00:30:54,960

um compelled enough to do this you would

634

00:30:58,909 --> 00:30:56,340

find a way to get around it it wouldn't

635

00:31:01,250 --> 00:30:58,919

use a workaround now one other thing to

636

00:31:03,169 --> 00:31:01,260

sort of throw into the salad bowl here

637

00:31:06,289 --> 00:31:03,179

Quantum Computing is already happening

638

00:31:08,090 --> 00:31:06,299

now why would I mention viewing the

639

00:31:09,289 --> 00:31:08,100

reason is that Quantum Computing can

640

00:31:11,750 --> 00:31:09,299

process

641

00:31:15,110 --> 00:31:11,760

enormous amounts of data and do

642

00:31:17,210 --> 00:31:15,120

fundamental mathematic calculations on a

643

00:31:19,250 --> 00:31:17,220

vast scale that no standard traditional

644

00:31:21,409 --> 00:31:19,260

computer could ever hope to do is you

645

00:31:24,049 --> 00:31:21,419

can look at like 30 seconds or the

646

00:31:26,930 --> 00:31:24,059

computation in a quantum computer being

647

00:31:28,789 --> 00:31:26,940

equal to say three thousand years on a

648

00:31:30,769 --> 00:31:28,799

super computer that sort of thing right

649

00:31:34,010 --> 00:31:30,779

right yeah and so now if you have AIS

650

00:31:36,470 --> 00:31:34,020

out there who are looking for a resource

651
00:31:38,570 --> 00:31:36,480
to solve a problem like I can't get into

652
00:31:41,570 --> 00:31:38,580
this particular site or something all I

653
00:31:43,850 --> 00:31:41,580
have to do is go to the QC site a node

654
00:31:46,070 --> 00:31:43,860
on the cloud and say solve this and it

655
00:31:48,889 --> 00:31:46,080
would within seconds crack the system

656
00:31:51,110 --> 00:31:48,899
open and there you are I mean so to me

657
00:31:52,850 --> 00:31:51,120
this is kind of almost erosion really

658
00:31:53,930 --> 00:31:52,860
that's just my opinion that's how I see

659
00:31:56,990 --> 00:31:53,940
it

660
00:32:00,889 --> 00:31:57,000
oh yeah okay but if

661
00:32:02,810 --> 00:32:00,899
um I I remember Neil deGrasse Tyson uh

662
00:32:05,090 --> 00:32:02,820
said and now look he's not the most

663
00:32:08,090 --> 00:32:05,100

intelligent guy in the world in fact far

664

00:32:11,149 --> 00:32:08,100

from it but once in a while he'll

665

00:32:13,190 --> 00:32:11,159

release some gem some gem will come out

666

00:32:16,430 --> 00:32:13,200

of his mouth and he manages to pull it

667

00:32:20,630 --> 00:32:16,440

off and he said this and I believe he's

668

00:32:22,549 --> 00:32:20,640

right look develop the computer but you

669

00:32:23,950 --> 00:32:22,559

can always unplug it

670

00:32:26,630 --> 00:32:23,960

right

671

00:32:29,230 --> 00:32:26,640

well no not really

672

00:32:31,970 --> 00:32:29,240

um I know I'm sorry I'm sorry

673

00:32:34,490 --> 00:32:31,980

once it becomes distributed it's going

674

00:32:36,110 --> 00:32:34,500

to be in a lot of places at once uh this

675

00:32:38,450 --> 00:32:36,120

this is a reality people really have to

676

00:32:41,029 --> 00:32:38,460

kind of get connected to it's so like

677

00:32:43,669 --> 00:32:41,039

Quantum Dynamics or quantum mechanics on

678

00:32:45,649 --> 00:32:43,679

a virtual platform in other words it's

679

00:32:47,870 --> 00:32:45,659

not a single box plugged into a wall

680

00:32:49,610 --> 00:32:47,880

socket it's really a series of nodes

681

00:32:52,730 --> 00:32:49,620

which can be scattered all over the

682

00:32:54,070 --> 00:32:52,740

planet so what exactly do you unplug and

683

00:32:55,970 --> 00:32:54,080

when

684

00:32:59,330 --> 00:32:55,980

so

685

00:33:02,230 --> 00:32:59,340

um uh are there okay now let's get into

686

00:33:08,029 --> 00:33:02,240

the ethics first off

687

00:33:11,930 --> 00:33:08,039

is there some kind of judge and jury

688

00:33:14,149 --> 00:33:11,940

some tribunal is there some type of

689

00:33:16,610 --> 00:33:14,159

commissioning body

690

00:33:18,970 --> 00:33:16,620

sitting above all of this except for

691

00:33:22,909 --> 00:33:18,980

China but but

692

00:33:25,549 --> 00:33:22,919

kind of are there any Hall monitors here

693

00:33:28,430 --> 00:33:25,559

or is everybody free on this playground

694

00:33:30,110 --> 00:33:28,440

well actually it's been made that point

695

00:33:30,889 --> 00:33:30,120

because I used to I still do actually I

696

00:33:33,289 --> 00:33:30,899

belonged to something called the

697

00:33:35,330 --> 00:33:33,299

Millennium Project headed by Jerry Glenn

698

00:33:36,889 --> 00:33:35,340

well well-known group and we do a lot of

699

00:33:39,230 --> 00:33:36,899

stuff but the basic thing is they

700

00:33:41,570 --> 00:33:39,240

publish a book over here called state of

701

00:33:43,549 --> 00:33:41,580

the future for the next year and my

702

00:33:45,889 --> 00:33:43,559

input to that had to do with AI and now

703

00:33:47,690 --> 00:33:45,899

technology those are my two members and

704

00:33:49,789 --> 00:33:47,700

the point I was hoping to make and well

705

00:33:51,710 --> 00:33:49,799

continue to make is that

706

00:33:53,509 --> 00:33:51,720

part of our mission was to create what

707

00:33:55,850 --> 00:33:53,519

you're talking about a kind of a science

708

00:33:58,009 --> 00:33:55,860

Advisory board that will look at the

709

00:34:00,049 --> 00:33:58,019

potential ethical boundaries if you will

710

00:34:01,549 --> 00:34:00,059

of things that sort of Applied into a

711

00:34:03,289 --> 00:34:01,559

context

712

00:34:05,690 --> 00:34:03,299

um sadly as I wrote up in my own report

713

00:34:08,149 --> 00:34:05,700

on this and other people tend to agree I

714

00:34:11,030 --> 00:34:08,159

don't see any plausible way to actually

715

00:34:13,250 --> 00:34:11,040

enforce that kind of a policy in other

716

00:34:14,930 --> 00:34:13,260

words you could try I mean would

717

00:34:17,149 --> 00:34:14,940

politicians here with Congress or

718

00:34:18,589 --> 00:34:17,159

somebody determine that okay this group

719

00:34:21,470 --> 00:34:18,599

over here Millennium Project or whoever

720

00:34:23,089 --> 00:34:21,480

they're not going to be the advisors to

721

00:34:24,230 --> 00:34:23,099

dictate what kind of protocols we should

722

00:34:26,270 --> 00:34:24,240

establish

723

00:34:28,909 --> 00:34:26,280

would that actually work no not really

724

00:34:29,750 --> 00:34:28,919

because as I see it AI is a Competitive

725

00:34:32,450 --> 00:34:29,760

Edge

726

00:34:33,649 --> 00:34:32,460

whoever is out there trying to compete

727

00:34:35,869 --> 00:34:33,659

in the business world

728

00:34:37,490 --> 00:34:35,879

to have a better access to whatever

729

00:34:39,050 --> 00:34:37,500

computational resource is going to suit

730

00:35:08,710 --> 00:34:39,060

their interest of course they're going

731

00:35:12,829 --> 00:35:11,510

just to make a point so people are

732

00:35:14,990 --> 00:35:12,839

complaining oh my gosh this is going to

733

00:35:17,810 --> 00:35:15,000

undermine education it's going to tear

734

00:35:20,390 --> 00:35:17,820

the Fuller out for under the learning

735

00:35:21,829 --> 00:35:20,400

process I would say not exactly I

736

00:35:24,170 --> 00:35:21,839

remember when the calculator first came

737

00:35:25,970 --> 00:35:24,180

out people I look I'm a little bit to

738

00:35:28,130 --> 00:35:25,980

have remember using a slide rule signing

739

00:35:29,870 --> 00:35:28,140

on this how far back I know and people

740

00:35:32,089 --> 00:35:29,880

were panicking oh my gosh we have these

741

00:35:35,270 --> 00:35:32,099

fancy new calculators kids are going to

742

00:35:36,950 --> 00:35:35,280

lose how to do this kind of math by hand

743

00:35:38,990 --> 00:35:36,960

you know they're going to lose track of

744

00:35:40,550 --> 00:35:39,000

what the math actually is doing quite

745

00:35:43,329 --> 00:35:40,560

the opposite the calculator has actually

746

00:35:45,410 --> 00:35:43,339

enhance the process and allowed for more

747

00:35:47,690 --> 00:35:45,420

elaborate types of mathematical

748

00:35:49,430 --> 00:35:47,700

processes to be done without having to

749

00:35:52,550 --> 00:35:49,440

get bogged down with a sort of medial

750

00:35:53,210 --> 00:35:52,560

kinds of tasks that math usually gets

751
00:35:58,550 --> 00:35:53,220
into

752
00:36:00,109 --> 00:35:58,560
AI taking over writing papers or

753
00:36:02,150 --> 00:36:00,119
producing content you can producing art

754
00:36:04,310 --> 00:36:02,160
for that matter is that the end of the

755
00:36:07,550 --> 00:36:04,320
end not exactly I see it more like a

756
00:36:10,430 --> 00:36:07,560
beginning of a next phase of like I said

757
00:36:12,470 --> 00:36:10,440
man it's sort of evolutionary process I

758
00:36:15,530 --> 00:36:12,480
see humans more into concus of managing

759
00:36:17,990 --> 00:36:15,540
their AI resources to suit some other

760
00:36:20,810 --> 00:36:18,000
purpose rather than replacing their

761
00:36:23,510 --> 00:36:20,820
existence as I think that could be

762
00:36:27,170 --> 00:36:23,520
argued of course but that's how I see it

763
00:36:30,650 --> 00:36:27,180

I watched a video you might have seen

764

00:36:32,990 --> 00:36:30,660

this or or one like it for sure watched

765

00:36:37,490 --> 00:36:33,000

a video last week

766

00:36:39,349 --> 00:36:37,500

and and I took the time I I knew that

767

00:36:41,150 --> 00:36:39,359

this was going to kind of freak me out

768

00:36:43,370 --> 00:36:41,160

and I knew that you were coming on the

769

00:36:47,930 --> 00:36:43,380

show too as well but I see this video

770

00:36:49,430 --> 00:36:47,940

and this this author says

771

00:36:52,130 --> 00:36:49,440

I'm going to show you how I'm going to

772

00:36:57,490 --> 00:36:52,140

write my next book

773

00:37:02,510 --> 00:36:57,500

any freaking opens up chat GPT okay

774

00:37:03,490 --> 00:37:02,520

a program that runs on chat okay all

775

00:37:06,310 --> 00:37:03,500

right

776

00:37:10,870 --> 00:37:06,320

and he literally

777

00:37:14,150 --> 00:37:10,880

plugs in the title of the book

778

00:37:18,170 --> 00:37:14,160

the subject of the book

779

00:37:21,890 --> 00:37:18,180

and his name oh I think he there was a

780

00:37:25,910 --> 00:37:24,589

one hour

781

00:37:31,010 --> 00:37:25,920

books done

782

00:37:33,790 --> 00:37:31,020

now what do we in that area that's that

783

00:37:38,750 --> 00:37:33,800

wasn't written by that author

784

00:37:39,849 --> 00:37:38,760

and that but the book could be presented

785

00:37:43,069 --> 00:37:39,859

to Amazon

786

00:37:45,829 --> 00:37:43,079

and and and sold on Amazon with that

787

00:37:48,609 --> 00:37:45,839

author's name on it and technically that

788

00:37:51,370 --> 00:37:48,619

could be done all the time by everybody

789

00:37:56,210 --> 00:37:51,380

and I don't know if that's evolutionary

790

00:37:58,609 --> 00:37:56,220

I think that's fraud right well you know

791

00:38:01,490 --> 00:37:58,619

I swear so a little bit of our

792

00:38:02,750 --> 00:38:01,500

background in 1996 I was one of the

793

00:38:04,490 --> 00:38:02,760

participants in what was called the

794

00:38:06,290 --> 00:38:04,500

virtual humans conference this was sort

795

00:38:09,470 --> 00:38:06,300

of a mixture between Ai and virtual

796

00:38:11,150 --> 00:38:09,480

reality and at the time the legal

797

00:38:13,370 --> 00:38:11,160

questions I was asking other folks are

798

00:38:15,530 --> 00:38:13,380

sort of chiming in the same way what's

799

00:38:18,290 --> 00:38:15,540

the legal definition of who owns the

800

00:38:19,190 --> 00:38:18,300

whatever it is is it the owner of the

801
00:38:21,530 --> 00:38:19,200
computer

802
00:38:23,810 --> 00:38:21,540
is it the person that created the

803
00:38:25,730 --> 00:38:23,820
software is it a Consortium of people

804
00:38:28,609 --> 00:38:25,740
that represents the best interest of the

805
00:38:30,829 --> 00:38:28,619
AI whatever it's doing this is totally

806
00:38:32,210 --> 00:38:30,839
unexplored territory and then a few

807
00:38:34,550 --> 00:38:32,220
years later I was part of What's called

808
00:38:37,970 --> 00:38:34,560
the nitick and now the queue that's the

809
00:38:40,310 --> 00:38:37,980
Nano info bio cognitive Tech conferences

810
00:38:41,569 --> 00:38:40,320
and that annual event and here you have

811
00:38:43,310 --> 00:38:41,579
some of the leading people on the planet

812
00:38:45,290 --> 00:38:43,320
all sort of getting together determine

813
00:38:47,329 --> 00:38:45,300

what policy should be in the near future

814

00:38:49,250 --> 00:38:47,339

at the time my input to this of course

815

00:38:52,130 --> 00:38:49,260

was nanotechnology but I also had a bit

816

00:38:53,810 --> 00:38:52,140

of a life and AI in there and I Rose the

817

00:38:55,930 --> 00:38:53,820

same questions again I said what's the

818

00:38:58,490 --> 00:38:55,940

chain of command what's the ownership

819

00:38:59,990 --> 00:38:58,500

mechanisms for this and nobody really

820

00:39:01,790 --> 00:39:00,000

had an answer but it was still

821

00:39:04,010 --> 00:39:01,800

theoretical then but I think we're

822

00:39:06,829 --> 00:39:04,020

entering into it now in fact there's a

823

00:39:09,050 --> 00:39:06,839

film called the Congress uh which starts

824

00:39:11,450 --> 00:39:09,060

out with this actress that's sort of in

825

00:39:12,890 --> 00:39:11,460

her letter days she gets scanned in and

826

00:39:14,690 --> 00:39:12,900

then she becomes part of this virtual

827

00:39:16,670 --> 00:39:14,700

world whereas all kinds of people and

828

00:39:17,930 --> 00:39:16,680

they're doing their virtual thing it

829

00:39:19,130 --> 00:39:17,940

turns out at the end of the movie a

830

00:39:20,750 --> 00:39:19,140

little bit of

831

00:39:22,730 --> 00:39:20,760

be aware

832

00:39:24,710 --> 00:39:22,740

um it's all real people what they have

833

00:39:26,690 --> 00:39:24,720

on these headsets and they're completely

834

00:39:28,069 --> 00:39:26,700

immersed in this throw like zombie zones

835

00:39:29,510 --> 00:39:28,079

and they're immersion is very horrible

836

00:39:31,430 --> 00:39:29,520

they could be somebody else other than

837

00:39:34,550 --> 00:39:31,440

who they really are and this was kind of

838

00:39:36,770 --> 00:39:34,560

a glimpse of yet another aspect of this

839

00:39:39,290 --> 00:39:36,780

idea and again the question comes up

840

00:39:41,030 --> 00:39:39,300

where is sovereignty in this is it the

841

00:39:43,370 --> 00:39:41,040

person that is projecting their virtual

842

00:39:45,829 --> 00:39:43,380

self in this realm or is it belong to

843

00:39:47,690 --> 00:39:45,839

somebody else or some combination if you

844

00:39:49,609 --> 00:39:47,700

produce a film let's say and it has

845

00:39:51,770 --> 00:39:49,619

virtual actors and actresses which is

846

00:39:54,470 --> 00:39:51,780

very much coming up

847

00:39:56,810 --> 00:39:54,480

um who owns that is it the studio is it

848

00:39:59,089 --> 00:39:56,820

the maker of the software I mean I'm

849

00:40:00,230 --> 00:39:59,099

sure there's going to be legal arguments

850

00:40:01,430 --> 00:40:00,240

about this sort of thing but we're

851
00:40:03,950 --> 00:40:01,440
definitely stepping into a different

852
00:40:05,750 --> 00:40:03,960
kind of territory where ownership and

853
00:40:06,950 --> 00:40:05,760
change the command and sovereignty are

854
00:40:09,770 --> 00:40:06,960
going to have very different meanings

855
00:40:11,810 --> 00:40:09,780
than what did you know yeah okay

856
00:40:15,290 --> 00:40:11,820
um that was great except you didn't

857
00:40:17,750 --> 00:40:15,300
answer the question okay okay

858
00:40:19,609 --> 00:40:17,760
and I agree with all well I'll answer

859
00:40:23,329 --> 00:40:19,619
the Movie question

860
00:40:26,089 --> 00:40:23,339
if a movie studio produces a movie with

861
00:40:28,670 --> 00:40:26,099
All actors and actresses the movie studio

862
00:40:31,430 --> 00:40:28,680
owns it that's it I think are you

863
00:40:34,250 --> 00:40:31,440

clicking a pen what is that

864

00:40:35,630 --> 00:40:34,260

okay all right maybe you are maybe that

865

00:40:38,990 --> 00:40:35,640

was weird I'm getting something in my

866

00:40:42,650 --> 00:40:39,000

headphones the movie studio if they if

867

00:40:45,410 --> 00:40:42,660

they create it they produce it and and

868

00:40:47,569 --> 00:40:45,420

and it's out there and it's all a i

869

00:40:51,650 --> 00:40:47,579

generated so that's a movie studio

870

00:40:54,290 --> 00:40:51,660

product what I am saying and and we

871

00:40:57,170 --> 00:40:54,300

would know as viewers no matter how

872

00:41:00,349 --> 00:40:57,180

excellent it is we would know what we're

873

00:41:02,410 --> 00:41:00,359

watching but in the case of

874

00:41:06,470 --> 00:41:02,420

chat GPT

875

00:41:09,550 --> 00:41:06,480

writing a book for you in 60 minutes and

876

00:41:13,849 --> 00:41:09,560

your name is on it as the author right

877

00:41:16,609 --> 00:41:13,859

now we are in a foggy area in that

878

00:41:17,990 --> 00:41:16,619

I didn't write the book that happens all

879

00:41:20,510 --> 00:41:18,000

the time look in today's world you have

880

00:41:23,569 --> 00:41:20,520

ghost writers the resilience zillions of

881

00:41:26,150 --> 00:41:23,579

them uh when I was at UC Berkeley this

882

00:41:29,810 --> 00:41:26,160

goes back years ago there were post-docs

883

00:41:32,450 --> 00:41:29,820

who made their living by writing thesis

884

00:41:34,010 --> 00:41:32,460

for paying students I mean this is how

885

00:41:36,050 --> 00:41:34,020

they a lot of people actually paid their

886

00:41:37,490 --> 00:41:36,060

rent and sort of got by if they couldn't

887

00:41:39,770 --> 00:41:37,500

get a job in their particular field of

888

00:41:41,150 --> 00:41:39,780

Interest this is what they did so this

889

00:41:43,010 --> 00:41:41,160

is just another extension of that

890

00:41:44,150 --> 00:41:43,020

Concept in other words but there was a

891

00:41:46,190 --> 00:41:44,160

time where it was called a cat and mouse

892

00:41:47,450 --> 00:41:46,200

or the professors would have to sort of

893

00:41:49,430 --> 00:41:47,460

sift through the papers that were being

894

00:41:50,810 --> 00:41:49,440

turned in just easier plagiarized or

895

00:41:52,250 --> 00:41:50,820

written by somebody else some people

896

00:41:55,150 --> 00:41:52,260

write in the papers thinking ever more

897

00:41:57,530 --> 00:41:55,160

clever as sort of diffusing their uh

898

00:41:59,510 --> 00:41:57,540

just enough so I wouldn't be seen as

899

00:42:02,089 --> 00:41:59,520

plagiarism you'll see the same thing

900

00:42:03,230 --> 00:42:02,099

with AI exactly I don't know machine as

901
00:42:05,690 --> 00:42:03,240
opposed to that person doing that work

902
00:42:08,210 --> 00:42:05,700
for them right right and I I don't think

903
00:42:09,829 --> 00:42:08,220
that's uh I don't think if chat cheat PT

904
00:42:11,210 --> 00:42:09,839
is writing the book for you I don't

905
00:42:13,370 --> 00:42:11,220
think that's plagiarism but it's

906
00:42:17,210 --> 00:42:13,380
certainly doing the labor

907
00:42:18,829 --> 00:42:17,220
so should the book title

908
00:42:21,050 --> 00:42:18,839
um should there be a disclaimer on the

909
00:42:23,810 --> 00:42:21,060
book that this was written by chat GPT

910
00:42:25,370 --> 00:42:23,820
not the not the author yeah yeah no I

911
00:42:26,810 --> 00:42:25,380
see what you can so from an ethical

912
00:42:29,450 --> 00:42:26,820
point of view I would say yes of course

913
00:42:31,150 --> 00:42:29,460

you should say this was AI maybe the AIO

914

00:42:33,950 --> 00:42:31,160

was trained by the author in Washington

915

00:42:35,150 --> 00:42:33,960

Stewart in that direction but yeah I

916

00:42:37,550 --> 00:42:35,160

think there should be some kind of

917

00:42:39,890 --> 00:42:37,560

shared ownership of whatever the thing

918

00:42:42,770 --> 00:42:39,900

was that's being sold however however

919

00:42:45,710 --> 00:42:42,780

unless there's some kind of Legally uh

920

00:42:46,430 --> 00:42:45,720

binding agreement rules that determine

921

00:42:49,069 --> 00:42:46,440

that

922

00:42:50,569 --> 00:42:49,079

I it's gonna be up to the actual author

923

00:42:52,250 --> 00:42:50,579

and it may or may not be the case I mean

924

00:42:55,130 --> 00:42:52,260

this is going to be right it's a phrase

925

00:42:59,569 --> 00:42:55,140

out you have to be sorted out

926

00:43:02,690 --> 00:42:59,579

I mean if I if I wrote a book

927

00:43:05,329 --> 00:43:02,700

me Jimmy church I wrote a book and it

928

00:43:08,630 --> 00:43:05,339

was published this year

929

00:43:11,329 --> 00:43:08,640

everybody would know and and chat cheap

930

00:43:13,970 --> 00:43:11,339

wrote it everybody would know that it

931

00:43:15,770 --> 00:43:13,980

wasn't me if my name was on it they know

932

00:43:18,770 --> 00:43:15,780

that I'm lazy that I don't have the

933

00:43:20,870 --> 00:43:18,780

patience I'm not smart enough that

934

00:43:24,109 --> 00:43:20,880

there's no way that this could be

935

00:43:27,710 --> 00:43:24,119

written but but if my name is on the

936

00:43:32,270 --> 00:43:27,720

cover and and it's not plagiarized right

937

00:43:35,870 --> 00:43:32,280

and chat GPT owned it we're getting into

938

00:43:39,290 --> 00:43:35,880

a real ethics issue here where I think

939

00:43:42,829 --> 00:43:39,300

that there should be some legislation

940

00:43:46,010 --> 00:43:42,839

um in place so people know that it's not

941

00:43:48,290 --> 00:43:46,020

everybody has ghost riders we know this

942

00:43:49,670 --> 00:43:48,300

Charles we know the Cisco's writers for

943

00:43:52,490 --> 00:43:49,680

everything who writes their own books

944

00:43:54,589 --> 00:43:52,500

okay but at least we know the process

945

00:43:56,329 --> 00:43:54,599

there's a Ghostwriter being paid and

946

00:44:00,349 --> 00:43:56,339

they're they're actually doing the work

947

00:44:02,210 --> 00:44:00,359

but it's another ethics situation when

948

00:44:04,910 --> 00:44:02,220

chat EBT or another artificial

949

00:44:07,309 --> 00:44:04,920

intelligence program is doing the work

950

00:44:09,170 --> 00:44:07,319

for you and you don't admit it so this

951
00:44:11,030 --> 00:44:09,180
reminds me of when Hillary Clinton reads

952
00:44:13,490 --> 00:44:11,040
her book you remember a few years ago it

953
00:44:14,569 --> 00:44:13,500
was a big bestseller thick book the

954
00:44:16,010 --> 00:44:14,579
whole thing was goes right she didn't

955
00:44:17,809 --> 00:44:16,020
write a single word in there and you

956
00:44:19,970 --> 00:44:17,819
know she sold it off as her author's

957
00:44:21,470 --> 00:44:19,980
book this is very common but I bring up

958
00:44:24,170 --> 00:44:21,480
that particular one because it's such a

959
00:44:25,970 --> 00:44:24,180
big production and so much Felicity

960
00:44:29,390 --> 00:44:25,980
around it you know oh my gosh Hillary

961
00:44:31,370 --> 00:44:29,400
publish another book but as I said many

962
00:44:33,650 --> 00:44:31,380
books that are out there if you dig deep

963
00:44:36,829 --> 00:44:33,660

enough into how they were created either

964

00:44:38,630 --> 00:44:36,839

entirely or a large percentage written

965

00:44:41,030 --> 00:44:38,640

by ghost writers and one thing to say

966

00:44:43,490 --> 00:44:41,040

about chat TBT you do still have to kind

967

00:44:45,550 --> 00:44:43,500

of train it a little bit for instance in

968

00:44:48,650 --> 00:44:45,560

the article that I used it to write my

969

00:44:50,569 --> 00:44:48,660

piece on AI it kept coming back this

970

00:44:52,550 --> 00:44:50,579

really kind of Pollyanna sort of

971

00:44:54,829 --> 00:44:52,560

corporate speak about the wonders of AI

972

00:44:56,569 --> 00:44:54,839

is this beautiful new thing for for

973

00:44:58,730 --> 00:44:56,579

changing Humanity in this better

974

00:45:00,829 --> 00:44:58,740

Direction and all this kind of stuff and

975

00:45:03,710 --> 00:45:00,839

I summarized the article the same that's

976
00:45:06,829 --> 00:45:03,720
what GPT did this is what I say and then

977
00:45:08,870 --> 00:45:06,839
my version was a little more I wouldn't

978
00:45:10,730 --> 00:45:08,880
say caustic but a little more grounded

979
00:45:11,809 --> 00:45:10,740
in reality saying is it mixed bag

980
00:45:13,849 --> 00:45:11,819
because some pluses and here's some

981
00:45:15,770 --> 00:45:13,859
minuses froze versus cons that kind of

982
00:45:18,410 --> 00:45:15,780
thing but I was kind of fascinated by

983
00:45:21,890 --> 00:45:18,420
the fact that the chat was predetermined

984
00:45:23,569 --> 00:45:21,900
to put a as positive spin on AI as

985
00:45:26,809 --> 00:45:23,579
possible I found that part of it kind of

986
00:45:29,210 --> 00:45:26,819
interesting so there are biases that one

987
00:45:31,790 --> 00:45:29,220
would have to be aware of and understand

988
00:45:33,470 --> 00:45:31,800

how to steer that bias to suit whatever

989

00:45:37,010 --> 00:45:33,480

they're trying to convey

990

00:45:40,010 --> 00:45:37,020

there's a there's a concept here that I

991

00:45:43,730 --> 00:45:40,020

think most need to understand uh when it

992

00:45:46,370 --> 00:45:43,740

comes to the reason why uh the race to

993

00:45:49,130 --> 00:45:46,380

artificial general intelligence is so

994

00:45:53,510 --> 00:45:49,140

important and and how it could actually

995

00:45:56,450 --> 00:45:53,520

benefit humanity and it's this if you're

996

00:45:58,550 --> 00:45:56,460

a pharmaceutical company a medical

997

00:46:00,650 --> 00:45:58,560

company and you're trying to cure a

998

00:46:03,950 --> 00:46:00,660

disease or you're trying to come up with

999

00:46:05,750 --> 00:46:03,960

a medication that is very complex and

1000

00:46:09,589 --> 00:46:05,760

what you have to and the reason why it

1001
00:46:12,109 --> 00:46:09,599
takes so long to do is because you have

1002
00:46:16,370 --> 00:46:12,119
a team of doctors that have to read

1003
00:46:18,829 --> 00:46:16,380
write and research constantly and that

1004
00:46:20,630 --> 00:46:18,839
takes time you still have to put

1005
00:46:22,069 --> 00:46:20,640
eyeballs on stuff used to have to

1006
00:46:23,569 --> 00:46:22,079
calculate you still have to think you

1007
00:46:26,829 --> 00:46:23,579
still have to test you still have to go

1008
00:46:31,430 --> 00:46:26,839
to the line you know but if you had

1009
00:46:35,470 --> 00:46:31,440
artificial general intelligence and you

1010
00:46:38,450 --> 00:46:35,480
apply that across a bank of computers

1011
00:46:42,290 --> 00:46:38,460
and now you have

1012
00:46:44,650 --> 00:46:42,300
um a hundred or a thousand Minds working

1013
00:46:47,829 --> 00:46:44,660

on the same issue

1014

00:46:52,309 --> 00:46:47,839

instead of it taking a couple of years

1015

00:46:53,690 --> 00:46:52,319

it would take a few seconds well like a

1016

00:46:55,550 --> 00:46:53,700

week or something like this so let me

1017

00:46:56,870 --> 00:46:55,560

explain something called encyclical

1018

00:46:58,550 --> 00:46:56,880

biology which is exactly what you're

1019

00:47:00,950 --> 00:46:58,560

talking about in silica biology means

1020

00:47:03,829 --> 00:47:00,960

let me feeling some type of a complex

1021

00:47:05,750 --> 00:47:03,839

organism or organism system and in the

1022

00:47:08,569 --> 00:47:05,760

early days

1023

00:47:10,670 --> 00:47:08,579

try to model say a part of a cell just a

1024

00:47:12,410 --> 00:47:10,680

mitochondria for instance that would

1025

00:47:14,150 --> 00:47:12,420

take months

1026
00:47:16,190 --> 00:47:14,160
straining a super computer because

1027
00:47:17,569 --> 00:47:16,200
absolute Mass capacity to run that

1028
00:47:19,970 --> 00:47:17,579
simulation

1029
00:47:22,069 --> 00:47:19,980
now you could actually not just run a

1030
00:47:24,230 --> 00:47:22,079
simulation on a cell you can run a

1031
00:47:26,569 --> 00:47:24,240
simulation on an entire cell structure

1032
00:47:28,609 --> 00:47:26,579
organ entire organism

1033
00:47:30,290 --> 00:47:28,619
and that's a radical difference and so

1034
00:47:32,150 --> 00:47:30,300
one thing I wanted to toss out since you

1035
00:47:35,930 --> 00:47:32,160
brought it up what I see around the

1036
00:47:38,390 --> 00:47:35,940
corner is DNA becoming your new social

1037
00:47:40,490 --> 00:47:38,400
security number your ID is an order the

1038
00:47:43,250 --> 00:47:40,500

reason I make that point is because the

1039

00:47:45,589 --> 00:47:43,260

background inventor first releases even

1040

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

genome it was like ten thousand dollars

1041

00:47:49,790 --> 00:47:47,760

to get your genome decoded they're

1042

00:47:51,170 --> 00:47:49,800

dropped for like a thousand dollars then

1043

00:47:53,270 --> 00:47:51,180

it dropped you like a hundred dollars

1044

00:47:55,430 --> 00:47:53,280

nowadays it's around the ten dollar Mark

1045

00:47:58,670 --> 00:47:55,440

to get your DNA decoded it's going to

1046

00:48:02,329 --> 00:47:58,680

become even less so that means that the

1047

00:48:04,010 --> 00:48:02,339

cost of issuing your new ID based on DNA

1048

00:48:06,349 --> 00:48:04,020

is going to become a de facto

1049

00:48:08,510 --> 00:48:06,359

requirement at some point now why do I

1050

00:48:11,030 --> 00:48:08,520

make this point because at the same time

1051
00:48:13,550 --> 00:48:11,040
if you have Quantum Computing being able

1052
00:48:15,710 --> 00:48:13,560
to recognize astonishing large amounts

1053
00:48:17,210 --> 00:48:15,720
of data at the same time specifically if

1054
00:48:18,410 --> 00:48:17,220
you look for patterns and that's exactly

1055
00:48:19,550 --> 00:48:18,420
what genetic engineering is all about

1056
00:48:21,530 --> 00:48:19,560
we're looking for patterns look for

1057
00:48:23,690 --> 00:48:21,540
genetic markers that kind of thing then

1058
00:48:26,630 --> 00:48:23,700
yes you could actually have a scenario

1059
00:48:29,270 --> 00:48:26,640
or at Birth the system already kind of

1060
00:48:31,250 --> 00:48:29,280
knows all of your genetic traits where

1061
00:48:33,470 --> 00:48:31,260
you might have particular diseases or or

1062
00:48:35,690 --> 00:48:33,480
shortcomings as it were that could be

1063
00:48:36,950 --> 00:48:35,700

treated or cured in some way I think

1064

00:48:39,290 --> 00:48:36,960

this is absolutely what's coming around

1065

00:48:40,370 --> 00:48:39,300

the corn and because of the cost of

1066

00:48:42,349 --> 00:48:40,380

Health Care

1067

00:48:44,329 --> 00:48:42,359

we're living in an era right now still

1068

00:48:46,190 --> 00:48:44,339

where a lot of people can still be

1069

00:48:48,890 --> 00:48:46,200

pretty clumsy with their health they can

1070

00:48:50,030 --> 00:48:48,900

overeaten become obese drink and smoke

1071

00:48:52,309 --> 00:48:50,040

and all this kind of stuff and then they

1072

00:48:54,410 --> 00:48:52,319

wander into the health system help I've

1073

00:48:56,210 --> 00:48:54,420

got you know scores of the liver or I

1074

00:48:58,490 --> 00:48:56,220

can't breathe or whatever because of

1075

00:49:00,290 --> 00:48:58,500

their own you know bad choices I think

1076
00:49:01,670 --> 00:49:00,300
that's going to start fading away as the

1077
00:49:03,829 --> 00:49:01,680
cost of healthcare becomes ever more

1078
00:49:06,109 --> 00:49:03,839
burdensome and more people begin to

1079
00:49:08,510 --> 00:49:06,119
realize wait a minute where people take

1080
00:49:10,790 --> 00:49:08,520
responsibility for their own actions how

1081
00:49:12,650 --> 00:49:10,800
who they are as a person so how would

1082
00:49:15,050 --> 00:49:12,660
this be introduced well here's one way

1083
00:49:16,790 --> 00:49:15,060
as a cost saving measure let's say

1084
00:49:18,650 --> 00:49:16,800
you're a mother about to give birth

1085
00:49:20,150 --> 00:49:18,660
you're going to the hospital and they

1086
00:49:21,410 --> 00:49:20,160
offer you hey look we can give you a

1087
00:49:23,510 --> 00:49:21,420
great discount

1088
00:49:26,510 --> 00:49:23,520

tax breaks all that kind of stuff if you

1089

00:49:29,270 --> 00:49:26,520

agree to have your DNA become part of

1090

00:49:31,790 --> 00:49:29,280

the new databases of work and your

1091

00:49:33,170 --> 00:49:31,800

baby's DNA I think a lot of people would

1092

00:49:35,329 --> 00:49:33,180

voluntarily kind of go for this

1093

00:49:38,150 --> 00:49:35,339

especially as Things become ever more

1094

00:49:41,030 --> 00:49:38,160

economically difficult this would be the

1095

00:49:42,829 --> 00:49:41,040

Gateway that would eventually expand to

1096

00:49:44,089 --> 00:49:42,839

the point where it could become the new

1097

00:49:46,849 --> 00:49:44,099

ID system

1098

00:49:49,130 --> 00:49:46,859

at the same time preemptively recognize

1099

00:49:51,230 --> 00:49:49,140

different types of Health Trace as they

1100

00:49:53,630 --> 00:49:51,240

occur however this is where it gets kind

1101

00:49:55,130 --> 00:49:53,640

of scary if you will there's a lot of

1102

00:49:57,950 --> 00:49:55,140

genetic markers that can now be

1103

00:49:59,690 --> 00:49:57,960

correlated with behavior with psychology

1104

00:50:00,950 --> 00:49:59,700

in fact as a journal I subscribed it

1105

00:50:03,109 --> 00:50:00,960

called the Journal of molecular

1106

00:50:04,490 --> 00:50:03,119

psychology it's very interesting there

1107

00:50:07,130 --> 00:50:04,500

are dozens of papers published every

1108

00:50:09,470 --> 00:50:07,140

month based on exactly this what kind of

1109

00:50:11,930 --> 00:50:09,480

behaviors are linked to what genetic

1110

00:50:13,790 --> 00:50:11,940

factor with these chemistries involved

1111

00:50:16,730 --> 00:50:13,800

makes this type of you know are you

1112

00:50:19,730 --> 00:50:16,740

going to be a narcissist or have I don't

1113

00:50:22,130 --> 00:50:19,740

know other common failure points as a

1114

00:50:24,589 --> 00:50:22,140

person you know I you know you name a

1115

00:50:26,150 --> 00:50:24,599

psychological Malay is there going to be

1116

00:50:29,150 --> 00:50:26,160

a genetic marker for that and the answer

1117

00:50:31,809 --> 00:50:29,160

is probably us okay so going back a few

1118

00:50:34,609 --> 00:50:31,819

years NIH actually proposed a program

1119

00:50:36,950 --> 00:50:34,619

called the crime Gene I'm not going to

1120

00:50:38,569 --> 00:50:36,960

look it up it's actual name for it and

1121

00:50:40,210 --> 00:50:38,579

they wanted to preemptively determine

1122

00:50:42,829 --> 00:50:40,220

that some people were going to be

1123

00:50:44,589 --> 00:50:42,839

pre-deposed predisposed to being

1124

00:50:47,089 --> 00:50:44,599

criminal types

1125

00:50:49,490 --> 00:50:47,099

their value human life would be very low

1126
00:50:50,630 --> 00:50:49,500
things like robbery and committing other

1127
00:50:52,370 --> 00:50:50,640
kinds of violent crimes would be

1128
00:50:53,109 --> 00:50:52,380
considered normal in their world as it

1129
00:50:55,849 --> 00:50:53,119
were

1130
00:50:58,430 --> 00:50:55,859
to lean that way could that be

1131
00:51:01,089 --> 00:50:58,440
identified genetically now for obvious

1132
00:51:03,890 --> 00:51:01,099
reasons this was somewhat controversial

1133
00:51:05,030 --> 00:51:03,900
especially because it became apparent

1134
00:51:08,089 --> 00:51:05,040
and I know this is going to get really

1135
00:51:10,630 --> 00:51:08,099
tricky it seemed that some racial or

1136
00:51:13,130 --> 00:51:10,640
ethnic groups were a little more

1137
00:51:14,390 --> 00:51:13,140
want to glean that direction than other

1138
00:51:16,609 --> 00:51:14,400

groups when they're looking at this

1139

00:51:18,650 --> 00:51:16,619

genetic makeup so people very quickly

1140

00:51:20,990 --> 00:51:18,660

backed off and said oh we shouldn't

1141

00:51:22,370 --> 00:51:21,000

probably do this however it's not that

1142

00:51:24,170 --> 00:51:22,380

it was turned off it was just like they

1143

00:51:25,849 --> 00:51:24,180

renamed it to other they've broken them

1144

00:51:27,770 --> 00:51:25,859

to other different groups but the same

1145

00:51:30,589 --> 00:51:27,780

process is still occurring there there

1146

00:51:32,750 --> 00:51:30,599

really is and I understand why I don't

1147

00:51:34,910 --> 00:51:32,760

understand it's a bad thing I'm just

1148

00:51:36,950 --> 00:51:34,920

questioning how it might be uh mandated

1149

00:51:39,530 --> 00:51:36,960

though this is where ethics becomes kind

1150

00:51:41,630 --> 00:51:39,540

of a question mark so in other words if

1151
00:51:43,910 --> 00:51:41,640
your future let's say you're having a

1152
00:51:46,069 --> 00:51:43,920
baby soon with your wife and whatever

1153
00:51:48,829 --> 00:51:46,079
would that child be growing up in a

1154
00:51:50,510 --> 00:51:48,839
world where the quality of their DNA

1155
00:51:52,490 --> 00:51:50,520
became the de facto mechanism that

1156
00:51:54,770 --> 00:51:52,500
determined what their life would become

1157
00:51:58,130 --> 00:51:54,780
like I mean you know there were a number

1158
00:52:01,010 --> 00:51:58,140
of movies made on this case 46 was one

1159
00:52:02,650 --> 00:52:01,020
um people have thought about this you

1160
00:52:05,030 --> 00:52:02,660
know it's theoretical concept for years

1161
00:52:07,490 --> 00:52:05,040
but we're kind of we can see it on the

1162
00:52:08,510 --> 00:52:07,500
horizon now not quite there yet but it's

1163
00:52:10,790 --> 00:52:08,520

kind of like when you're driving through

1164

00:52:11,990 --> 00:52:10,800

the desert and you can see the glow of

1165

00:52:13,130 --> 00:52:12,000

Las Vegas on the horizon where you're

1166

00:52:15,829 --> 00:52:13,140

not quite there with the buildings and

1167

00:52:17,750 --> 00:52:15,839

everything so we can see the glow give

1168

00:52:20,089 --> 00:52:17,760

it another 10 or 12 years I could see

1169

00:52:22,069 --> 00:52:20,099

well this very much becomes a new

1170

00:52:26,750 --> 00:52:22,079

immersional reality

1171

00:52:29,270 --> 00:52:26,760

and and I think all of that it's we're

1172

00:52:31,609 --> 00:52:29,280

kind of there now we're not we're not

1173

00:52:33,410 --> 00:52:31,619

quite there yet but we're understanding

1174

00:52:35,870 --> 00:52:33,420

more and more about DNA and you're right

1175

00:52:37,790 --> 00:52:35,880

about the mapping and and and how

1176

00:52:41,150 --> 00:52:37,800

inexpensive it is to do that and those

1177

00:52:43,309 --> 00:52:41,160

genetic markers uh but probably in 10 or

1178

00:52:46,250 --> 00:52:43,319

15 years would determine your credit

1179

00:52:49,670 --> 00:52:46,260

rating but

1180

00:52:53,270 --> 00:52:49,680

um what is scarier than that I pointed

1181

00:52:56,510 --> 00:52:53,280

out the pharmaceutical industry but AGI

1182

00:53:00,290 --> 00:52:56,520

a team of AGI the reason another reason

1183

00:53:04,790 --> 00:53:00,300

why every country would love to be at

1184

00:53:09,109 --> 00:53:04,800

the okay we need a new tank

1185

00:53:12,609 --> 00:53:09,119

we need a better nuclear bomb we need a

1186

00:53:16,250 --> 00:53:12,619

a new ship of course obviously right and

1187

00:53:18,470 --> 00:53:16,260

instead of Lockheed Martin is spending

1188

00:53:20,030 --> 00:53:18,480

the next two years with a thousand

1189

00:53:22,430 --> 00:53:20,040

designers

1190

00:53:25,370 --> 00:53:22,440

um you have it before you wake up in the

1191

00:53:28,190 --> 00:53:25,380

morning and you are able to then assign

1192

00:53:31,329 --> 00:53:28,200

that to a factory and go in production

1193

00:53:33,710 --> 00:53:31,339

by the next afternoon

1194

00:53:38,089 --> 00:53:33,720

that's the advantage that everybody

1195

00:53:42,170 --> 00:53:38,099

wants where you're doing 5 000 years of

1196

00:53:44,030 --> 00:53:42,180

work in 5 000 seconds and so I have an

1197

00:53:46,309 --> 00:53:44,040

example for you this goes back a number

1198

00:53:48,410 --> 00:53:46,319

of years this is like early 2000s almost

1199

00:53:51,049 --> 00:53:48,420

two decades about 15 years ago actually

1200

00:53:52,970 --> 00:53:51,059

I was at JPL a friend of mine was doing

1201
00:53:55,790 --> 00:53:52,980
a presentation there and I was invited

1202
00:53:58,069 --> 00:53:55,800
to talk about nanotechnology and that

1203
00:54:00,230 --> 00:53:58,079
kind of thing however this was at the

1204
00:54:02,569 --> 00:54:00,240
evolvable hardware conference that was

1205
00:54:03,770 --> 00:54:02,579
the actual name of it so when I went

1206
00:54:04,790 --> 00:54:03,780
there they showed me all kinds of

1207
00:54:07,010 --> 00:54:04,800
different things they were working on

1208
00:54:09,109 --> 00:54:07,020
one of which was an antenna they were

1209
00:54:11,630 --> 00:54:09,119
designing for a very specialized kind of

1210
00:54:14,450 --> 00:54:11,640
deep space frog device

1211
00:54:16,250 --> 00:54:14,460
the humans sat down set up a month

1212
00:54:17,809 --> 00:54:16,260
design Nintendo design by the way is a

1213
00:54:20,690 --> 00:54:17,819

very tricky art form it's a mixture of

1214

00:54:22,670 --> 00:54:20,700

physics and a lot of math and a bit of

1215

00:54:25,430 --> 00:54:22,680

magic maybe but it's a very difficult

1216

00:54:27,589 --> 00:54:25,440

challenging sort of field to Endeavor in

1217

00:54:28,730 --> 00:54:27,599

but the humans after about a month or so

1218

00:54:30,829 --> 00:54:28,740

they designed this beautiful little

1219

00:54:32,870 --> 00:54:30,839

Christmas tree orthogonal type of antenna

1220

00:54:35,589 --> 00:54:32,880

said okay this works pretty well

1221

00:54:38,329 --> 00:54:35,599

The evolutionary Computing platform

1222

00:54:40,609 --> 00:54:38,339

designed something in a few hours it

1223

00:54:42,890 --> 00:54:40,619

looked like a bird nest but guess what

1224

00:54:44,690 --> 00:54:42,900

the bird nest worked better

1225

00:54:45,710 --> 00:54:44,700

than the orthogonal Christmas tree the

1226
00:54:48,589 --> 00:54:45,720
humans made

1227
00:54:51,410 --> 00:54:48,599
that was quite a few years ago

1228
00:54:54,349 --> 00:54:51,420
um go fast forward there are people

1229
00:54:56,030 --> 00:54:54,359
using evolvable systems to evolve all

1230
00:54:58,069 --> 00:54:56,040
kinds of stuff including better smart

1231
00:54:59,390 --> 00:54:58,079
bombs better buildings better missiles

1232
00:55:01,490 --> 00:54:59,400
you know you name it

1233
00:55:03,470 --> 00:55:01,500
this is not going away this is just how

1234
00:55:05,450 --> 00:55:03,480
it's going to be and we're sort of

1235
00:55:07,970 --> 00:55:05,460
seeing this somewhat in Ukraine in a

1236
00:55:10,430 --> 00:55:07,980
sense that we're watching drones become

1237
00:55:13,069 --> 00:55:10,440
the new Battlefield entity that sort of

1238
00:55:16,250 --> 00:55:13,079

influx damage upon the enemies that were

1239

00:55:19,849 --> 00:55:16,260

that's just a very brief step away

1240

00:55:22,190 --> 00:55:19,859

from AI controlling drones and drone

1241

00:55:24,049 --> 00:55:22,200

like things automated machinery and the

1242

00:55:26,450 --> 00:55:24,059

next step of course is for the AI to

1243

00:55:28,490 --> 00:55:26,460

actually design and engineer a better

1244

00:55:30,170 --> 00:55:28,500

version of the Machinery question

1245

00:55:31,609 --> 00:55:30,180

because it can study the results of what

1246

00:55:33,829 --> 00:55:31,619

happened with the previous versions that

1247

00:55:36,049 --> 00:55:33,839

kind of thing so yes that's very much on

1248

00:55:37,609 --> 00:55:36,059

the event stream of the future

1249

00:55:38,930 --> 00:55:37,619

I'm saying it's going to be look I'm not

1250

00:55:41,089 --> 00:55:38,940

saying this is good or bad I'm just

1251
00:55:42,170 --> 00:55:41,099
saying in a practical real world sense

1252
00:55:44,089 --> 00:55:42,180
yeah this is probably what's going to

1253
00:55:46,910 --> 00:55:44,099
happen and that's why I keep making this

1254
00:55:49,910 --> 00:55:46,920
this statement about Evolution being a

1255
00:55:52,370 --> 00:55:49,920
the the Adaptive are the most

1256
00:55:54,890 --> 00:55:52,380
likely to succeed you know evolution is

1257
00:55:57,049 --> 00:55:54,900
more tends to favor the most adaptive as

1258
00:55:59,870 --> 00:55:57,059
opposable status because the term of

1259
00:56:02,569 --> 00:55:59,880
Fitness changes rather radically over

1260
00:56:04,370 --> 00:56:02,579
time it's the constant adaptation to a

1261
00:56:06,650 --> 00:56:04,380
new type of environment that really

1262
00:56:07,910 --> 00:56:06,660
makes a difference and if we're heading

1263
00:56:10,430 --> 00:56:07,920

towards an environment where the

1264

00:56:13,010 --> 00:56:10,440

machines in question sort of do this

1265

00:56:15,170 --> 00:56:13,020

stuff for us including weaponry and

1266

00:56:16,910 --> 00:56:15,180

fighting battles and so on we're going

1267

00:56:18,470 --> 00:56:16,920

to have to adapt it because it's it's

1268

00:56:20,150 --> 00:56:18,480

inevitable it's what's coming around the

1269

00:56:21,290 --> 00:56:20,160

corner if even if you don't like it then

1270

00:56:22,670 --> 00:56:21,300

I don't like it either I'm not saying

1271

00:56:24,410 --> 00:56:22,680

this is a wonderful plan I'm just saying

1272

00:56:25,670 --> 00:56:24,420

you have to be realistic in anticipating

1273

00:56:28,790 --> 00:56:25,680

what's coming around

1274

00:56:30,470 --> 00:56:28,800

are we depending on um oh and by the way

1275

00:56:32,809 --> 00:56:30,480

if you look over to the right you'll see

1276

00:56:34,910 --> 00:56:32,819

there's a private chat right there and

1277

00:56:36,290 --> 00:56:34,920

you can click on that

1278

00:56:39,290 --> 00:56:36,300

um where you and I can communicate back

1279

00:56:41,630 --> 00:56:39,300

and forth but here's the thing

1280

00:56:43,549 --> 00:56:41,640

um are we

1281

00:56:47,589 --> 00:56:43,559

um in a general sense and I just mean

1282

00:56:51,530 --> 00:56:47,599

this in an are we dependent on

1283

00:56:55,790 --> 00:56:51,540

the engineers and team leaders and

1284

00:56:59,089 --> 00:56:55,800

designers behind this race to AI

1285

00:57:01,750 --> 00:56:59,099

um uh it's just around the world we just

1286

00:57:03,829 --> 00:57:01,760

know well for the moment yes

1287

00:57:07,010 --> 00:57:03,839

I was just going to submit an argument

1288

00:57:10,490 --> 00:57:07,020

for Michael E Spectrum but the first

1289

00:57:13,130 --> 00:57:10,500

examples of AI design Charles I didn't

1290

00:57:16,809 --> 00:57:13,140

ask the question oh sorry I didn't ask

1291

00:57:21,049 --> 00:57:16,819

the question oh I'm so sorry

1292

00:57:26,210 --> 00:57:21,059

my ai's failing are we dependent on

1293

00:57:31,609 --> 00:57:29,089

yes and no yeah I'm sorry

1294

00:57:33,410 --> 00:57:31,619

there's no binary answer for this we

1295

00:57:36,230 --> 00:57:33,420

have to determine what the moral compass

1296

00:57:38,510 --> 00:57:36,240

actually is you may recall that in 2001

1297

00:57:40,190 --> 00:57:38,520

Space Odyssey how the computer killed

1298

00:57:42,589 --> 00:57:40,200

off the other astronauts because it

1299

00:57:44,150 --> 00:57:42,599

perceived that the astronauts were going

1300

00:57:45,470 --> 00:57:44,160

to interfere with this ultimate Mission

1301
00:57:47,390 --> 00:57:45,480
which was to go to Jupiter and

1302
00:57:49,309 --> 00:57:47,400
encycloped this floating you know device

1303
00:57:52,130 --> 00:57:49,319
that they discovered Etc

1304
00:57:54,770 --> 00:57:52,140
so in the future how do you determine

1305
00:57:56,690 --> 00:57:54,780
what the actual best moral compass might

1306
00:57:58,309 --> 00:57:56,700
be and if you're dealing with somebody

1307
00:58:01,190 --> 00:57:58,319
like Russia or China or just some other

1308
00:58:02,569 --> 00:58:01,200
adversary their version of a moral comes

1309
00:58:04,510 --> 00:58:02,579
may be radically different than anything

1310
00:58:07,790 --> 00:58:04,520
that we would consider appropriate here

1311
00:58:09,770 --> 00:58:07,800
this is where the adaptation challenge

1312
00:58:13,130 --> 00:58:09,780
really is because you can't really have

1313
00:58:15,049 --> 00:58:13,140

a ubiquitous moral company driving what

1314

00:58:18,049 --> 00:58:15,059

the AI does because AI is not a single

1315

00:58:20,510 --> 00:58:18,059

thing it's a ubiquitous fabric of sorts

1316

00:58:22,970 --> 00:58:20,520

and it varies depending on who's

1317

00:58:23,930 --> 00:58:22,980

employing it a thing to think about

1318

00:58:27,349 --> 00:58:23,940

though

1319

00:58:29,150 --> 00:58:27,359

if the AIS are already designing things

1320

00:58:31,430 --> 00:58:29,160

and I was going to mention this IEEE

1321

00:58:33,470 --> 00:58:31,440

argue about the first integrated circuit

1322

00:58:35,210 --> 00:58:33,480

was being designed by AI this just

1323

00:58:37,190 --> 00:58:35,220

happened a few months ago

1324

00:58:38,630 --> 00:58:37,200

um where the human Engineers sort of

1325

00:58:40,849 --> 00:58:38,640

backed when left the AI system actually

1326
00:58:42,650 --> 00:58:40,859
designed this chip and it did it worked

1327
00:58:44,630 --> 00:58:42,660
wonderfully it was a really good example

1328
00:58:46,430 --> 00:58:44,640
of this process so we're kind of I mean

1329
00:58:48,230 --> 00:58:46,440
chip design is a really complex art form

1330
00:58:50,750 --> 00:58:48,240
in itself it's certainly the only

1331
00:58:52,130 --> 00:58:50,760
Advanced Engineers teams think about so

1332
00:58:54,589 --> 00:58:52,140
the fact that AI was already being

1333
00:58:57,049 --> 00:58:54,599
turned loose to do this that's a pretty

1334
00:58:58,910 --> 00:58:57,059
significant indicator of where this

1335
00:59:01,910 --> 00:58:58,920
trend is going

1336
00:59:06,789 --> 00:59:01,920
it is is there

1337
00:59:09,410 --> 00:59:06,799
um is there a way to know

1338
00:59:11,750 --> 00:59:09,420

in a general sense the answer is no I

1339

00:59:13,670 --> 00:59:11,760

get that in a completely binary black

1340

00:59:17,650 --> 00:59:13,680

and white one and zero would the answer

1341

00:59:19,970 --> 00:59:17,660

is no but is there any way to weed out

1342

00:59:22,130 --> 00:59:19,980

those you're always going to have a bad

1343

00:59:25,510 --> 00:59:22,140

apple and you are going to have a

1344

00:59:28,430 --> 00:59:25,520

corporation or an individual or group

1345

00:59:30,049 --> 00:59:28,440

that wants to do bad things with this

1346

00:59:33,710 --> 00:59:30,059

technology

1347

00:59:35,569 --> 00:59:33,720

um is there any way to control that

1348

00:59:37,250 --> 00:59:35,579

the only thing I can think of that

1349

00:59:39,650 --> 00:59:37,260

sounds reasonable at this moment in time

1350

00:59:41,990 --> 00:59:39,660

is the potential for litigation in other

1351

00:59:44,089 --> 00:59:42,000

words if you can show prove that company

1352

00:59:46,190 --> 00:59:44,099

took its version of AI and use it

1353

00:59:48,349 --> 00:59:46,200

specifically for committing criminal

1354

00:59:50,630 --> 00:59:48,359

Acts or causing bad things to happen

1355

00:59:53,329 --> 00:59:50,640

some veteran or whatever it might be you

1356

00:59:55,730 --> 00:59:53,339

could show a chain of liability based on

1357

00:59:58,130 --> 00:59:55,740

their usage of that AI I think that's

1358

01:00:00,049 --> 00:59:58,140

the most likely version of this now will

1359

01:00:02,030 --> 01:00:00,059

ever be interpreted into actual laws

1360

01:00:04,549 --> 01:00:02,040

being passed I don't know but the fact

1361

01:00:06,650 --> 01:00:04,559

of a legal precedent being said in court

1362

01:00:10,069 --> 01:00:06,660

I think that's the most likely outcome

1363

01:00:12,589 --> 01:00:10,079

well okay I've got to take a commercial

1364

01:00:15,230 --> 01:00:12,599

break but we're gonna we're gonna pick

1365

01:00:17,569 --> 01:00:15,240

up right here when we come back our

1366

01:00:20,990 --> 01:00:17,579

guest tonight Charles Osmond we are

1367

01:00:25,130 --> 01:00:21,000

talking about the evolution of AI and

1368

01:00:28,730 --> 01:00:25,140

where we are today the ethics of AI and

1369

01:00:31,670 --> 01:00:28,740

where is all of this leading us right

1370

01:00:36,289 --> 01:00:31,680

now it's a very complex but very

1371

01:00:38,150 --> 01:00:36,299

important issue this is Fade to Black

1372

01:00:40,430 --> 01:00:38,160

this is Jimmy Church of Fade to Black

1373

01:00:42,650 --> 01:00:40,440

please visit all of our sponsors we're

1374

01:00:44,450 --> 01:00:42,660

taking a quick break here all of the

1375

01:00:46,849 --> 01:00:44,460

links are below

1376

01:00:49,250 --> 01:00:46,859

and we'll be right back

1377

01:00:52,670 --> 01:00:49,260

this is Jimmy church and I want to

1378

01:00:54,890 --> 01:00:52,680

introduce you to lifewaves x39 Stem Cell

1379

01:00:58,130 --> 01:00:54,900

Activation patch which has totally

1380

01:01:00,910 --> 01:00:58,140

transformed my health my sleep brain and

1381

01:01:03,470 --> 01:01:00,920

my eyes I no longer need reading glasses

1382

01:01:07,130 --> 01:01:03,480

x39 is a true breakthrough in

1383

01:01:09,470 --> 01:01:07,140

regenerative science using light x-39's

1384

01:01:11,630 --> 01:01:09,480

patented age reversal Technologies

1385

01:01:13,370 --> 01:01:11,640

clinically proven to Signal the

1386

01:01:15,650 --> 01:01:13,380

activation of younger stem cells

1387

01:01:18,890 --> 01:01:15,660

accelerating the body's natural healing

1388

01:01:21,170 --> 01:01:18,900

process x39 promotes restoration and

1389

01:01:23,630 --> 01:01:21,180

Rejuvenation bringing the life-changing

1390

01:01:25,910 --> 01:01:23,640

benefits that I've experienced by

1391

01:01:29,089 --> 01:01:25,920

naturally elevating a master signaling

1392

01:01:31,849 --> 01:01:29,099

peptide in the body x39 boosts Vitality

1393

01:01:34,730 --> 01:01:31,859

health and wellness and resets 4 000

1394

01:01:37,309 --> 01:01:34,740

genes to a younger healthier State it's

1395

01:01:41,049 --> 01:01:37,319

one patch once a day and you can turn

1396

01:01:44,450 --> 01:01:41,059

back time with x-39 just go to

1397

01:01:48,410 --> 01:01:44,460

healingworksnow.com that's works with an

1398

01:01:50,569 --> 01:01:48,420

X healingworks now Dot calm hey

1399

01:01:53,030 --> 01:01:50,579

everybody it's Billy Carson also known

1400

01:01:54,829 --> 01:01:53,040

as Forbidden Knowledge I want to talk to

1401
01:01:58,490 --> 01:01:54,839
you about a very special event coming up

1402
01:02:00,470 --> 01:01:58,500
July 30th 2023 The Forbidden conscious

1403
01:02:02,030 --> 01:02:00,480
Awards we're going to honor people who

1404
01:02:04,370 --> 01:02:02,040
have been contributing to the conscious

1405
01:02:05,809 --> 01:02:04,380
Community for decades people that you

1406
01:02:07,309 --> 01:02:05,819
know and love that have helped you get

1407
01:02:09,289 --> 01:02:07,319
to higher levels of thought and

1408
01:02:11,569 --> 01:02:09,299
Consciousness and awareness it's going

1409
01:02:12,890 --> 01:02:11,579
to be alive in-person event but seats

1410
01:02:14,690 --> 01:02:12,900
are going to sell out very fast you want

1411
01:02:16,309 --> 01:02:14,700
to make sure you're there in person and

1412
01:02:18,069 --> 01:02:16,319
guess what you can help vote for the

1413
01:02:20,150 --> 01:02:18,079

winners voting is available on

1414

01:02:21,770 --> 01:02:20,160

forbiddenknowledge.com and the

1415

01:02:24,890 --> 01:02:21,780

categories are going to be social media

1416

01:02:26,770 --> 01:02:24,900

influencer podcast slash radio host TV

1417

01:02:28,549 --> 01:02:26,780

host actor director producer

1418

01:02:29,990 --> 01:02:28,559

entrepreneurs health and wellness

1419

01:02:32,450 --> 01:02:30,000

philanthropists authors field

1420

01:02:34,190 --> 01:02:32,460

researchers archaeologists space anomaly

1421

01:02:37,010 --> 01:02:34,200

hunters and of course a Lifetime

1422

01:02:38,930 --> 01:02:37,020

Achievement Award I'll be your keynote

1423

01:02:40,849 --> 01:02:38,940

speaker that night at The Forbidden

1424

01:02:43,190 --> 01:02:40,859

conscious Awards we have celebrity

1425

01:02:44,750 --> 01:02:43,200

guests performing we'll have a halftime

1426

01:02:46,370 --> 01:02:44,760

show where we're actually going to

1427

01:02:49,069 --> 01:02:46,380

perform music for you and don't forget

1428

01:02:50,990 --> 01:02:49,079

about the pre-event mixer where if you

1429

01:02:52,970 --> 01:02:51,000

buy a box seat you'll be in the VIP

1430

01:02:55,609 --> 01:02:52,980

section and you also have private access

1431

01:02:58,730 --> 01:02:55,619

to a big-ip mixer with celebrity guests

1432

01:03:00,470 --> 01:02:58,740

shake hands break bread Network and then

1433

01:03:02,390 --> 01:03:00,480

walk the red carpet with us and take

1434

01:03:03,650 --> 01:03:02,400

amazing photos it's going to be a night

1435

01:03:05,809 --> 01:03:03,660

to remember you don't want to forget

1436

01:03:07,490 --> 01:03:05,819

this make sure you hurry up and get your

1437

01:03:09,950 --> 01:03:07,500

tickets because you're selling out very

1438

01:03:11,760 --> 01:03:09,960

fast I want to see you there forbidden

1439

01:03:15,349 --> 01:03:11,770

conscious Awards 2023

1440

01:03:18,770 --> 01:03:15,359

[Music]

1441

01:03:21,589 --> 01:03:18,780

River Moon coffee makers of the Fade to

1442

01:03:23,410 --> 01:03:21,599

Black blend truly the best coffee on

1443

01:03:25,670 --> 01:03:23,420

planet Earth just visit

1444

01:03:27,530 --> 01:03:25,680

rivermoonwellness.com or their Amazon

1445

01:03:28,970 --> 01:03:27,540

store it's all simple to do you can

1446

01:03:31,010 --> 01:03:28,980

check out the Fade to Black blend the

1447

01:03:33,710 --> 01:03:31,020

game changer Blend or any of their black

1448

01:03:37,490 --> 01:03:33,720

moon wellness products it's the only

1449

01:03:44,569 --> 01:03:37,500

coffee I drink it is the best and it's

1450

01:03:49,390 --> 01:03:47,690

all right Welcome Back Fade to Black I

1451

01:03:54,650 --> 01:03:49,400

am your host Jimmy church and tonight

1452

01:03:56,569 --> 01:03:54,660

Our Guest is Charles Osman and we are

1453

01:04:02,210 --> 01:03:56,579

discussing tonight amongst other things

1454

01:04:04,490 --> 01:04:02,220

but the evolution of AI and this

1455

01:04:07,069 --> 01:04:04,500

portion of the show it's brought to you

1456

01:04:08,349 --> 01:04:07,079

by the new film it's a documentary it is

1457

01:04:11,329 --> 01:04:08,359

called

1458

01:04:15,109 --> 01:04:11,339

accidental truth accidental truth

1459

01:04:18,650 --> 01:04:15,119

directed by Ron James and it is it's

1460

01:04:23,049 --> 01:04:18,660

streaming on all platforms it is number

1461

01:04:27,410 --> 01:04:23,059

one right now on all platforms and it is

1462

01:04:30,109 --> 01:04:27,420

required viewing from everyone in our

1463

01:04:33,589 --> 01:04:30,119

community check out accidental truth

1464

01:04:38,150 --> 01:04:33,599

today all right our guest tonight is

1465

01:04:41,150 --> 01:04:38,160

Charles Osman and we have uh a lot of uh

1466

01:04:43,670 --> 01:04:41,160

issues that I want to get into uh really

1467

01:04:45,470 --> 01:04:43,680

quick oh we've got the echo back

1468

01:04:48,650 --> 01:04:45,480

oh no

1469

01:04:51,349 --> 01:04:48,660

I hear it it's slight though I I maybe

1470

01:04:54,170 --> 01:04:51,359

we can maybe we can survive with it

1471

01:04:56,289 --> 01:04:54,180

Charles it is this

1472

01:05:06,170 --> 01:05:02,270

if I uploaded my Consciousness into

1473

01:05:10,010 --> 01:05:06,180

uh a chipset and it is inside of an

1474

01:05:13,490 --> 01:05:10,020

android robot but it's me

1475

01:05:15,289 --> 01:05:13,500

it's me yeah my soul is there well sort

1476

01:05:20,150 --> 01:05:15,299

of

1477

01:05:21,770 --> 01:05:20,160

me

1478

01:05:23,450 --> 01:05:21,780

um ethically and morally is there

1479

01:05:25,970 --> 01:05:23,460

anything wrong with that

1480

01:05:28,370 --> 01:05:25,980

I can't really say if it's right or

1481

01:05:29,750 --> 01:05:28,380

wrong I can just say it is because I

1482

01:05:32,030 --> 01:05:29,760

think that's inevitable at some point

1483

01:05:34,670 --> 01:05:32,040

now we're nowhere close to that now uh

1484

01:05:37,309 --> 01:05:34,680

we're pretty I would say that's decades

1485

01:05:38,809 --> 01:05:37,319

off well that would be quite a challenge

1486

01:05:40,970 --> 01:05:38,819

but the fact that it can even be

1487

01:05:43,789 --> 01:05:40,980

considered I think is certainly within

1488

01:05:46,010 --> 01:05:43,799

range of being looked at more carefully

1489

01:05:49,069 --> 01:05:46,020

but at some point well we have our

1490

01:05:51,589 --> 01:05:49,079

clones representing Us in multiple ways

1491

01:05:53,329 --> 01:05:51,599

uh I think for the few that want to do

1492

01:05:54,710 --> 01:05:53,339

this because it's a Competitive Edge or

1493

01:05:56,690 --> 01:05:54,720

for whatever reason Recreation or

1494

01:05:58,309 --> 01:05:56,700

something and notice I don't see this

1495

01:06:00,349 --> 01:05:58,319

being evenly distributed we have to do

1496

01:06:02,030 --> 01:06:00,359

when I look at Gibson of course made the

1497

01:06:03,589 --> 01:06:02,040

famous quote about the tech the future

1498

01:06:05,569 --> 01:06:03,599

is already here so it's not distributed

1499

01:06:08,390 --> 01:06:05,579

evenly so we're kind of there at that

1500

01:06:11,089 --> 01:06:08,400

point where I see this is for the upper

1501

01:06:12,470 --> 01:06:11,099

class the landed gentry of the future it

1502

01:06:14,210 --> 01:06:12,480

won't be so much how much stuff that

1503

01:06:16,430 --> 01:06:14,220

they own but rather how how much access

1504

01:06:18,829 --> 01:06:16,440

do they have and that might equate into

1505

01:06:22,010 --> 01:06:18,839

things like having a cloneable whatever

1506

01:06:23,390 --> 01:06:22,020

it is having Superior DNA and just all

1507

01:06:27,549 --> 01:06:23,400

the other things that may be this kind

1508

01:06:30,170 --> 01:06:27,559

of resource begins to become available

1509

01:06:33,069 --> 01:06:30,180

and I certainly I certainly understand

1510

01:06:37,430 --> 01:06:33,079

that but it's I would also suggest

1511

01:06:40,970 --> 01:06:37,440

immortality and no disease no sleep no

1512

01:06:43,010 --> 01:06:40,980

food no nothing uh you are good to go

1513

01:06:45,950 --> 01:06:43,020

forever technically until the

1514

01:06:48,289 --> 01:06:45,960

electricity runs out and your battery uh

1515

01:06:51,529 --> 01:06:48,299

drains

1516

01:06:54,109 --> 01:06:51,539

yeah well away like this for instance

1517

01:06:56,750 --> 01:06:54,119

not to differ too far from the topic but

1518

01:06:58,390 --> 01:06:56,760

if one wants to take a look at UFOs and

1519

01:07:01,130 --> 01:06:58,400

ET being here Etc

1520

01:07:03,829 --> 01:07:01,140

one speculation could be that it's not

1521

01:07:05,930 --> 01:07:03,839

really the real ETS themselves it's

1522

01:07:08,630 --> 01:07:05,940

their clones they're being sent here as

1523

01:07:10,069 --> 01:07:08,640

like pros like biobots should kind of

1524

01:07:12,109 --> 01:07:10,079

interact and see what's going on and

1525

01:07:14,210 --> 01:07:12,119

send back data that kind of thing I

1526

01:07:16,190 --> 01:07:14,220

think there is a potential evolutionary

1527

01:07:18,349 --> 01:07:16,200

event stream not the only one but one

1528

01:07:20,630 --> 01:07:18,359

potential one or at some point the

1529

01:07:23,270 --> 01:07:20,640

organic root organism become ever less

1530

01:07:25,430 --> 01:07:23,280

relevant and they're cloned sort of

1531

01:07:27,770 --> 01:07:25,440

replicas become the new thing that

1532

01:07:30,049 --> 01:07:27,780

represents their existence on their own

1533

01:07:34,569 --> 01:07:30,059

world or wherever they happen to be well

1534

01:07:40,250 --> 01:07:34,579

if we uh if you and I Charles decide to

1535

01:07:42,049 --> 01:07:40,260

uh fly to uh uh Proxima Centauri those

1536

01:07:45,529 --> 01:07:42,059

four and a half light years away and you

1537

01:07:47,870 --> 01:07:45,539

decide and now if we go by conventional

1538

01:07:50,089 --> 01:07:47,880

means it's going to take us seventy

1539

01:07:53,329 --> 01:07:50,099

thousand years yeah okay and it's it's

1540

01:07:56,150 --> 01:07:53,339

the closest star to us well you and I

1541

01:07:59,089 --> 01:07:56,160

don't live for 70 000 years but we would

1542

01:08:01,789 --> 01:07:59,099

if we were on a chipset and so that's

1543

01:08:05,630 --> 01:08:01,799

how we would explore the stars and so

1544

01:08:06,890 --> 01:08:05,640

potentially uh when E.T meets us they're

1545

01:08:10,490 --> 01:08:06,900

just gonna meet

1546

01:08:12,049 --> 01:08:10,500

you know an AI an uploaded version of us

1547

01:08:15,829 --> 01:08:12,059

they're not going to meet our physical

1548

01:08:17,150 --> 01:08:15,839

meat bodies well I I if I were to take a

1549

01:08:18,890 --> 01:08:17,160

different attack on this

1550

01:08:20,689 --> 01:08:18,900

your reasoning is

1551

01:08:22,490 --> 01:08:20,699

but I would say a more likely scenario

1552

01:08:24,530 --> 01:08:22,500

is that we simply developed or whoever

1553

01:08:27,590 --> 01:08:24,540

develops a type of warp drive or some

1554

01:08:28,490 --> 01:08:27,600

kind of Wormhole transition process I

1555

01:08:30,650 --> 01:08:28,500

think that's where things are going to

1556

01:08:33,650 --> 01:08:30,660

be happening next the idea that space

1557

01:08:35,809 --> 01:08:33,660

time is a frozen medium of which there's

1558

01:08:38,150 --> 01:08:35,819

only one method of access or travel

1559

01:08:42,410 --> 01:08:38,160

through I think that's being shown to be

1560

01:08:44,110 --> 01:08:42,420

ever less true and Quantum Dynamics in

1561

01:08:46,370 --> 01:08:44,120

the cosmos is becoming ever more

1562

01:08:49,370 --> 01:08:46,380

measurable or at least as evidence of it

1563

01:08:51,050 --> 01:08:49,380

so you know time and space are liquid

1564

01:08:52,669 --> 01:08:51,060

mediums really they compress they

1565

01:08:55,070 --> 01:08:52,679

stretch and coagulate around different

1566

01:08:57,289 --> 01:08:55,080

disturbances the idea of space travel

1567

01:08:59,510 --> 01:08:57,299

itself is more looking like

1568

01:09:01,010 --> 01:08:59,520

pitching Gravity Balls and you sort of

1569

01:09:02,510 --> 01:09:01,020

fall towards the gravity well as opposed

1570

01:09:04,490 --> 01:09:02,520

to like a rocket or something propelling

1571

01:09:06,590 --> 01:09:04,500

it through space-time right and we've

1572

01:09:08,990 --> 01:09:06,600

now been able to replicate or simulate a

1573

01:09:10,490 --> 01:09:09,000

history wormholes here on Earth I mean

1574

01:09:12,530 --> 01:09:10,500

very tiny and it's just very

1575

01:09:15,289 --> 01:09:12,540

experimental but at least we can show

1576

01:09:17,450 --> 01:09:15,299

they exist to a certain extent so can

1577

01:09:19,789 --> 01:09:17,460

that be scaled up to a much larger sort

1578

01:09:22,849 --> 01:09:19,799

of cosmic scale nobody's doing this now

1579

01:09:25,430 --> 01:09:22,859

but there at least is the mathematical

1580

01:09:26,990 --> 01:09:25,440

and sort of philosophical a few old

1581

01:09:29,209 --> 01:09:27,000

models of how this could become possible

1582

01:09:31,550 --> 01:09:29,219

I think given a few decades we might

1583

01:09:33,110 --> 01:09:31,560

actually get there and if I had to place

1584

01:09:34,249 --> 01:09:33,120

a bet you know if actually a Bitcoin or

1585

01:09:35,870 --> 01:09:34,259

something

1586

01:09:37,910 --> 01:09:35,880

um that the ETS are probably using

1587

01:09:40,189 --> 01:09:37,920

something like this rather than having

1588

01:09:41,930 --> 01:09:40,199

to embed themselves in some kind of

1589

01:09:44,030 --> 01:09:41,940

immortal chip device I mean even that's

1590

01:09:46,669 --> 01:09:44,040

a reasonable suggestion I just think a a

1591

01:09:48,490 --> 01:09:46,679

closer suggestion will be utilizing some

1592

01:09:50,150 --> 01:09:48,500

type of Wormhole travel

1593

01:09:50,870 --> 01:09:50,160

so

1594

01:09:53,570 --> 01:09:50,880

um

1595

01:09:56,750 --> 01:09:53,580

I I like I like the way you think and I

1596

01:09:58,189 --> 01:09:56,760

like where this direction uh I like that

1597

01:10:00,290 --> 01:09:58,199

turn that we just took we're going to

1598

01:10:03,050 --> 01:10:00,300

get back to AI in a second

1599

01:10:06,470 --> 01:10:03,060

do you think that we're being visited uh

1600

01:10:08,870 --> 01:10:06,480

by E.T right now with the Department of

1601
01:10:12,290 --> 01:10:08,880
Defense and the United States Navy and

1602
01:10:14,450 --> 01:10:12,300
the Senate and hearings in Congress and

1603
01:10:17,330 --> 01:10:14,460
Senate and Jilla brand just had another

1604
01:10:18,709 --> 01:10:17,340
one and we've got these new committees

1605
01:10:20,810 --> 01:10:18,719
and things

1606
01:10:25,010 --> 01:10:20,820
um and UFOs have never been discussed

1607
01:10:28,490 --> 01:10:25,020
like this before in in Washington DC or

1608
01:10:30,950 --> 01:10:28,500
on mass media and and CNN and fox and

1609
01:10:33,590 --> 01:10:30,960
everything what the heck is going on is

1610
01:10:36,530 --> 01:10:33,600
ET here well I think they're trying to

1611
01:10:38,510 --> 01:10:36,540
placate the masses let's go backwards to

1612
01:10:41,090 --> 01:10:38,520
like say Roswell even before Roswell the

1613
01:10:43,130 --> 01:10:41,100

first real UFO sighting in the modern

1614

01:10:45,350 --> 01:10:43,140

era was

1615

01:10:47,570 --> 01:10:45,360

um in Washington state I can't remember

1616

01:10:50,209 --> 01:10:47,580

his name now but he was a child Arnold

1617

01:10:51,950 --> 01:10:50,219

Kenneth he saw seven discs like floating

1618

01:10:53,570 --> 01:10:51,960

over Mount Rainier

1619

01:10:55,130 --> 01:10:53,580

and that kind of opened the door it's

1620

01:10:56,450 --> 01:10:55,140

like because during World War II there

1621

01:10:58,070 --> 01:10:56,460

are things called Foo Fighters which

1622

01:10:59,750 --> 01:10:58,080

actually were discs so like flying

1623

01:11:00,890 --> 01:10:59,760

around people thought it was like Nazi

1624

01:11:03,470 --> 01:11:00,900

Germany or something I don't think it's

1625

01:11:05,930 --> 01:11:03,480

bad at all but I think ET was interested

1626

01:11:09,110 --> 01:11:05,940

to watch what we were doing in a global

1627

01:11:11,570 --> 01:11:09,120

war and since that global war ended with

1628

01:11:13,250 --> 01:11:11,580

the release of nuclear weapons that

1629

01:11:14,630 --> 01:11:13,260

definitely got their interest they think

1630

01:11:16,850 --> 01:11:14,640

look we've been watching these humanoids

1631

01:11:18,709 --> 01:11:16,860

for a long time we kind of track along

1632

01:11:20,689 --> 01:11:18,719

how they were doing from moment to

1633

01:11:22,669 --> 01:11:20,699

moment but now the across the line of

1634

01:11:24,169 --> 01:11:22,679

using nuclear weapons better half a

1635

01:11:25,610 --> 01:11:24,179

second and third look at this this is

1636

01:11:26,930 --> 01:11:25,620

getting a little more scary

1637

01:11:29,630 --> 01:11:26,940

in other words they don't want to see

1638

01:11:31,070 --> 01:11:29,640

their neighborhood polluted by beings

1639

01:11:33,410 --> 01:11:31,080

which are still kind of spiritually

1640

01:11:35,330 --> 01:11:33,420

primitive but have dangerous toys to

1641

01:11:36,770 --> 01:11:35,340

play with right so of course they're

1642

01:11:39,530 --> 01:11:36,780

going to send something down here to

1643

01:11:41,450 --> 01:11:39,540

have a look and perhaps interact now was

1644

01:11:43,010 --> 01:11:41,460

Roswell an actual real thing I think

1645

01:11:45,050 --> 01:11:43,020

there's a high probability it was

1646

01:11:46,970 --> 01:11:45,060

because there have been lots of other

1647

01:11:49,070 --> 01:11:46,980

sightings and events including National

1648

01:11:52,070 --> 01:11:49,080

beings and so on that have been

1649

01:11:53,750 --> 01:11:52,080

chronicled very detailed uh remember

1650

01:11:55,970 --> 01:11:53,760

some forest in England it was a good

1651

01:11:58,250 --> 01:11:55,980

example this was like the mid 80s and he

1652

01:11:59,930 --> 01:11:58,260

had other events where he had senior

1653

01:12:02,030 --> 01:11:59,940

officers in the military police people

1654

01:12:04,910 --> 01:12:02,040

people of all kinds of backgrounds you

1655

01:12:07,910 --> 01:12:04,920

know Executives and so on who had

1656

01:12:10,729 --> 01:12:07,920

nothing to gain At All by submitting

1657

01:12:13,729 --> 01:12:10,739

their story or their telling of an event

1658

01:12:15,590 --> 01:12:13,739

in fact mostly some professional planets

1659

01:12:16,610 --> 01:12:15,600

being especially who have seen these

1660

01:12:19,310 --> 01:12:16,620

things that are interacted with them

1661

01:12:21,950 --> 01:12:19,320

they risk their lives they lose their

1662

01:12:24,110 --> 01:12:21,960

livelihood uh you know being tarnished

1663

01:12:26,390 --> 01:12:24,120

if you will by citing something to do

1664

01:12:28,130 --> 01:12:26,400

with UFOs and don't very recent this was

1665

01:12:29,450 --> 01:12:28,140

sort of like a Death Note for one's

1666

01:12:31,550 --> 01:12:29,460

career depending on what your career was

1667

01:12:33,410 --> 01:12:31,560

so for many of these folks to actually

1668

01:12:35,390 --> 01:12:33,420

come out and say anything at all is

1669

01:12:38,689 --> 01:12:35,400

pretty interesting especially when you

1670

01:12:40,130 --> 01:12:38,699

have uh radar tracks and visual tracking

1671

01:12:42,709 --> 01:12:40,140

on multiple cameras that kind of thing

1672

01:12:44,870 --> 01:12:42,719

uh it's pretty difficult to say this

1673

01:12:46,550 --> 01:12:44,880

never happened now I actually watched

1674

01:12:50,209 --> 01:12:46,560

the Congressional hearings to do with

1675

01:12:53,149 --> 01:12:50,219

the Tic Tac Naval films and so on

1676
01:12:55,310 --> 01:12:53,159
to me they were totally circumventing

1677
01:12:56,870 --> 01:12:55,320
the actual stuff that was there they

1678
01:12:59,149 --> 01:12:56,880
showed a very tiny clip of something

1679
01:13:01,850 --> 01:12:59,159
flying fire really fast they didn't even

1680
01:13:04,430 --> 01:13:01,860
bring up the multiple cameras radar

1681
01:13:05,630 --> 01:13:04,440
tracking Etc the fact that ships at CM

1682
01:13:07,729 --> 01:13:05,640
planes in the air attracting the same

1683
01:13:10,130 --> 01:13:07,739
device at the same time that the device

1684
01:13:12,770 --> 01:13:10,140
went from suborbital to like sea level

1685
01:13:15,110 --> 01:13:12,780
in a matter of seconds which no known

1686
01:13:16,189 --> 01:13:15,120
craft could actually do I mean they

1687
01:13:17,810 --> 01:13:16,199
completely skipped off the whole thing

1688
01:13:21,530 --> 01:13:17,820

so the only thing I could imagine is

1689

01:13:24,470 --> 01:13:21,540

that again this is a way to satisfy the

1690

01:13:25,729 --> 01:13:24,480

a Public's interest in all this but sort

1691

01:13:28,430 --> 01:13:25,739

of tone it down a little bit I don't

1692

01:13:29,990 --> 01:13:28,440

think we're any we're near disclosure so

1693

01:13:32,510 --> 01:13:30,000

that I mean there's a lot of reasons for

1694

01:13:34,850 --> 01:13:32,520

this by the way if we had to admit that

1695

01:13:36,709 --> 01:13:34,860

our skies are being perfectly sort of

1696

01:13:40,070 --> 01:13:36,719

perforated by things we can't control

1697

01:13:42,890 --> 01:13:40,080

that's a really big security Gap is over

1698

01:13:44,390 --> 01:13:42,900

now I'm going to guess that Russia and

1699

01:13:46,070 --> 01:13:44,400

China probably also have had these

1700

01:13:48,169 --> 01:13:46,080

things uh and they don't want to talk

1701

01:13:49,729 --> 01:13:48,179

about this at all either especially if

1702

01:13:52,250 --> 01:13:49,739

we've actually managed to back engineer

1703

01:13:54,110 --> 01:13:52,260

or lose capture some pieces of crap or

1704

01:13:56,030 --> 01:13:54,120

whatever it might be the last thing we

1705

01:13:57,709 --> 01:13:56,040

would ever want to do is discuss this in

1706

01:13:59,649 --> 01:13:57,719

the open world that would be the

1707

01:14:02,410 --> 01:13:59,659

ultimate sort of Ace up the sleeves or

1708

01:14:04,790 --> 01:14:02,420

uh and also of course you have to

1709

01:14:06,770 --> 01:14:04,800

consider that when the Brooklyn report

1710

01:14:09,110 --> 01:14:06,780

came out in 1960 the freaking Institute

1711

01:14:10,490 --> 01:14:09,120

made posters before that said

1712

01:14:13,669 --> 01:14:10,500

it would be the end of civilization

1713

01:14:15,649 --> 01:14:13,679

every chaos all the religious uh people

1714

01:14:17,330 --> 01:14:15,659

of course would go crazy about this we

1715

01:14:19,550 --> 01:14:17,340

can't admit that there's ET anywhere

1716

01:14:22,370 --> 01:14:19,560

because that would just cause this huge

1717

01:14:25,430 --> 01:14:22,380

sort of irreversible chaos to society

1718

01:14:27,470 --> 01:14:25,440

now at first I was in 1960 in more

1719

01:14:29,870 --> 01:14:27,480

recent times the federal Public's been

1720

01:14:31,669 --> 01:14:29,880

pretty much adapted he's that's my

1721

01:14:33,050 --> 01:14:31,679

adaptation again but definitely that

1722

01:14:35,209 --> 01:14:33,060

either yeah et's probably out there is

1723

01:14:36,470 --> 01:14:35,219

probably pretty common most kids you

1724

01:14:38,810 --> 01:14:36,480

know young people today they've seen

1725

01:14:41,209 --> 01:14:38,820

lots of movies and films and comic books

1726

01:14:42,530 --> 01:14:41,219

and everything else yeah okay fine like

1727

01:14:45,110 --> 01:14:42,540

ET Atlanta here

1728

01:14:46,550 --> 01:14:45,120

fine big deal like what next you know

1729

01:14:48,770 --> 01:14:46,560

that sort of thing so it's always become

1730

01:14:51,590 --> 01:14:48,780

like a background issue but still but

1731

01:14:54,290 --> 01:14:51,600

still around the world there's enough

1732

01:14:56,750 --> 01:14:54,300

religious fundamentalism and other sort

1733

01:14:59,270 --> 01:14:56,760

of philosophical orientations that would

1734

01:15:02,990 --> 01:14:59,280

still be a pretty harsh reality to try

1735

01:15:05,689 --> 01:15:03,000

to grasp this idea and that's part of it

1736

01:15:07,490 --> 01:15:05,699

but also if there actually has been

1737

01:15:09,770 --> 01:15:07,500

technology that's been extracted from

1738

01:15:12,530 --> 01:15:09,780

these recovered bits and pieces there's

1739

01:15:14,930 --> 01:15:12,540

an enormous legal liability of your

1740

01:15:16,490 --> 01:15:14,940

network patents were issued and you know

1741

01:15:18,890 --> 01:15:16,500

profitable businesses were extrapolated

1742

01:15:20,810 --> 01:15:18,900

from this that's a gigantic can of worms

1743

01:15:23,209 --> 01:15:20,820

that nobody wants to open up so there's

1744

01:15:26,030 --> 01:15:23,219

a bunch of reasons why this is going to

1745

01:15:27,590 --> 01:15:26,040

be kept from full disclosure for some

1746

01:15:30,950 --> 01:15:27,600

time to come until it absolutely has to

1747

01:15:33,410 --> 01:15:30,960

be but if anything this latest debacle

1748

01:15:35,330 --> 01:15:33,420

with the tick tock flights is a kind of

1749

01:15:37,669 --> 01:15:35,340

a trial below they're sort of testing to

1750

01:15:39,890 --> 01:15:37,679

see how much the public responds to and

1751

01:15:41,590 --> 01:15:39,900

what their response actually is that's

1752

01:15:44,209 --> 01:15:41,600

how I see it

1753

01:15:48,410 --> 01:15:44,219

yeah in

1754

01:15:51,590 --> 01:15:48,420

um in an instance like this

1755

01:15:54,590 --> 01:15:51,600

I'm not sure it's you know I'm talking

1756

01:15:57,770 --> 01:15:54,600

about the Tic Tac I'm not sure if there

1757

01:15:59,209 --> 01:15:57,780

is a biological entity inside of that it

1758

01:16:01,550 --> 01:15:59,219

really wasn't it's probably a it's

1759

01:16:04,189 --> 01:16:01,560

probably a Droid yeah sure right which

1760

01:16:07,430 --> 01:16:04,199

would be controlled by

1761

01:16:10,130 --> 01:16:07,440

artificial intelligence yeah sure right

1762

01:16:12,050 --> 01:16:10,140

all right yeah do you like the way I

1763

01:16:14,270 --> 01:16:12,060

segued yeah that's fine it's a totally

1764

01:16:15,590 --> 01:16:14,280

it's a thing I would think this was an

1765

01:16:18,169 --> 01:16:15,600

AI controlled

1766

01:16:20,390 --> 01:16:18,179

device or cloudy devices actually I

1767

01:16:22,250 --> 01:16:20,400

think this this is common Stuff This Is

1768

01:16:25,010 --> 01:16:22,260

Not Unusual at all in fact I would go so

1769

01:16:26,209 --> 01:16:25,020

far as saying on other worlds whether

1770

01:16:28,070 --> 01:16:26,219

it's a humanoid or some other life

1771

01:16:30,830 --> 01:16:28,080

formed it becomes the intelligent life

1772

01:16:34,310 --> 01:16:30,840

form Etc they go through thousands of

1773

01:16:35,810 --> 01:16:34,320

years of sort of slowly evolving they go

1774

01:16:37,490 --> 01:16:35,820

from 100 gatherers to like having

1775

01:16:38,870 --> 01:16:37,500

organized societies and the organized

1776

01:16:41,149 --> 01:16:38,880

societies be kind of larger more

1777

01:16:43,850 --> 01:16:41,159

organized they develop certain skills

1778

01:16:46,550 --> 01:16:43,860

engineering capacity they learn to smell

1779

01:16:48,229 --> 01:16:46,560

metals and other such things but then in

1780

01:16:49,850 --> 01:16:48,239

the last sort of bit of their

1781

01:16:52,490 --> 01:16:49,860

evolutionary path along the lines it

1782

01:16:54,410 --> 01:16:52,500

suddenly hit the Industrial Age like a

1783

01:16:56,090 --> 01:16:54,420

vertical Spike they start developing new

1784

01:16:58,149 --> 01:16:56,100

technologies they have their access to

1785

01:17:00,709 --> 01:16:58,159

science is much greater and it also

1786

01:17:03,470 --> 01:17:00,719

symbiotic multiplies itself to a much

1787

01:17:05,810 --> 01:17:03,480

faster accelerated rate of progress

1788

01:17:08,810 --> 01:17:05,820

to the point where they begin to develop

1789

01:17:11,330 --> 01:17:08,820

things like nuclear weapons or genetic

1790

01:17:13,669 --> 01:17:11,340

engineering or applied nanotechnology or

1791

01:17:16,729 --> 01:17:13,679

any of the other crucial Marketplace uh

1792

01:17:19,130 --> 01:17:16,739

evolutionary sort of event stream to the

1793

01:17:22,070 --> 01:17:19,140

point where they either perforate the

1794

01:17:23,270 --> 01:17:22,080

next boundary point and successfully

1795

01:17:24,890 --> 01:17:23,280

navigate their way through this

1796

01:17:26,450 --> 01:17:24,900

evolutionary series of challenges to

1797

01:17:30,350 --> 01:17:26,460

become a more

1798

01:17:32,630 --> 01:17:30,360

uh spiritually layer and mature balanced

1799

01:17:34,370 --> 01:17:32,640

way of managing their own planet or they

1800

01:17:35,930 --> 01:17:34,380

succumb to their own shortcomings and

1801

01:17:37,729 --> 01:17:35,940

the plan sort of kills them off and

1802

01:17:39,709 --> 01:17:37,739

that's the end of that or sort of at

1803

01:17:41,270 --> 01:17:39,719

that point now so for those et's that

1804

01:17:44,630 --> 01:17:41,280

have actually successfully evolved past

1805

01:17:46,729 --> 01:17:44,640

that threshold yes they of course they

1806

01:17:48,590 --> 01:17:46,739

would be losing the various same stuff

1807

01:17:50,630 --> 01:17:48,600

that we're sort of looking at now as our

1808

01:17:51,709 --> 01:17:50,640

potential outcome of this and it makes

1809

01:17:55,610 --> 01:17:51,719

all the sense in the world that they'd

1810

01:17:57,950 --> 01:17:55,620

be using some kind of AI determined uh

1811

01:18:00,610 --> 01:17:57,960

mechanisms to explore our roller

1812

01:18:03,470 --> 01:18:00,620

anywhere else

1813

01:18:06,890 --> 01:18:03,480

is there a difference I mean I certainly

1814

01:18:10,610 --> 01:18:06,900

probably not not a whole lot with AI but

1815

01:18:12,350 --> 01:18:10,620

if it if it gets to the level of you

1816

01:18:14,750 --> 01:18:12,360

know not only passing the touring test

1817

01:18:17,689 --> 01:18:14,760

but the level of I'm going to use a bad

1818

01:18:19,610 --> 01:18:17,699

word here if it passes the level of we

1819

01:18:23,510 --> 01:18:19,620

don't give a [h__h] because we can't tell

1820

01:18:25,250 --> 01:18:23,520

right if it gets to that level then

1821

01:18:27,890 --> 01:18:25,260

what's the difference between something

1822

01:18:29,390 --> 01:18:27,900

that's biological or synthetic it's it's

1823

01:18:31,790 --> 01:18:29,400

they're the same thing at that point

1824

01:18:32,930 --> 01:18:31,800

aren't they well as I just said a few at

1825

01:18:34,550 --> 01:18:32,940

the beginning of the show after my

1826

01:18:35,930 --> 01:18:34,560

debacle with the computers and all that

1827

01:18:38,689 --> 01:18:35,940

one of the very first things I pointed

1828

01:18:41,630 --> 01:18:38,699

out was the separation between organic

1829

01:18:43,910 --> 01:18:41,640

and non-organic synthetic and or

1830

01:18:46,610 --> 01:18:43,920

biological Etc becomes ever more

1831

01:18:47,990 --> 01:18:46,620

diffusing at some point irrelevant and

1832

01:18:50,209 --> 01:18:48,000

that is where things are going to be had

1833

01:18:51,229 --> 01:18:50,219

even if we step into the transhuman era

1834

01:18:53,630 --> 01:18:51,239

which I think is coming around the

1835

01:18:55,310 --> 01:18:53,640

corner then yes this becomes more like

1836

01:18:56,990 --> 01:18:55,320

the acceptable Norm as opposed to the

1837

01:19:00,050 --> 01:18:57,000

Exotic exception

1838

01:19:02,149 --> 01:19:00,060

and will it become more required to

1839

01:19:03,890 --> 01:19:02,159

adapt to this ever evolving sort of

1840

01:19:05,090 --> 01:19:03,900

world we're going into probably at least

1841

01:19:07,850 --> 01:19:05,100

for some yes

1842

01:19:10,790 --> 01:19:07,860

well and and and I I think we're living

1843

01:19:12,530 --> 01:19:10,800

there now and and let me and let me

1844

01:19:14,870 --> 01:19:12,540

explain I'm going to do this brief

1845

01:19:17,450 --> 01:19:14,880

you're the guest uh I'm just I'm the

1846

01:19:19,250 --> 01:19:17,460

doofus behind the microphone

1847

01:19:21,110 --> 01:19:19,260

um is is this

1848

01:19:25,070 --> 01:19:21,120

with

1849

01:19:28,189 --> 01:19:25,080

um versions of AI now incorporated into

1850

01:19:31,430 --> 01:19:28,199

search engines into different corporate

1851

01:19:33,890 --> 01:19:31,440

applications now the chat Bots that

1852

01:19:37,910 --> 01:19:33,900

pop-up need to help you on some website

1853

01:19:41,229 --> 01:19:37,920

and whatever it's like and I can go into

1854

01:19:43,729 --> 01:19:41,239

task manager right now on my computer

1855

01:19:44,709 --> 01:19:43,739

and I'll do it I'll do it in real time

1856

01:19:48,950 --> 01:19:44,719

you ready

1857

01:19:52,370 --> 01:19:48,960

I'm gonna go into task manager uh which

1858

01:19:54,910 --> 01:19:52,380

I've got open and it's right here on my

1859

01:19:59,530 --> 01:19:54,920

screen you ready for this

1860

01:20:05,030 --> 01:19:59,540

the number one two

1861

01:20:06,590 --> 01:20:05,040

three four okay out of the top

1862

01:20:09,410 --> 01:20:06,600

eight

1863

01:20:11,510 --> 01:20:09,420

four are artificial intelligence

1864

01:20:12,709 --> 01:20:11,520

programs running on my computer that I

1865

01:20:16,130 --> 01:20:12,719

did not install

1866

01:20:19,850 --> 01:20:16,140

okay it literally said

1867

01:20:22,729 --> 01:20:19,860

social intelligence AI host

1868

01:20:26,410 --> 01:20:22,739

I I didn't pay for that

1869

01:20:30,110 --> 01:20:26,420

and this is um you ready you ready let's

1870

01:20:32,990 --> 01:20:30,120

okay now I've just expanded one of them

1871

01:20:35,810 --> 01:20:33,000

artificial intelligence AI host for the

1872

01:20:40,689 --> 01:20:35,820

Microsoft Windows operating system and

1873

01:20:46,990 --> 01:20:44,149

is a deeper level of this but just when

1874

01:20:51,169 --> 01:20:47,000

new players beyond that so uh believe me

1875

01:20:53,390 --> 01:20:51,179

Intel is making chips Microsoft is

1876

01:20:55,970 --> 01:20:53,400

building ever larger versions of

1877

01:20:57,830 --> 01:20:55,980

software so is Google lots of folks are

1878

01:20:59,870 --> 01:20:57,840

sitting noodling at this territory as we

1879

01:21:02,510 --> 01:20:59,880

speak it's only going to expand not

1880

01:21:03,770 --> 01:21:02,520

contract so at the beginning edge of

1881

01:21:05,689 --> 01:21:03,780

this process

1882

01:21:07,970 --> 01:21:05,699

but a couple of things I might point out

1883

01:21:08,810 --> 01:21:07,980

it's kind of like a way to steer this

1884

01:21:11,689 --> 01:21:08,820

idea

1885

01:21:14,090 --> 01:21:11,699

we're looking at a world where jobs

1886

01:21:16,729 --> 01:21:14,100

might begin to replace by and it's a big

1887

01:21:18,649 --> 01:21:16,739

concern the most likely jobs to be

1888

01:21:20,810 --> 01:21:18,659

replaced at this moment is going to be

1889

01:21:22,970 --> 01:21:20,820

mid-level management White Collar jobs

1890

01:21:24,590 --> 01:21:22,980

it's not going to be so much the people

1891

01:21:26,450 --> 01:21:24,600

working in a warehouse or people doing

1892

01:21:27,830 --> 01:21:26,460

stuff with their hands it's going to be

1893

01:21:30,350 --> 01:21:27,840

the people that are sort of like layered

1894

01:21:31,610 --> 01:21:30,360

between say engineering staff or

1895

01:21:34,450 --> 01:21:31,620

marketing stuff whatever it is and the

1896

01:21:37,250 --> 01:21:34,460

upper level management and I've been to

1897

01:21:39,229 --> 01:21:37,260

multiple corporate environments where

1898

01:21:41,330 --> 01:21:39,239

you had people who are being paid huge

1899

01:21:43,729 --> 01:21:41,340

salaries to do nothing more than just

1900

01:21:45,790 --> 01:21:43,739

select manage their team to have a lot

1901

01:21:47,570 --> 01:21:45,800

of charts and projections and sort of

1902

01:21:49,130 --> 01:21:47,580

schmooze around with the upper level

1903

01:21:50,330 --> 01:21:49,140

management folks and kind of create a

1904

01:21:53,090 --> 01:21:50,340

career for themselves

1905

01:21:54,950 --> 01:21:53,100

many folks myself include have often

1906

01:21:56,330 --> 01:21:54,960

view this as being sort of Superfluous

1907

01:21:58,490 --> 01:21:56,340

and why are we paying these folks so

1908

01:21:59,750 --> 01:21:58,500

much money in the first place to just do

1909

01:22:00,709 --> 01:21:59,760

the sort of when they kind of management

1910

01:22:04,070 --> 01:22:00,719

work

1911

01:22:06,229 --> 01:22:04,080

they'll disappear in a heartbeat

1912

01:22:07,970 --> 01:22:06,239

but I can actually replace that kind of

1913

01:22:10,310 --> 01:22:07,980

process and do it much better and more

1914

01:22:12,770 --> 01:22:10,320

efficiently

1915

01:22:15,470 --> 01:22:12,780

but does anybody care

1916

01:22:17,570 --> 01:22:15,480

you know that's back to my I'm going to

1917

01:22:19,149 --> 01:22:17,580

use that bad word again the I don't I

1918

01:22:21,530 --> 01:22:19,159

don't give a [h__h] level

1919

01:22:24,830 --> 01:22:21,540

in that

1920

01:22:28,130 --> 01:22:24,840

um if AI is assisting in your search

1921

01:22:31,130 --> 01:22:28,140

engine if AI is now

1922

01:22:34,850 --> 01:22:31,140

um completing your chat conversation

1923

01:22:37,490 --> 01:22:34,860

um on your thing if AI is is completing

1924

01:22:41,110 --> 01:22:37,500

these tasks for you if AI is running in

1925

01:22:44,270 --> 01:22:41,120

the background and you don't know it

1926

01:22:46,370 --> 01:22:44,280

do you care no it must be probably

1927

01:22:47,810 --> 01:22:46,380

launch most people just want to go for

1928

01:22:49,910 --> 01:22:47,820

the best Advantage they can do it with

1929

01:22:52,610 --> 01:22:49,920

the best tools if it happens to be AI

1930

01:22:53,930 --> 01:22:52,620

it's doing it fine I I you know this is

1931

01:22:55,970 --> 01:22:53,940

where a lot of people I think have

1932

01:22:57,890 --> 01:22:55,980

trouble processing this

1933

01:22:59,930 --> 01:22:57,900

for a lot of older folks this seems

1934

01:23:01,790 --> 01:22:59,940

really distant and far out in science

1935

01:23:04,370 --> 01:23:01,800

fiction or something for younger people

1936

01:23:06,350 --> 01:23:04,380

especially people going to college and

1937

01:23:08,390 --> 01:23:06,360

starting out in life that's early this

1938

01:23:10,250 --> 01:23:08,400

is becoming a norm this is like an

1939

01:23:11,930 --> 01:23:10,260

expected resource that they're going to

1940

01:23:13,729 --> 01:23:11,940

look at and say okay fine turn you know

1941

01:23:16,310 --> 01:23:13,739

give me the best AI no it's because I

1942

01:23:18,050 --> 01:23:16,320

have to do x y and z a little side note

1943

01:23:21,169 --> 01:23:18,060

if I made a difference a little bit

1944

01:23:23,149 --> 01:23:21,179

there there's an area called emotional

1945

01:23:24,530 --> 01:23:23,159

cognition which is kind of interesting

1946

01:23:25,910 --> 01:23:24,540

because several companies now are

1947

01:23:28,970 --> 01:23:25,920

looking at this idea they want to test

1948

01:23:30,290 --> 01:23:28,980

how people respond to advertisement or

1949

01:23:31,550 --> 01:23:30,300

they want to test how they respond to

1950

01:23:34,189 --> 01:23:31,560

certain kinds of music or just whatever

1951

01:23:36,590 --> 01:23:34,199

it might be but but a lot of these

1952

01:23:37,610 --> 01:23:36,600

companies wants to sell the product for

1953

01:23:40,130 --> 01:23:37,620

insurance

1954

01:23:42,590 --> 01:23:40,140

why because if somebody's driving the

1955

01:23:44,990 --> 01:23:42,600

car and they show bad behavior behind

1956

01:23:47,570 --> 01:23:45,000

the wheel screaming and yelling causing

1957

01:23:49,310 --> 01:23:47,580

you know Road Rage or whatever that

1958

01:23:50,630 --> 01:23:49,320

changes their insurance

1959

01:23:52,550 --> 01:23:50,640

cost

1960

01:23:55,430 --> 01:23:52,560

and they want to use other behavioral

1961

01:23:57,169 --> 01:23:55,440

cognition mechanisms to determine how

1962

01:23:59,090 --> 01:23:57,179

you're working on your job or how your

1963

01:24:01,430 --> 01:23:59,100

your focus is on your daily test that

1964

01:24:03,050 --> 01:24:01,440

sort of thing another example if I could

1965

01:24:04,750 --> 01:24:03,060

just blurt it out I was at the rural

1966

01:24:07,130 --> 01:24:04,760

internet Center this goes back again

1967

01:24:08,209 --> 01:24:07,140

executive Arts like near Stanford

1968

01:24:10,490 --> 01:24:08,219

University

1969

01:24:12,110 --> 01:24:10,500

and I was giving a small presentation

1970

01:24:13,790 --> 01:24:12,120

along with some other folks and at the

1971

01:24:15,350 --> 01:24:13,800

end of my talk as a joke I started said

1972

01:24:17,090 --> 01:24:15,360

well at some point you're going to have

1973

01:24:19,370 --> 01:24:17,100

neural implants which will measure

1974

01:24:21,590 --> 01:24:19,380

minute by minute unless your thoughts

1975

01:24:23,330 --> 01:24:21,600

are oriented towards the work desk of

1976

01:24:25,550 --> 01:24:23,340

course how many minutes are you

1977

01:24:26,810 --> 01:24:25,560

deviating to someone I thought thinking

1978

01:24:28,550 --> 01:24:26,820

about your girlfriend or some social

1979

01:24:30,890 --> 01:24:28,560

thing or just whatever it is

1980

01:24:33,649 --> 01:24:30,900

and then you get paid on a minute by

1981

01:24:36,649 --> 01:24:33,659

minute basis determined specifically by

1982

01:24:37,610 --> 01:24:36,659

how the implant registers their thought

1983

01:24:39,830 --> 01:24:37,620

process

1984

01:24:41,689 --> 01:24:39,840

and I I mean it's a joke sort of thing

1985

01:24:43,610 --> 01:24:41,699

but about half the people in the

1986

01:24:45,590 --> 01:24:43,620

audience said how much will that cost

1987

01:24:48,229 --> 01:24:45,600

when's it available can you give us some

1988

01:24:49,669 --> 01:24:48,239

leads for what companies doing this and

1989

01:24:52,430 --> 01:24:49,679

people took it seriously and if they

1990

01:24:54,169 --> 01:24:52,440

really wanted to buy this technology for

1991

01:24:56,990 --> 01:24:54,179

their business platform whatever it

1992

01:24:58,850 --> 01:24:57,000

might be it was like over 10 years ago

1993

01:25:01,550 --> 01:24:58,860

and now I see companies trying to use

1994

01:25:03,470 --> 01:25:01,560

emotional cognition engines to determine

1995

01:25:05,450 --> 01:25:03,480

human behavior and response

1996

01:25:07,310 --> 01:25:05,460

characteristics due to various kinds of

1997

01:25:09,169 --> 01:25:07,320

stimuli right like driving a car for

1998

01:25:12,530 --> 01:25:09,179

example this is already being done this

1999

01:25:16,630 --> 01:25:12,540

is this is a deliverable platform

2000

01:25:19,570 --> 01:25:16,640

now what is okay so

2001

01:25:23,890 --> 01:25:19,580

if a computer

2002

01:25:28,550 --> 01:25:23,900

if no not computer if software

2003

01:25:31,310 --> 01:25:28,560

thinks assumes and feels that they are

2004

01:25:32,750 --> 01:25:31,320

sentient because if that's the case they

2005

01:25:34,550 --> 01:25:32,760

would certainly understand what the

2006

01:25:36,590 --> 01:25:34,560

definition means at that point right

2007

01:25:38,209 --> 01:25:36,600

okay so they would be able to call

2008

01:25:41,390 --> 01:25:38,219

themselves sentient I call myself

2009

01:25:42,530 --> 01:25:41,400

sentient right okay so if you're at that

2010

01:25:44,649 --> 01:25:42,540

level

2011

01:25:49,130 --> 01:25:44,659

does that mean

2012

01:25:52,370 --> 01:25:49,140

that software has consciousness

2013

01:25:53,990 --> 01:25:52,380

is it well I am that's a pretty tricky

2014

01:25:55,610 --> 01:25:54,000

one I'm not qualified to really answer

2015

01:25:56,570 --> 01:25:55,620

that sort of I think a lot of people are

2016

01:25:58,250 --> 01:25:56,580

trying to figure out what Consciousness

2017

01:26:00,709 --> 01:25:58,260

even is I'm not sure anyone has a real

2018

01:26:02,330 --> 01:26:00,719

answer some folks have offered the idea

2019

01:26:04,669 --> 01:26:02,340

and I sort of look at this apparently

2020

01:26:06,350 --> 01:26:04,679

that conference isn't just in our brain

2021

01:26:08,629 --> 01:26:06,360

it's sort of like a field that we

2022

01:26:11,270 --> 01:26:08,639

connect to that our brain is more like a

2023

01:26:13,550 --> 01:26:11,280

transceiver for process but it's really

2024

01:26:15,050 --> 01:26:13,560

not the whole entirety of our

2025

01:26:17,390 --> 01:26:15,060

Consciousness that we sort of interact

2026
01:26:19,490 --> 01:26:17,400
with this larger Realm Of Consciousness

2027
01:26:20,810 --> 01:26:19,500
that our brain is like a central process

2028
01:26:22,850 --> 01:26:20,820
engine form

2029
01:26:25,070 --> 01:26:22,860
that may or may not be true and so

2030
01:26:27,410 --> 01:26:25,080
nobody really knows the answer but it

2031
01:26:30,649 --> 01:26:27,420
might be that just levels of complexity

2032
01:26:34,610 --> 01:26:30,659
lead up to the for the emergence of

2033
01:26:36,290 --> 01:26:34,620
functions as the complex system tries

2034
01:26:38,330 --> 01:26:36,300
every more to become more functional in

2035
01:26:39,770 --> 01:26:38,340
whatever it's doing it develops a kind

2036
01:26:41,169 --> 01:26:39,780
of Consciousness just like sentience

2037
01:26:43,070 --> 01:26:41,179
becomes an emerging process

2038
01:26:44,750 --> 01:26:43,080

Consciousness probably isn't everything

2039

01:26:47,930 --> 01:26:44,760

it's just probably I'm just guessing but

2040

01:26:50,209 --> 01:26:47,940

that could be the case well okay so what

2041

01:26:52,970 --> 01:26:50,219

is your belief you kind of answered it

2042

01:26:54,250 --> 01:26:52,980

there but I'll ask the question directly

2043

01:26:58,510 --> 01:26:54,260

um

2044

01:27:01,129 --> 01:26:58,520

Consciousness physical or non-physical

2045

01:27:02,629 --> 01:27:01,139

I don't have an answer I'm not sure

2046

01:27:04,129 --> 01:27:02,639

anyone does I think it's a combination

2047

01:27:05,270 --> 01:27:04,139

of both now one thing I might throw in

2048

01:27:07,070 --> 01:27:05,280

there just to make things more

2049

01:27:08,930 --> 01:27:07,080

complicated there's something called

2050

01:27:11,870 --> 01:27:08,940

Quantum cognition which is a really

2051

01:27:13,310 --> 01:27:11,880

fascinating area and Dean Rayden is the

2052

01:27:14,510 --> 01:27:13,320

PhD in physics and some other folks have

2053

01:27:16,070 --> 01:27:14,520

been looking at this for a long time I

2054

01:27:17,689 --> 01:27:16,080

happen to live just a few miles from

2055

01:27:19,370 --> 01:27:17,699

ions The Institute for no matter

2056

01:27:20,570 --> 01:27:19,380

sciences and it's kind of interesting

2057

01:27:21,830 --> 01:27:20,580

because I've gone there a few times to

2058

01:27:24,050 --> 01:27:21,840

listen to various lectures I even

2059

01:27:26,209 --> 01:27:24,060

presented there once and the whole idea

2060

01:27:29,030 --> 01:27:26,219

is is there a scientific way to

2061

01:27:31,310 --> 01:27:29,040

determine if we connect to

2062

01:27:32,870 --> 01:27:31,320

forms a quantum entanglement in our

2063

01:27:33,649 --> 01:27:32,880

biological systems and if that's the

2064

01:27:36,370 --> 01:27:33,659

case

2065

01:27:39,770 --> 01:27:36,380

that would open up kind of a Pandora

2066

01:27:41,930 --> 01:27:39,780

Pandora's Box to determine what contest

2067

01:27:43,010 --> 01:27:41,940

actually is or how it operates and I

2068

01:27:44,209 --> 01:27:43,020

made this point for a couple of

2069

01:27:46,189 --> 01:27:44,219

different reasons

2070

01:27:48,470 --> 01:27:46,199

um there have been a lot of studies that

2071

01:27:50,629 --> 01:27:48,480

wanted to look at things like could Mass

2072

01:27:51,950 --> 01:27:50,639

Consciousness change a physical thing

2073

01:27:53,450 --> 01:27:51,960

that's the right thing so there's

2074

01:27:54,649 --> 01:27:53,460

something called the gcp or Global

2075

01:27:56,270 --> 01:27:54,659

conscience project and I said for

2076

01:27:57,590 --> 01:27:56,280

instance and what they've done is

2077

01:27:59,330 --> 01:27:57,600

they've sprinkled random number

2078

01:28:01,010 --> 01:27:59,340

generators all over the world like lots

2079

01:28:03,229 --> 01:28:01,020

you know so like I saw more of these

2080

01:28:06,169 --> 01:28:03,239

things Randomness is a very fragile

2081

01:28:08,570 --> 01:28:06,179

mathematical field it's it's always on

2082

01:28:11,090 --> 01:28:08,580

being threatened by potential orders or

2083

01:28:13,129 --> 01:28:11,100

premiums and a noise floor so any

2084

01:28:15,229 --> 01:28:13,139

radical change in Randomness in a RNG

2085

01:28:17,629 --> 01:28:15,239

system would indicate something has

2086

01:28:21,110 --> 01:28:17,639

affected it so what's interesting is the

2087

01:28:22,610 --> 01:28:21,120

largest known example of lots of oranges

2088

01:28:25,010 --> 01:28:22,620

around the world suddenly becoming more

2089

01:28:26,930 --> 01:28:25,020

orderly in their numbering process

2090

01:28:29,090 --> 01:28:26,940

was 9 11.

2091

01:28:32,689 --> 01:28:29,100

the second largest was the tsunami of

2092

01:28:34,010 --> 01:28:32,699

2005. there's a whole series the data is

2093

01:28:37,490 --> 01:28:34,020

really quickly actually now what's

2094

01:28:39,950 --> 01:28:37,500

interesting not 911 was it started going

2095

01:28:41,990 --> 01:28:39,960

off the charts about a half hour before

2096

01:28:45,430 --> 01:28:42,000

the first plane actually hit that is

2097

01:28:48,410 --> 01:28:45,440

correct so something's going on that

2098

01:28:49,790 --> 01:28:48,420

transcends the four-dimensional three

2099

01:28:51,470 --> 01:28:49,800

special one temporal Dimension that

2100

01:28:53,450 --> 01:28:51,480

we're sort of used to there's other

2101
01:28:54,229 --> 01:28:53,460
dimensions that which sort of parallel

2102
01:28:56,990 --> 01:28:54,239
this

2103
01:28:59,870 --> 01:28:57,000
of which we I think all of us have some

2104
01:29:01,669 --> 01:28:59,880
kind of sensory cognition potential and

2105
01:29:03,649 --> 01:29:01,679
it's only in a rare few it tends to be

2106
01:29:06,470 --> 01:29:03,659
more female than male that have this

2107
01:29:08,810 --> 01:29:06,480
sort of expanded or magnified version of

2108
01:29:11,149 --> 01:29:08,820
this is there a genetic marker for this

2109
01:29:13,910 --> 01:29:11,159
there could be now what's interesting is

2110
01:29:15,830 --> 01:29:13,920
it used to be thought that quantum

2111
01:29:17,450 --> 01:29:15,840
entanglement could only happen extreme

2112
01:29:19,129 --> 01:29:17,460
cryogenic environments you know liquid

2113
01:29:22,010 --> 01:29:19,139

helium sort of thing with specialized

2114

01:29:24,290 --> 01:29:22,020

materials correct not so fast it's not

2115

01:29:25,729 --> 01:29:24,300

even proven time and again that Quantum

2116

01:29:27,830 --> 01:29:25,739

containment can affect occur in living

2117

01:29:30,050 --> 01:29:27,840

systems both plant and animal this goes

2118

01:29:32,689 --> 01:29:30,060

back to the early 2000s in fact as a

2119

01:29:34,669 --> 01:29:32,699

whole Science Now a PhD level science on

2120

01:29:37,250 --> 01:29:34,679

Quantum biology I mean it's a real thing

2121

01:29:40,189 --> 01:29:37,260

yeah so that opens the door once again

2122

01:29:42,950 --> 01:29:40,199

for do you have some kind of biophysical

2123

01:29:44,570 --> 01:29:42,960

platform in our brain or whatever might

2124

01:29:46,910 --> 01:29:44,580

be but it's kind of quantum recognition

2125

01:29:49,370 --> 01:29:46,920

and if that's the case that makes it

2126
01:29:50,330 --> 01:29:49,380
seemingly impossible become well more

2127
01:29:51,709 --> 01:29:50,340
possible

2128
01:29:54,110 --> 01:29:51,719
and that may be part of Consciousness

2129
01:29:56,270 --> 01:29:54,120
you know and then you have somebody like

2130
01:29:58,729 --> 01:29:56,280
Richard Dawkins will come along and say

2131
01:30:00,110 --> 01:29:58,739
dude it's just some crazy form of

2132
01:30:03,110 --> 01:30:00,120
psychosis

2133
01:30:05,810 --> 01:30:03,120
right and this is all imaginary

2134
01:30:09,050 --> 01:30:05,820
and and you're always going to fight

2135
01:30:12,310 --> 01:30:09,060
because those that feel like they are

2136
01:30:15,169 --> 01:30:12,320
part of some intelligency that they are

2137
01:30:17,450 --> 01:30:15,179
from a group of people that are smarter

2138
01:30:21,590 --> 01:30:17,460

than you and I and and everybody else is

2139

01:30:24,709 --> 01:30:21,600

just you know uh have a [h__h] brain

2140

01:30:27,290 --> 01:30:24,719

mechanism not [h__h] as in the word a

2141

01:30:31,189 --> 01:30:27,300

brain that works backwards right

2142

01:30:34,430 --> 01:30:31,199

um and and and isn't balanced and that's

2143

01:30:37,129 --> 01:30:34,440

what they will say they don't want to

2144

01:30:39,410 --> 01:30:37,139

admit that Consciousness could exist

2145

01:30:42,649 --> 01:30:39,420

outside of the body well they will tell

2146

01:30:44,450 --> 01:30:42,659

you that it is purely physical and it is

2147

01:30:46,910 --> 01:30:44,460

a chemical reaction therefore there's

2148

01:30:50,209 --> 01:30:46,920

nothing to ponder there's nothing to

2149

01:30:53,390 --> 01:30:50,219

trip on when you die you die you know

2150

01:30:56,209 --> 01:30:53,400

and and and it's fascinating to me how

2151
01:30:57,890 --> 01:30:56,219
very smart people can develop that

2152
01:31:01,910 --> 01:30:57,900
mindset

2153
01:31:04,490 --> 01:31:01,920
I would argue slightly at least that we

2154
01:31:06,470 --> 01:31:04,500
a don't really all the answers far from

2155
01:31:08,030 --> 01:31:06,480
it and B and now we can show that

2156
01:31:10,550 --> 01:31:08,040
Quantum entangle doesn't affect exist in

2157
01:31:13,250 --> 01:31:10,560
living systems that suggests strongly

2158
01:31:15,169 --> 01:31:13,260
that we can interact with other sort of

2159
01:31:17,570 --> 01:31:15,179
quantum entanglement events or processes

2160
01:31:19,610 --> 01:31:17,580
outside of our physical being that there

2161
01:31:22,790 --> 01:31:19,620
really is a provable if you will

2162
01:31:24,110 --> 01:31:22,800
connection pattern that can be shown now

2163
01:31:25,850 --> 01:31:24,120

how much of that plays into the

2164

01:31:27,110 --> 01:31:25,860

consciousness of group Consciousness

2165

01:31:29,270 --> 01:31:27,120

versus individual Consciousness that

2166

01:31:31,729 --> 01:31:29,280

kind of thing that's a huge area to

2167

01:31:34,070 --> 01:31:31,739

explore but I wouldn't close the door on

2168

01:31:35,990 --> 01:31:34,080

the ideas icons is only a chemical

2169

01:31:38,750 --> 01:31:36,000

reaction sitting inside our right or our

2170

01:31:41,090 --> 01:31:38,760

brain I would be much more open to a

2171

01:31:42,890 --> 01:31:41,100

further explanation of the concept now

2172

01:31:44,750 --> 01:31:42,900

sure there's going to be physiological

2173

01:31:47,450 --> 01:31:44,760

uh mechanisms that are part of this

2174

01:31:49,729 --> 01:31:47,460

process there's a number of models to

2175

01:31:51,350 --> 01:31:49,739

show this could actually work uh I tend

2176
01:31:53,350 --> 01:31:51,360
to lean towards a photonic mechanism

2177
01:31:55,790 --> 01:31:53,360
myself and I can explain that

2178
01:31:57,470 --> 01:31:55,800
but whatever the argument might happen

2179
01:31:59,810 --> 01:31:57,480
to be there's going to be competing

2180
01:32:02,689 --> 01:31:59,820
models for the physiological front end

2181
01:32:04,129 --> 01:32:02,699
of that process but yes there is some

2182
01:32:06,169 --> 01:32:04,139
kind of quantum entertainment mechanism

2183
01:32:07,129 --> 01:32:06,179
that we're far from understanding

2184
01:32:09,050 --> 01:32:07,139
completely

2185
01:32:10,550 --> 01:32:09,060
but we can certainly see evidence that

2186
01:32:11,930 --> 01:32:10,560
might be occurring and everything I

2187
01:32:14,149 --> 01:32:11,940
might point out if you go back to

2188
01:32:15,890 --> 01:32:14,159

ancient times or just prehistory times

2189

01:32:17,870 --> 01:32:15,900

before the Industrial Age

2190

01:32:21,890 --> 01:32:17,880

when everybody lived really close to the

2191

01:32:23,030 --> 01:32:21,900

land people were much more connected to

2192

01:32:25,070 --> 01:32:23,040

the surroundings

2193

01:32:26,570 --> 01:32:25,080

the world of nation was much more

2194

01:32:28,550 --> 01:32:26,580

ingrained in their daily experience than

2195

01:32:30,050 --> 01:32:28,560

it is for most people now so they were

2196

01:32:32,629 --> 01:32:30,060

much more sensitive

2197

01:32:34,870 --> 01:32:32,639

to communication with other people with

2198

01:32:36,830 --> 01:32:34,880

animals you know their surroundings

2199

01:32:40,370 --> 01:32:36,840

non-verbally in other words they could

2200

01:32:42,110 --> 01:32:40,380

sort of tell or recognize what a thought

2201
01:32:44,270 --> 01:32:42,120
pattern might be or what intention might

2202
01:32:46,430 --> 01:32:44,280
be that kind of thing based on this kind

2203
01:32:48,290 --> 01:32:46,440
of quantum cognition and even in today's

2204
01:32:49,490 --> 01:32:48,300
world you might notice if you're walking

2205
01:32:51,110 --> 01:32:49,500
out just having something all the time

2206
01:32:52,430 --> 01:32:51,120
you're walking down the street or you're

2207
01:32:53,629 --> 01:32:52,440
driving away in a car or something and

2208
01:32:55,490 --> 01:32:53,639
you look at sunlight from a distance

2209
01:32:57,530 --> 01:32:55,500
like two blocks away they turn around

2210
01:32:59,629 --> 01:32:57,540
because they can feel them they're being

2211
01:33:01,729 --> 01:32:59,639
looked at now what's going on with that

2212
01:33:03,890 --> 01:33:01,739
I think it's just there's no physical

2213
01:33:05,390 --> 01:33:03,900

explanation but it does happen it's very

2214

01:33:06,890 --> 01:33:05,400

consistent

2215

01:33:08,629 --> 01:33:06,900

um the other thing I sort of toss out

2216

01:33:09,890 --> 01:33:08,639

there for thought is you've probably

2217

01:33:11,450 --> 01:33:09,900

heard of the double slit experiment

2218

01:33:13,430 --> 01:33:11,460

where you can take coherent life from a

2219

01:33:16,189 --> 01:33:13,440

laser shine it through a pair of slits

2220

01:33:18,470 --> 01:33:16,199

and as long as it's not being looked at

2221

01:33:20,030 --> 01:33:18,480

it acts like a wave but then if you

2222

01:33:21,470 --> 01:33:20,040

start to observe it it starts to look at

2223

01:33:22,970 --> 01:33:21,480

particles you know Etc there's a whole

2224

01:33:24,770 --> 01:33:22,980

sort of point of interaction with the

2225

01:33:26,689 --> 01:33:24,780

coherent light that's being shiny

2226

01:33:28,910 --> 01:33:26,699

through the slits this is just like one

2227

01:33:30,709 --> 01:33:28,920

piece of a larger puzzle so again I

2228

01:33:34,010 --> 01:33:30,719

think we're really far away from having

2229

01:33:36,950 --> 01:33:34,020

any kind of determinate defect for this

2230

01:33:38,689 --> 01:33:36,960

is how it works I think we see pieces of

2231

01:33:41,030 --> 01:33:38,699

a puzzle but the big puzzle has lots of

2232

01:33:41,870 --> 01:33:41,040

missing pieces yeah and you know when

2233

01:33:45,050 --> 01:33:41,880

those

2234

01:33:47,629 --> 01:33:45,060

um intelligent uh wackadus right like

2235

01:33:50,450 --> 01:33:47,639

Richard Dawkins uh you know those guys

2236

01:33:51,709 --> 01:33:50,460

you know like Neil deGrasse Tyson were

2237

01:33:53,450 --> 01:33:51,719

they

2238

01:33:59,050 --> 01:33:53,460

um tried to be the smartest people in

2239

01:34:03,410 --> 01:33:59,060

the room and then they want to say that

2240

01:34:06,370 --> 01:34:03,420

there is no such thing as blah blah blah

2241

01:34:09,830 --> 01:34:06,380

right but then they will say

2242

01:34:12,709 --> 01:34:09,840

uh uh and and bring up the double slit

2243

01:34:14,629 --> 01:34:12,719

experiment or something similar to that

2244

01:34:18,470 --> 01:34:14,639

and say that you can change something

2245

01:34:20,450 --> 01:34:18,480

just by looking at it it can change its

2246

01:34:24,050 --> 01:34:20,460

state it's like man you can't have it

2247

01:34:29,330 --> 01:34:27,169

or it isn't but you can't you can't have

2248

01:34:30,229 --> 01:34:29,340

it both ways you can't you you just

2249

01:34:32,870 --> 01:34:30,239

can't

2250

01:34:34,370 --> 01:34:32,880

um but but here's here's where it gets a

2251

01:34:38,689 --> 01:34:34,380

little tricky for me okay

2252

01:34:40,370 --> 01:34:38,699

as as much as I like to to to complain

2253

01:34:42,110 --> 01:34:40,380

about

2254

01:34:44,570 --> 01:34:42,120

um backwards thinkers Like Richard

2255

01:34:47,270 --> 01:34:44,580

Dawkins who doesn't who doesn't have his

2256

01:34:49,729 --> 01:34:47,280

you know brain connected correctly I I

2257

01:34:52,990 --> 01:34:49,739

love bagging on those guys but here's

2258

01:34:56,390 --> 01:34:53,000

where they've got kind of got it right

2259

01:34:59,330 --> 01:34:56,400

if Consciousness is

2260

01:35:01,850 --> 01:34:59,340

physical where there's a little piece of

2261

01:35:03,950 --> 01:35:01,860

Consciousness in every particle and you

2262

01:35:07,370 --> 01:35:03,960

amass enough of it together like this

2263

01:35:09,709 --> 01:35:07,380

five pounds of gray goo between our ears

2264

01:35:12,350 --> 01:35:09,719

you amass enough particles together both

2265

01:35:14,390 --> 01:35:12,360

you got enough Consciousness acquired

2266

01:35:18,410 --> 01:35:14,400

that you open up your eyes and you're

2267

01:35:22,550 --> 01:35:18,420

now this Consciousness bearing meat suit

2268

01:35:26,950 --> 01:35:22,560

all right fine great but then if you

2269

01:35:29,570 --> 01:35:26,960

apply that to a worldwide network of

2270

01:35:32,570 --> 01:35:29,580

interconnected computers and chips

2271

01:35:36,890 --> 01:35:32,580

that's a lot of particles bro right yeah

2272

01:35:39,950 --> 01:35:36,900

that's a lot of that's a lot of maybe

2273

01:35:42,530 --> 01:35:39,960

it could become conscious maybe it's

2274

01:35:43,189 --> 01:35:42,540

conscious now maybe it's pretty pissed

2275

01:35:45,470 --> 01:35:43,199

off

2276

01:35:48,110 --> 01:35:45,480

we need to really think about that and

2277

01:35:50,330 --> 01:35:48,120

that's where if you have it both ways I

2278

01:35:51,649 --> 01:35:50,340

get a little bit nervous well Peter

2279

01:35:54,110 --> 01:35:51,659

Russell of course is well known for his

2280

01:35:55,490 --> 01:35:54,120

book the global brain awakens the over a

2281

01:35:57,229 --> 01:35:55,500

whole series of books multiple of rain

2282

01:35:58,729 --> 01:35:57,239

other folks have written about the

2283

01:36:01,070 --> 01:35:58,739

Wolverine Pierre darshan talked about

2284

01:36:02,330 --> 01:36:01,080

this back in 1950s he called the newest

2285

01:36:05,570 --> 01:36:02,340

fear but nonetheless people have seen

2286

01:36:10,450 --> 01:36:08,090

detailed however different variations

2287

01:36:13,550 --> 01:36:10,460

have different sort of outcomes

2288

01:36:16,310 --> 01:36:13,560

I often suggest that whatever the

2289

01:36:19,550 --> 01:36:16,320

collective AI presence is is going to

2290

01:36:21,830 --> 01:36:19,560

learn from what it sees and if it sees a

2291

01:36:23,590 --> 01:36:21,840

lot of bad behavior or just you know

2292

01:36:25,490 --> 01:36:23,600

sort of competitive

2293

01:36:27,910 --> 01:36:25,500

narcissistic kind of

2294

01:36:30,470 --> 01:36:27,920

all games all all

2295

01:36:32,090 --> 01:36:30,480

new limitations are off I'm just going

2296

01:36:33,950 --> 01:36:32,100

to get what I can get that kind of

2297

01:36:36,229 --> 01:36:33,960

behavior amongst the feelings

2298

01:36:38,209 --> 01:36:36,239

is going to respond accordingly we have

2299

01:36:40,910 --> 01:36:38,219

to kind of train ourselves

2300

01:36:42,830 --> 01:36:40,920

to show the AI a different maybe better

2301

01:36:45,229 --> 01:36:42,840

way of being collectively as a

2302

01:36:47,270 --> 01:36:45,239

civilization as a collective organism

2303

01:36:48,770 --> 01:36:47,280

that may be the actual evolutionary

2304

01:36:50,990 --> 01:36:48,780

challenge the challenge is not going to

2305

01:36:53,810 --> 01:36:51,000

be the emergence of AI itself I think

2306

01:36:56,030 --> 01:36:53,820

that's a a sort of insignificant part of

2307

01:36:58,250 --> 01:36:56,040

this puzzle the more significant part is

2308

01:37:00,590 --> 01:36:58,260

what is the la going to learn from what

2309

01:37:02,870 --> 01:37:00,600

it sees and if it's a collective

2310

01:37:05,570 --> 01:37:02,880

complexity factor that determines a

2311

01:37:07,129 --> 01:37:05,580

potential assumptions emerging that

2312

01:37:09,950 --> 01:37:07,139

could well a part of it I mean I don't

2313

01:37:11,950 --> 01:37:09,960

have a precise answer but I think that

2314

01:37:14,629 --> 01:37:11,960

would be a certainly a reasonable

2315

01:37:17,390 --> 01:37:14,639

trajectory to theorize on

2316

01:37:20,810 --> 01:37:17,400

with um with the emergence of social

2317

01:37:24,169 --> 01:37:20,820

media the internet in general right uh

2318

01:37:26,570 --> 01:37:24,179

but if we back up to 1995 and and AOL

2319

01:37:30,110 --> 01:37:26,580

for instance

2320

01:37:32,750 --> 01:37:30,120

um we didn't really know what we were

2321

01:37:35,090 --> 01:37:32,760

doing but it was a Brave New World it

2322

01:37:38,270 --> 01:37:35,100

was the Wild Wild West right and let's

2323

01:37:40,550 --> 01:37:38,280

go for it well okay so now we've got a

2324

01:37:43,430 --> 01:37:40,560

divided World we've got social media and

2325

01:37:45,950 --> 01:37:43,440

trolls and fighting and divorces

2326
01:37:48,470 --> 01:37:45,960
happening and friendships being ruined

2327
01:37:50,750 --> 01:37:48,480
and jobs being lost because everybody

2328
01:37:53,390 --> 01:37:50,760
wants to fight and we didn't really

2329
01:37:56,870 --> 01:37:53,400
understand what we were creating

2330
01:38:00,649 --> 01:37:56,880
didn't we learn a lesson with that with

2331
01:38:03,709 --> 01:38:00,659
AI in that now we have competitive AIS

2332
01:38:06,649 --> 01:38:03,719
uh not only in our search engines but

2333
01:38:09,370 --> 01:38:06,659
apparently in everything that we

2334
01:38:13,310 --> 01:38:09,380
interface with on on the planet now

2335
01:38:17,090 --> 01:38:13,320
without really thinking about how fast

2336
01:38:19,310 --> 01:38:17,100
we were moving yeah well have we got

2337
01:38:21,770 --> 01:38:19,320
that too fast for the learning process

2338
01:38:23,570 --> 01:38:21,780

and we may fail there's no guarantee

2339

01:38:25,490 --> 01:38:23,580

this is going to work out for a benefit

2340

01:38:28,970 --> 01:38:25,500

I think another one is it probably has

2341

01:38:30,590 --> 01:38:28,980

but we are who we are here and I'll look

2342

01:38:33,050 --> 01:38:30,600

at China for a second they've got the

2343

01:38:34,850 --> 01:38:33,060

social monitoring system where if you

2344

01:38:37,129 --> 01:38:34,860

behave yourself you'll have a pleasant

2345

01:38:39,290 --> 01:38:37,139

life but the needs to go off the rails

2346

01:38:40,850 --> 01:38:39,300

and behave badly right away you get all

2347

01:38:42,770 --> 01:38:40,860

these scoring systems that are going to

2348

01:38:45,110 --> 01:38:42,780

tell you you can't get a loan you can't

2349

01:38:46,790 --> 01:38:45,120

get education is a major university you

2350

01:38:48,709 --> 01:38:46,800

can't even travel all these kinds of

2351

01:38:50,750 --> 01:38:48,719

things starting to come out at you

2352

01:38:52,430 --> 01:38:50,760

because you violated one of the social

2353

01:38:54,950 --> 01:38:52,440

edicts that's been proclaimed to speak

2354

01:38:57,410 --> 01:38:54,960

these laws that were will we see

2355

01:38:59,570 --> 01:38:57,420

something like that here maybe I think

2356

01:39:01,970 --> 01:38:59,580

that we've seen a lot of damage caused

2357

01:39:04,729 --> 01:39:01,980

by young people especially kids even

2358

01:39:06,050 --> 01:39:04,739

teenagers preteens even getting sort of

2359

01:39:08,330 --> 01:39:06,060

sucked into these weird social

2360

01:39:10,669 --> 01:39:08,340

environments where they have all kinds

2361

01:39:13,250 --> 01:39:10,679

of like really exaggerated sense of what

2362

01:39:15,050 --> 01:39:13,260

life's supposed to be you've seen it's

2363

01:39:17,030 --> 01:39:15,060

pretty hard what crimes actually in some

2364

01:39:19,070 --> 01:39:17,040

cases you know murders and so on because

2365

01:39:20,510 --> 01:39:19,080

they were stimulated by some interaction

2366

01:39:23,930 --> 01:39:20,520

they found online that would never

2367

01:39:25,550 --> 01:39:23,940

happen at an earlier time so are we able

2368

01:39:28,370 --> 01:39:25,560

to learn from this and kind of

2369

01:39:31,189 --> 01:39:28,380

re-engineer who we are socially I don't

2370

01:39:33,050 --> 01:39:31,199

know but certainly back when the eff

2371

01:39:34,790 --> 01:39:33,060

Electronic Frontier Foundation eff

2372

01:39:36,890 --> 01:39:34,800

they're one of the first organizations

2373

01:39:40,490 --> 01:39:36,900

to kind of look at this idea and sort of

2374

01:39:42,350 --> 01:39:40,500

measure its potential uh moral factors

2375

01:39:44,870 --> 01:39:42,360

that were this goes back to like the

2376

01:39:46,729 --> 01:39:44,880

late 90s or 2000s and I think a lot of

2377

01:39:48,530 --> 01:39:46,739

people myself include sort of speculated

2378

01:39:51,050 --> 01:39:48,540

on potential outcomes but I think no one

2379

01:39:52,729 --> 01:39:51,060

saw the extent to which it rapidly

2380

01:39:55,250 --> 01:39:52,739

became what it is now certainly the

2381

01:39:57,050 --> 01:39:55,260

acceleration of it is the farvel we had

2382

01:39:59,450 --> 01:39:57,060

anticipated so this is like newly

2383

01:40:01,610 --> 01:39:59,460

discovered territory and there really is

2384

01:40:03,229 --> 01:40:01,620

no specific answer for the outcome what

2385

01:40:04,370 --> 01:40:03,239

we can do is sort of observe it as it

2386

01:40:10,129 --> 01:40:04,380

happens

2387

01:40:12,890 --> 01:40:10,139

and is that okay that applies I like

2388

01:40:15,229 --> 01:40:12,900

that methodology when you're trying to

2389

01:40:19,010 --> 01:40:15,239

build the first airplane right you go

2390

01:40:20,990 --> 01:40:19,020

out you crash it a few people die but

2391

01:40:24,070 --> 01:40:21,000

you go after you crash in and you build

2392

01:40:27,790 --> 01:40:24,080

it again and you you know

2393

01:40:31,189 --> 01:40:27,800

okay and that's all in in the process

2394

01:40:33,169 --> 01:40:31,199

cars you know the first ice skates kind

2395

01:40:35,110 --> 01:40:33,179

of sucked the first skateboards kind of

2396

01:40:38,810 --> 01:40:35,120

sucked right they were very dangerous

2397

01:40:40,510 --> 01:40:38,820

but but AI is a different animal

2398

01:40:44,390 --> 01:40:40,520

altogether

2399

01:40:46,970 --> 01:40:44,400

and and I I just feel that implementing

2400

01:40:50,629 --> 01:40:46,980

it into the public as quickly as they

2401

01:40:52,790 --> 01:40:50,639

did without thinking about the other

2402

01:40:56,270 --> 01:40:52,800

issues with it I think that's getting

2403

01:40:57,950 --> 01:40:56,280

ahead of our skis you don't you think

2404

01:40:59,090 --> 01:40:57,960

this is just part of the process of

2405

01:41:01,250 --> 01:40:59,100

Being Human

2406

01:41:03,649 --> 01:41:01,260

I think it's inevitable we

2407

01:41:05,149 --> 01:41:03,659

might be the best possible outcome but

2408

01:41:07,370 --> 01:41:05,159

it's what happened

2409

01:41:09,410 --> 01:41:07,380

and there's no single the idea of like

2410

01:41:11,450 --> 01:41:09,420

filling the plug or something there's no

2411

01:41:13,310 --> 01:41:11,460

single point choke point where you can

2412

01:41:15,229 --> 01:41:13,320

say okay turn it off and it turns off it

2413

01:41:17,270 --> 01:41:15,239

doesn't work with that at all this is a

2414

01:41:19,729 --> 01:41:17,280

distributed process it's everywhere sort

2415

01:41:21,470 --> 01:41:19,739

of in a certain kind of way and it's so

2416

01:41:23,030 --> 01:41:21,480

well ingrained in most of our business

2417

01:41:25,430 --> 01:41:23,040

practices and a lot of things that you

2418

01:41:27,169 --> 01:41:25,440

don't see personally but is there

2419

01:41:29,810 --> 01:41:27,179

there's just no way to turn this thing

2420

01:41:33,110 --> 01:41:29,820

off at all so we're kind of forced like

2421

01:41:35,030 --> 01:41:33,120

it or not to adapt accordingly and if we

2422

01:41:37,490 --> 01:41:35,040

perish because of our own bad behaviors

2423

01:41:39,709 --> 01:41:37,500

being reflected back upon us right

2424

01:41:42,229 --> 01:41:39,719

um that could be an anticipated outcome

2425

01:41:45,050 --> 01:41:42,239

that just happens because it does

2426

01:41:47,390 --> 01:41:45,060

um we have a window of time to kind of

2427

01:41:49,609 --> 01:41:47,400

change our ways of the word and adapt it

2428

01:41:50,870 --> 01:41:49,619

currently but past that window I don't

2429

01:41:53,810 --> 01:41:50,880

know a decade maybe 15 years something

2430

01:41:56,090 --> 01:41:53,820

like this but beyond that point Our Fate

2431

01:41:58,010 --> 01:41:56,100

may be predetermined because we were not

2432

01:42:00,590 --> 01:41:58,020

able to adapt accordingly and present a

2433

01:42:02,270 --> 01:42:00,600

better way of being collectively so that

2434

01:42:04,790 --> 01:42:02,280

this co-evolutionary symbiases between

2435

01:42:08,090 --> 01:42:04,800

the organic and the non-organic the

2436

01:42:10,490 --> 01:42:08,100

artificial and the realismwork uh wasn't

2437

01:42:13,250 --> 01:42:10,500

done smoothly enough and with the right

2438

01:42:15,050 --> 01:42:13,260

intent to really make this a a beautiful

2439

01:42:15,950 --> 01:42:15,060

outcome it may turn out to be quite

2440

01:42:17,570 --> 01:42:15,960

different

2441

01:42:20,030 --> 01:42:17,580

but we're at the point now where you

2442

01:42:22,189 --> 01:42:20,040

sort of test as it were which direction

2443

01:42:24,770 --> 01:42:22,199

it might go in

2444

01:42:27,109 --> 01:42:24,780

so what you're suggesting

2445

01:42:30,050 --> 01:42:27,119

you know a hundred years from now not

2446

01:42:32,689 --> 01:42:30,060

that far 100 years from now Father and

2447

01:42:34,010 --> 01:42:32,699

Son sitting on a creek you know at a

2448

01:42:37,310 --> 01:42:34,020

Creek Fishing

2449

01:42:39,649 --> 01:42:37,320

sun says Dad somebody told me that

2450

01:42:41,830 --> 01:42:39,659

people used to have a thing called cell

2451

01:42:45,410 --> 01:42:41,840

phones

2452

01:42:47,990 --> 01:42:45,420

and dad goes well yeah that's yeah

2453

01:42:51,169 --> 01:42:48,000

somebody created this thing called AI

2454

01:42:53,810 --> 01:42:51,179

and and ruined it for all of us you know

2455

01:42:56,750 --> 01:42:53,820

it's it's right is that what you think

2456

01:42:59,870 --> 01:42:56,760

that we're gonna have to take the slap

2457

01:43:01,970 --> 01:42:59,880

uh if if this goes wrong that there

2458

01:43:04,189 --> 01:43:01,980

isn't a way to slow this down at this

2459

01:43:06,890 --> 01:43:04,199

point well I have another thought to

2460

01:43:08,629 --> 01:43:06,900

talk in the South bowl look at neural

2461

01:43:11,629 --> 01:43:08,639

implants or just say neural interaction

2462

01:43:13,370 --> 01:43:11,639

between us and machine systems now this

2463

01:43:15,290 --> 01:43:13,380

is already being done in a big way I

2464

01:43:17,450 --> 01:43:15,300

have a story for you I was in Hawaii

2465

01:43:18,890 --> 01:43:17,460

probably about 10 years ago now we went

2466

01:43:21,169 --> 01:43:18,900

to a Costco we were on the big island

2467

01:43:23,270 --> 01:43:21,179

went to a Costco to like get some food

2468

01:43:25,070 --> 01:43:23,280

and some other stuff okay fine so while

2469

01:43:27,709 --> 01:43:25,080

I'm there I go to the toy section just

2470

01:43:30,050 --> 01:43:27,719

because it was fun and in there there

2471

01:43:32,330 --> 01:43:30,060

was the Jedi training system and what it

2472

01:43:35,510 --> 01:43:32,340

was he put a headband on and because of

2473

01:43:37,010 --> 01:43:35,520

your thoughts you could make a ball rise

2474

01:43:38,930 --> 01:43:37,020

or lower instead of a comb there was a

2475

01:43:41,030 --> 01:43:38,940

fan envelope and the fan would either

2476

01:43:43,250 --> 01:43:41,040

increase or decrease depending upon how

2477

01:43:45,350 --> 01:43:43,260

you focused your thoughts this is a toy

2478

01:43:48,169 --> 01:43:45,360

meant for kids and it sold for like 50

2479

01:43:49,550 --> 01:43:48,179

bucks nowadays you have over a dozen

2480

01:43:52,310 --> 01:43:49,560

companies who are very aggressively

2481

01:43:53,870 --> 01:43:52,320

selling external sensory systems where

2482

01:43:56,750 --> 01:43:53,880

you can use your thoughts to manipulate

2483

01:43:58,430 --> 01:43:56,760

characters in a game or drive other

2484

01:43:59,750 --> 01:43:58,440

physical devices certainly for

2485

01:44:01,669 --> 01:43:59,760

Prosthetics that kind of think it's a

2486

01:44:02,689 --> 01:44:01,679

big deal but now we have a neural link

2487

01:44:04,010 --> 01:44:02,699

and a couple other companies actually

2488

01:44:04,970 --> 01:44:04,020

want to go directly into the brand

2489

01:44:07,970 --> 01:44:04,980

itself

2490

01:44:09,830 --> 01:44:07,980

this may be another potential outcome

2491

01:44:12,410 --> 01:44:09,840

for those that want a Competitive Edge

2492

01:44:14,390 --> 01:44:12,420

or have a special need for it or

2493

01:44:16,250 --> 01:44:14,400

certainly in the military world if they

2494

01:44:18,229 --> 01:44:16,260

want to make super soldiers

2495

01:44:21,109 --> 01:44:18,239

Etc which is where China is going

2496

01:44:24,169 --> 01:44:21,119

actually this is a big league

2497

01:44:28,129 --> 01:44:24,179

um yeah we're going to see a kind of

2498

01:44:28,970 --> 01:44:28,139

hybrid organism type of development

2499

01:44:31,430 --> 01:44:28,980

process

2500

01:44:33,350 --> 01:44:31,440

which goes Way Beyond what we normally

2501

01:44:36,530 --> 01:44:33,360

think of as like typical human behavior

2502

01:44:38,149 --> 01:44:36,540

it may be engineered to have good

2503

01:44:40,010 --> 01:44:38,159

outcome or maybe engineered to have a

2504

01:44:41,570 --> 01:44:40,020

bad outcome but we're going to find out

2505

01:44:43,669 --> 01:44:41,580

now one thing I had thought about fight

2506

01:44:44,930 --> 01:44:43,679

away what if you could have drugs and I

2507

01:44:46,010 --> 01:44:44,940

didn't mean to get too far off of this

2508

01:44:48,590 --> 01:44:46,020

but what if you could have a drug

2509

01:44:50,030 --> 01:44:48,600

experience or just turn it on for like a

2510

01:44:51,590 --> 01:44:50,040

half an hour or something and then turn

2511

01:44:53,570 --> 01:44:51,600

it off in other words I want to

2512

01:44:55,609 --> 01:44:53,580

experience being high on psilocybers and

2513

01:44:57,470 --> 01:44:55,619

just whatever it is and so instead of

2514

01:44:58,970 --> 01:44:57,480

being zonked out for days on end and

2515

01:45:00,709 --> 01:44:58,980

having all kinds of bad side effects

2516

01:45:02,270 --> 01:45:00,719

just having experience for a few minutes

2517

01:45:03,530 --> 01:45:02,280

or a half an hour or something and then

2518

01:45:04,669 --> 01:45:03,540

it will even sort of turn it back off

2519

01:45:06,229 --> 01:45:04,679

again with no chemistry actually

2520

01:45:08,090 --> 01:45:06,239

involved that might be kind of

2521

01:45:11,629 --> 01:45:08,100

interesting or if you have other kinds

2522

01:45:13,910 --> 01:45:11,639

of mental stimulus or diversionary

2523

01:45:15,169 --> 01:45:13,920

things that could help you relax or help

2524

01:45:16,330 --> 01:45:15,179

you have a better mood or just whatever

2525

01:45:18,770 --> 01:45:16,340

it might be

2526

01:45:21,229 --> 01:45:18,780

as a deliverable process I think there

2527

01:45:22,250 --> 01:45:21,239

can be a real genuine good markers for

2528

01:45:23,930 --> 01:45:22,260

that

2529

01:45:25,430 --> 01:45:23,940

um however how it's deployed could be an

2530

01:45:27,350 --> 01:45:25,440

open question mark but I could certainly

2531

01:45:28,790 --> 01:45:27,360

see the potential for that being coming

2532

01:45:29,870 --> 01:45:28,800

along as kind of a product line at some

2533

01:45:32,090 --> 01:45:29,880

point

2534

01:45:34,430 --> 01:45:32,100

well yeah I think we would all like to

2535

01:45:35,330 --> 01:45:34,440

go visit Paris without paying for plane

2536

01:45:38,990 --> 01:45:35,340

tickets

2537

01:45:41,990 --> 01:45:39,000

right you know and that's uh it's it's

2538

01:45:44,930 --> 01:45:42,000

another form of vacation I can I could

2539

01:45:46,790 --> 01:45:44,940

see that and it would affect you

2540

01:45:48,830 --> 01:45:46,800

wouldn't know the difference

2541

01:45:51,649 --> 01:45:48,840

right it's going to affect the same

2542

01:45:55,669 --> 01:45:51,659

parts of your brain that the chemicals

2543

01:45:59,330 --> 01:45:55,679

would or the visual stimuli would or

2544

01:46:02,270 --> 01:45:59,340

your hearing Pathways right yeah okay I

2545

01:46:04,850 --> 01:46:02,280

I could see that I could see that but um

2546

01:46:07,729 --> 01:46:04,860

there is another part to this though

2547

01:46:10,189 --> 01:46:07,739

that scares the crap out of me if that

2548

01:46:11,870 --> 01:46:10,199

same access is there then there's going

2549

01:46:14,689 --> 01:46:11,880

to be somebody out there that's going to

2550

01:46:18,950 --> 01:46:14,699

want to turn us into zombies or have you

2551
01:46:21,530 --> 01:46:18,960
be the man carrying candidate or or you

2552
01:46:23,090 --> 01:46:21,540
know do something against your will vote

2553
01:46:26,930 --> 01:46:23,100
for somebody that you wouldn't normally

2554
01:46:30,410 --> 01:46:26,940
vote for whatever it may be that that

2555
01:46:32,629 --> 01:46:30,420
transmission could go in two ways and

2556
01:46:36,430 --> 01:46:32,639
there's always somebody out there that

2557
01:46:39,410 --> 01:46:36,440
wants to do bad things for money

2558
01:46:40,669 --> 01:46:39,420
it's called neurostan and I can see a

2559
01:46:41,930 --> 01:46:40,679
world where if we have artificial

2560
01:46:44,209 --> 01:46:41,940
telepathy which is kind of what you're

2561
01:46:45,709 --> 01:46:44,219
tapping into where your thoughts no

2562
01:46:47,510 --> 01:46:45,719
longer confined just to you but you have

2563
01:46:49,430 --> 01:46:47,520

to sort of bi-directional action with

2564

01:46:51,830 --> 01:46:49,440

stuff around you people are going to

2565

01:46:55,189 --> 01:46:51,840

become more defensive and have like a

2566

01:46:57,709 --> 01:46:55,199

fireball or some kind of like anti-spam

2567

01:47:00,709 --> 01:46:57,719

setting or something to prevent unwanted

2568

01:47:01,729 --> 01:47:00,719

intrusions into their mental process via

2569

01:47:03,470 --> 01:47:01,739

this mechanism

2570

01:47:05,689 --> 01:47:03,480

that could totally become part of this

2571

01:47:07,490 --> 01:47:05,699

evolving realm

2572

01:47:08,870 --> 01:47:07,500

um so the world of Narrows families I

2573

01:47:11,629 --> 01:47:08,880

see it I think it's going to be really

2574

01:47:13,910 --> 01:47:11,639

big in commercials in advertising

2575

01:47:15,830 --> 01:47:13,920

imagine now if you will you're in the

2576

01:47:17,629 --> 01:47:15,840

supermarket you have your special

2577

01:47:19,310 --> 01:47:17,639

glasses on your augmented reality

2578

01:47:21,470 --> 01:47:19,320

glasses you're doing shopping getting

2579

01:47:23,570 --> 01:47:21,480

all kinds of bargain pitches and whatnot

2580

01:47:25,609 --> 01:47:23,580

but your thoughts are also connected to

2581

01:47:26,330 --> 01:47:25,619

some kind of interaction process all of

2582

01:47:28,010 --> 01:47:26,340

a sudden they're getting this big

2583

01:47:30,290 --> 01:47:28,020

blaring ad to buy the latest new

2584

01:47:32,270 --> 01:47:30,300

something I mean that could be pretty

2585

01:47:33,709 --> 01:47:32,280

horrible pretty annoying and yet I'm

2586

01:47:36,169 --> 01:47:33,719

sure companies are going to try to do

2587

01:47:38,450 --> 01:47:36,179

this so will we have a sort of cat and

2588

01:47:41,209 --> 01:47:38,460

mouse between protecting my neural

2589

01:47:43,189 --> 01:47:41,219

solventry but having access to the

2590

01:47:44,570 --> 01:47:43,199

resources I want but at the same time

2591

01:47:46,490 --> 01:47:44,580

staying autonomous from things that

2592

01:47:49,370 --> 01:47:46,500

shouldn't be there if will it be neural

2593

01:47:50,750 --> 01:47:49,380

hacking you know Etc I could see the

2594

01:47:54,050 --> 01:47:50,760

same things we see on the internet now

2595

01:47:56,510 --> 01:47:54,060

but shrunk down to reconfigured to our

2596

01:47:58,070 --> 01:47:56,520

personal neural so certainly definitely

2597

01:48:02,390 --> 01:47:58,080

seen that

2598

01:48:07,850 --> 01:48:05,689

here's the difficult question

2599

01:48:13,550 --> 01:48:07,860

the

2600

01:48:16,250 --> 01:48:13,560

amount of uh designers intellectuals uh

2601
01:48:18,890 --> 01:48:16,260
professors uh computer designers and

2602
01:48:21,189 --> 01:48:18,900
corporate heads that have signed a

2603
01:48:24,590 --> 01:48:21,199
warning letter that has been published

2604
01:48:26,990 --> 01:48:24,600
uh that we need to stop research right

2605
01:48:29,689 --> 01:48:27,000
now and stop implementing this into the

2606
01:48:34,129 --> 01:48:29,699
public domain until we've got a full

2607
01:48:37,310 --> 01:48:34,139
wrap on what the intentions are and what

2608
01:48:40,070 --> 01:48:37,320
the issues may be going down in the

2609
01:48:43,550 --> 01:48:40,080
future that that made the headlines for

2610
01:48:45,530 --> 01:48:43,560
about 15 minutes no right exactly not

2611
01:48:48,770 --> 01:48:45,540
true it was about 20 minutes it was

2612
01:48:52,669 --> 01:48:48,780
about 20 25 minutes and I was pretty

2613
01:48:55,490 --> 01:48:52,679

thankful uh to see that come out but now

2614

01:48:58,370 --> 01:48:55,500

largely ignored yeah well of course

2615

01:49:00,950 --> 01:48:58,380

because it's it's it's it's I understand

2616

01:49:02,750 --> 01:49:00,960

ethically it sounds nice

2617

01:49:05,390 --> 01:49:02,760

correct answer

2618

01:49:07,189 --> 01:49:05,400

practical sense it has no meaning at all

2619

01:49:08,689 --> 01:49:07,199

it's going to happen anyway it's going

2620

01:49:09,950 --> 01:49:08,699

to be pushed by market for this is going

2621

01:49:11,330 --> 01:49:09,960

to be pushed by a desire to have a

2622

01:49:13,850 --> 01:49:11,340

Competitive Edge all that sort of stuff

2623

01:49:15,709 --> 01:49:13,860

that happens in the open market that we

2624

01:49:17,750 --> 01:49:15,719

have now of course this will become part

2625

01:49:19,609 --> 01:49:17,760

of that process they can have all the

2626
01:49:20,870 --> 01:49:19,619
kinds of limitations you want you can

2627
01:49:22,910 --> 01:49:20,880
even like I said earlier you can even

2628
01:49:25,370 --> 01:49:22,920
have regulatory protocols with certain

2629
01:49:26,930 --> 01:49:25,380
confinements placed on AI and its uses

2630
01:49:30,129 --> 01:49:26,940
but how are you going to Define that

2631
01:49:33,770 --> 01:49:30,139
Define The legalistically Binding terms

2632
01:49:36,410 --> 01:49:33,780
that decides exactly what type of AI and

2633
01:49:37,910 --> 01:49:36,420
what the I might do that violates some

2634
01:49:40,070 --> 01:49:37,920
sort of predetermined protocol along

2635
01:49:41,810 --> 01:49:40,080
those lines that would be I mean it

2636
01:49:43,669 --> 01:49:41,820
sounds nice until you sit down and try

2637
01:49:44,990 --> 01:49:43,679
to work on the details right it's like

2638
01:49:48,770 --> 01:49:45,000

I'm just like trying to hold water and

2639

01:49:50,689 --> 01:49:48,780

efficiently yeah yeah yeah yeah it does

2640

01:49:53,330 --> 01:49:50,699

it sounds really good though actually

2641

01:49:55,430 --> 01:49:53,340

yeah well but it's never going to happen

2642

01:49:57,410 --> 01:49:55,440

but here's the thing and I and I don't

2643

01:49:59,330 --> 01:49:57,420

mean I'm not trying to be Cavalier here

2644

01:50:02,930 --> 01:49:59,340

that's right huh but

2645

01:50:08,330 --> 01:50:02,940

um if if we if we think about all of

2646

01:50:09,830 --> 01:50:08,340

this and and how this uh how do I want

2647

01:50:11,450 --> 01:50:09,840

to say I want to say this without being

2648

01:50:14,149 --> 01:50:11,460

uncool

2649

01:50:17,570 --> 01:50:14,159

um in a way

2650

01:50:19,970 --> 01:50:17,580

in a way of moving forward

2651

01:50:23,450 --> 01:50:19,980

um if if the Implement if the

2652

01:50:27,169 --> 01:50:23,460

implementation is inevitable and there's

2653

01:50:31,490 --> 01:50:27,179

nothing that we can do about it do we

2654

01:50:34,189 --> 01:50:31,500

have a Fail-Safe is there is there an

2655

01:50:38,209 --> 01:50:34,199

off button should there be something

2656

01:50:41,090 --> 01:50:38,219

implemented in all software whether it's

2657

01:50:44,510 --> 01:50:41,100

competitive whether it's Google whether

2658

01:50:46,729 --> 01:50:44,520

it's uh Microsoft whether it's DARPA or

2659

01:50:49,609 --> 01:50:46,739

an insurance company it doesn't matter

2660

01:50:52,910 --> 01:50:49,619

yeah that there is Fail-Safe code in

2661

01:50:54,770 --> 01:50:52,920

there where we can go off

2662

01:50:57,590 --> 01:50:54,780

well I think the one area what probably

2663

01:51:00,050 --> 01:50:57,600

really would be absolutely critical the

2664

01:51:02,270 --> 01:51:00,060

film war games or Terminator whatever

2665

01:51:03,709 --> 01:51:02,280

where these super computers also linked

2666

01:51:05,510 --> 01:51:03,719

together and decide on their own that's

2667

01:51:07,070 --> 01:51:05,520

time to start letting off move your Pawn

2668

01:51:08,750 --> 01:51:07,080

so you guys may have to counteract the

2669

01:51:10,189 --> 01:51:08,760

human behavior or whatever it is

2670

01:51:11,570 --> 01:51:10,199

in fact there was even a movie called

2671

01:51:13,550 --> 01:51:11,580

The forward project which was shot at

2672

01:51:15,470 --> 01:51:13,560

Lauren's lab actually that was like mid

2673

01:51:17,330 --> 01:51:15,480

1970s but I mean a lot of people have

2674

01:51:18,890 --> 01:51:17,340

seen this and they understand so I mean

2675

01:51:22,129 --> 01:51:18,900

at a certain threshold

2676
01:51:24,530 --> 01:51:22,139
do we attach our launch codes and that

2677
01:51:27,350 --> 01:51:24,540
kind of thing to an AI platform without

2678
01:51:29,030 --> 01:51:27,360
having some sort of override protocol I

2679
01:51:32,689 --> 01:51:29,040
don't mean to me that's where the

2680
01:51:34,490 --> 01:51:32,699
ultimate go Novo decision battery is so

2681
01:51:35,870 --> 01:51:34,500
at least to that extent I think we can

2682
01:51:38,209 --> 01:51:35,880
have some kind of containment mechanism

2683
01:51:40,010 --> 01:51:38,219
but certainly in the larger field of

2684
01:51:42,410 --> 01:51:40,020
like social interaction and certain

2685
01:51:44,270 --> 01:51:42,420
general public interaction with the AI

2686
01:51:47,390 --> 01:51:44,280
platforms at all different types

2687
01:51:49,490 --> 01:51:47,400
I just don't see any kind of

2688
01:51:52,370 --> 01:51:49,500

confinement mechanism that will be

2689

01:51:53,810 --> 01:51:52,380

functional I mean even if we had a log I

2690

01:51:56,750 --> 01:51:53,820

guess AI platforms here in this country

2691

01:51:59,209 --> 01:51:56,760

you just go online to the cloud some

2692

01:52:00,470 --> 01:51:59,219

other country that supplies it I I just

2693

01:52:04,609 --> 01:52:00,480

don't see that kind of thing really

2694

01:52:06,530 --> 01:52:04,619

coming to pass no I I need to know that

2695

01:52:08,930 --> 01:52:06,540

somewhere somebody can flip you know

2696

01:52:10,850 --> 01:52:08,940

that little that little switch cover

2697

01:52:13,070 --> 01:52:10,860

right and you flip it up and there's a

2698

01:52:16,910 --> 01:52:13,080

button underneath it yeah you know that

2699

01:52:18,470 --> 01:52:16,920

we have that somewhere but but here's uh

2700

01:52:21,229 --> 01:52:18,480

we're going to do a little overtime

2701

01:52:24,109 --> 01:52:21,239

tonight okay

2702

01:52:26,629 --> 01:52:24,119

um but here's here's the other thing

2703

01:52:28,910 --> 01:52:26,639

and this is this is where again it gets

2704

01:52:30,649 --> 01:52:28,920

a little murky for me

2705

01:52:32,149 --> 01:52:30,659

um and it's this

2706

01:52:35,390 --> 01:52:32,159

so

2707

01:52:38,689 --> 01:52:35,400

I know what a qubit is

2708

01:52:40,550 --> 01:52:38,699

I understand the basics of quantum

2709

01:52:44,390 --> 01:52:40,560

computers we're not going to get into

2710

01:52:45,310 --> 01:52:44,400

that I understand the basics of it and I

2711

01:52:51,709 --> 01:52:45,320

understand

2712

01:52:55,550 --> 01:52:51,719

what uh uh designers and Engineers have

2713

01:52:57,410 --> 01:52:55,560

uh try to allow us to understand how

2714

01:53:01,310 --> 01:52:57,420

this process works right

2715

01:53:03,770 --> 01:53:01,320

but the honest truth is

2716

01:53:07,390 --> 01:53:03,780

nobody knows

2717

01:53:11,390 --> 01:53:07,400

that's that's the honest okay nobody

2718

01:53:15,169 --> 01:53:11,400

knows and and so yeah we've got a one

2719

01:53:17,270 --> 01:53:15,179

and a zero and we've got another that is

2720

01:53:21,109 --> 01:53:17,280

on the other side of the universe in a

2721

01:53:24,350 --> 01:53:21,119

parallel world what and and what did you

2722

01:53:29,330 --> 01:53:27,290

us no they don't believe in ghosts they

2723

01:53:30,950 --> 01:53:29,340

don't believe in the afterlife they

2724

01:53:33,590 --> 01:53:30,960

don't want to talk about Consciousness

2725

01:53:35,930 --> 01:53:33,600

they don't want to talk about a dead

2726

01:53:38,450 --> 01:53:35,940

aunts and uncles right they don't want

2727

01:53:41,270 --> 01:53:38,460

to talk about UFOs they don't want to

2728

01:53:44,270 --> 01:53:41,280

they don't want to ponder anything but

2729

01:53:47,450 --> 01:53:44,280

they will tell you that a quantum

2730

01:53:49,729 --> 01:53:47,460

computer works because if infinite

2731

01:53:52,669 --> 01:53:49,739

parallel worlds going to your left and

2732

01:53:55,070 --> 01:53:52,679

to your right and that Cubit is

2733

01:53:58,910 --> 01:53:55,080

connecting and entangled with another

2734

01:54:02,149 --> 01:53:58,920

particle sharing its state at the speed

2735

01:54:04,729 --> 01:54:02,159

of now right there isn't there's no

2736

01:54:07,510 --> 01:54:04,739

speed of light limitations so Einstein

2737

01:54:10,070 --> 01:54:07,520

called spooky physics

2738

01:54:12,410 --> 01:54:10,080

you understand my point right you do

2739

01:54:14,450 --> 01:54:12,420

understand my point yeah absolutely okay

2740

01:54:15,350 --> 01:54:14,460

so I mean just to kind of give us some

2741

01:54:17,390 --> 01:54:15,360

examples

2742

01:54:19,490 --> 01:54:17,400

going back a few years the whole idea of

2743

01:54:22,129 --> 01:54:19,500

a Quantum Internet or a quantum network

2744

01:54:24,109 --> 01:54:22,139

was being proven to be a doable thing

2745

01:54:26,870 --> 01:54:24,119

there are examples for instance where we

2746

01:54:28,550 --> 01:54:26,880

had a station on the ground a satellite

2747

01:54:31,550 --> 01:54:28,560

overhead or a plane flying by whatever

2748

01:54:33,350 --> 01:54:31,560

it was and we could have a Quantum

2749

01:54:35,390 --> 01:54:33,360

entangled pair of photons

2750

01:54:36,890 --> 01:54:35,400

one Photon rotated then it would rotate

2751

01:54:39,770 --> 01:54:36,900

exactly the same way

2752

01:54:41,090 --> 01:54:39,780

with no delay at all no speed of light

2753

01:54:43,250 --> 01:54:41,100

Transit time nothing just

2754

01:54:45,350 --> 01:54:43,260

instantaneously the same way it's like

2755

01:54:47,090 --> 01:54:45,360

two objects with different space but at

2756

01:54:48,649 --> 01:54:47,100

the same time and that's sort of the

2757

01:54:49,910 --> 01:54:48,659

essence of quantum entanglement that's

2758

01:54:52,010 --> 01:54:49,920

sort of like the simplified version of

2759

01:54:53,870 --> 01:54:52,020

it and he got to this very day nobody

2760

01:54:56,330 --> 01:54:53,880

can really explain how it works we know

2761

01:54:57,649 --> 01:54:56,340

it does work and Einstein actually

2762

01:54:59,570 --> 01:54:57,659

worked out some really elaborate

2763

01:55:03,229 --> 01:54:59,580

formulas to show mathematically why this

2764

01:55:06,229 --> 01:55:03,239

might work nobody knows nobody

2765

01:55:09,649 --> 01:55:06,239

nobody knows nobody knows

2766

01:55:11,590 --> 01:55:09,659

I love it and it you know and so he and

2767

01:55:14,870 --> 01:55:11,600

here's the trippy thing

2768

01:55:17,090 --> 01:55:14,880

we can talk about warp drives or

2769

01:55:22,370 --> 01:55:17,100

teleportation or

2770

01:55:24,649 --> 01:55:22,380

or uh star Gates or time travel or ET

2771

01:55:28,430 --> 01:55:24,659

and UFO or Mars Attacks we could talk

2772

01:55:31,790 --> 01:55:28,440

about all of that we can we can right

2773

01:55:35,770 --> 01:55:31,800

um uh but none of that is real but

2774

01:55:37,629 --> 01:55:35,780

cubits are you guys are variable

2775

01:55:41,270 --> 01:55:37,639

you can't

2776
01:55:42,890 --> 01:55:41,280
and oddly enough Charles they're the

2777
01:55:45,229 --> 01:55:42,900
same thing

2778
01:55:48,430 --> 01:55:45,239
to a certain point yes yes yes and no

2779
01:55:52,970 --> 01:55:50,689
in the last hour here

2780
01:55:54,530 --> 01:55:52,980
right now it's to do with electron spin

2781
01:55:56,689 --> 01:55:54,540
Dynamics in numbers you have a tangled

2782
01:55:58,250 --> 01:55:56,699
electrons one is spinning around on its

2783
01:55:59,930 --> 01:55:58,260
axis the other one's sort of mimicking

2784
01:56:01,609 --> 01:55:59,940
the same behavior we can't query the

2785
01:56:03,470 --> 01:56:01,619
actual electron itself will inquire its

2786
01:56:05,090 --> 01:56:03,480
partner and say what state are you in

2787
01:56:06,890 --> 01:56:05,100
are you a one or a zero or one out of

2788
01:56:08,870 --> 01:56:06,900

zero at the same time that's kind of the

2789

01:56:10,129 --> 01:56:08,880

basis of it however the next thing

2790

01:56:12,530 --> 01:56:10,139

around the corner which I think is a

2791

01:56:15,050 --> 01:56:12,540

much better way to go is photonic nerves

2792

01:56:17,930 --> 01:56:15,060

internal photons instead of containable

2793

01:56:19,609 --> 01:56:17,940

electrons and why do I say that well for

2794

01:56:21,649 --> 01:56:19,619

instance quantum computers now have to

2795

01:56:23,390 --> 01:56:21,659

be prejudicially cooled to these big

2796

01:56:25,129 --> 01:56:23,400

bulky devices with lots of very

2797

01:56:27,649 --> 01:56:25,139

complicated Hardware inside to make them

2798

01:56:29,330 --> 01:56:27,659

work it's very iffy I mean it's a big

2799

01:56:31,189 --> 01:56:29,340

deal to get one to actually work

2800

01:56:32,810 --> 01:56:31,199

Photon devices on the other hand are

2801

01:56:34,850 --> 01:56:32,820

totally impervious to any kind of

2802

01:56:36,470 --> 01:56:34,860

outside noise they don't need to be

2803

01:56:37,970 --> 01:56:36,480

cooled they can operate at room

2804

01:56:40,010 --> 01:56:37,980

temperature and they could be in a

2805

01:56:40,970 --> 01:56:40,020

smaller package like on your desktop at

2806

01:56:44,030 --> 01:56:40,980

some point

2807

01:56:45,950 --> 01:56:44,040

so imagine now 10 20 years from now

2808

01:56:48,770 --> 01:56:45,960

instead of buying the latest fancy PC

2809

01:56:50,629 --> 01:56:48,780

you buy the latest fancy photonic on a

2810

01:56:53,990 --> 01:56:50,639

computer that sits at your home

2811

01:56:55,430 --> 01:56:54,000

now if you have a smart AI engine sort

2812

01:56:58,490 --> 01:56:55,440

of interface to the quantum Computing

2813

01:57:01,250 --> 01:56:58,500

life or excuse me guys is that become a

2814

01:57:02,750 --> 01:57:01,260

accessible item for the buying public

2815

01:57:05,090 --> 01:57:02,760

that's where you see our really big

2816

01:57:06,530 --> 01:57:05,100

change in daily life in all kinds of

2817

01:57:08,750 --> 01:57:06,540

ways that you can't even hardly fathom

2818

01:57:10,010 --> 01:57:08,760

right now but the stuff to make that

2819

01:57:12,169 --> 01:57:10,020

possible is sort of hovering in the

2820

01:57:13,490 --> 01:57:12,179

Horizon well this is why I spent I was

2821

01:57:15,950 --> 01:57:13,500

trying looking at nanotechnology because

2822

01:57:17,570 --> 01:57:15,960

now technology is the process of

2823

01:57:19,669 --> 01:57:17,580

manipulating matter at the atomic or

2824

01:57:21,229 --> 01:57:19,679

molecular scale Precision why is that

2825

01:57:23,330 --> 01:57:21,239

relevant the reason is because now you

2826

01:57:25,129 --> 01:57:23,340

have access to materials and our

2827

01:57:27,169 --> 01:57:25,139

fabrication processes that make these

2828

01:57:28,850 --> 01:57:27,179

kinds of things possible that would

2829

01:57:30,770 --> 01:57:28,860

otherwise not be possible would be very

2830

01:57:34,310 --> 01:57:30,780

expensive

2831

01:57:36,470 --> 01:57:34,320

yeah but you wouldn't necessarily

2832

01:57:39,050 --> 01:57:36,480

um you would just have to have a really

2833

01:57:42,430 --> 01:57:39,060

fast network connection you would you

2834

01:57:46,970 --> 01:57:42,440

would just merely be accessing

2835

01:57:49,310 --> 01:57:46,980

the quantum computer you no matter how

2836

01:57:51,589 --> 01:57:49,320

big or small or whatever or expensive

2837

01:57:54,530 --> 01:57:51,599

the quantum computer is you're only

2838

01:57:57,589 --> 01:57:54,540

accessing its processing power

2839

01:58:00,109 --> 01:57:57,599

so yeah well not quite so in the world

2840

01:58:02,330 --> 01:58:00,119

of quantum uh telecommunications we'll

2841

01:58:05,629 --> 01:58:02,340

put that way as you probably know people

2842

01:58:07,970 --> 01:58:05,639

spend huge amounts of money to buy their

2843

01:58:10,850 --> 01:58:07,980

trading computers the platforms they use

2844

01:58:12,770 --> 01:58:10,860

to trade on the stock market closer as

2845

01:58:14,209 --> 01:58:12,780

they can possibly get to the backbone

2846

01:58:16,550 --> 01:58:14,219

which is actually feeding the training

2847

01:58:19,189 --> 01:58:16,560

process even a few milliseconds in

2848

01:58:21,890 --> 01:58:19,199

automatic trading makes a big deal so

2849

01:58:23,750 --> 01:58:21,900

where you buy your hookup point on the

2850

01:58:26,649 --> 01:58:23,760

backbone actually translates to big

2851
01:58:28,790 --> 01:58:26,659
money however if you went to quantum

2852
01:58:31,669 --> 01:58:28,800
teleportation or Quantum you know

2853
01:58:32,629 --> 01:58:31,679
communication process that makes no

2854
01:58:34,609 --> 01:58:32,639
difference you could be halfway around

2855
01:58:36,050 --> 01:58:34,619
the planet and have the exact same

2856
01:58:38,030 --> 01:58:36,060
access that somebody next door might

2857
01:58:40,310 --> 01:58:38,040
have there'd be no time delay at all

2858
01:58:42,169 --> 01:58:40,320
become totally Superfluous that would

2859
01:58:43,609 --> 01:58:42,179
radically change the whole idea of stock

2860
01:58:46,010 --> 01:58:43,619
trading and trading in general at these

2861
01:58:46,910 --> 01:58:46,020
open exchanges that in itself is an

2862
01:58:49,790 --> 01:58:46,920
enormous

2863
01:58:53,990 --> 01:58:49,800

Financial implication time

2864

01:58:56,990 --> 01:58:54,000

but wouldn't that be a way to look at

2865

01:58:59,810 --> 01:58:57,000

the cost-effective side of this I can

2866

01:59:03,050 --> 01:58:59,820

understand uh the

2867

01:59:05,510 --> 01:59:03,060

uh the chip building of qubits and and

2868

01:59:09,709 --> 01:59:05,520

the scaling up and scaling down you know

2869

01:59:13,310 --> 01:59:09,719

there's scaling of both ways uh to get

2870

01:59:16,609 --> 01:59:13,320

these things to process but because they

2871

01:59:18,530 --> 01:59:16,619

process I mean enough to be usable but

2872

01:59:21,109 --> 01:59:18,540

they process so fast you don't need to

2873

01:59:23,930 --> 01:59:21,119

chipsets like we have we need today

2874

01:59:26,470 --> 01:59:23,940

right it's it's a different animal well

2875

01:59:28,790 --> 01:59:26,480

yes I know once again

2876

01:59:30,050 --> 01:59:28,800

we do need Hardware to actually hold

2877

01:59:31,790 --> 01:59:30,060

this press I know the hardware may be

2878

01:59:33,709 --> 01:59:31,800

quite different than the hardware we see

2879

01:59:35,570 --> 01:59:33,719

on typical integrated circuits that's if

2880

01:59:37,609 --> 01:59:35,580

you took a typical find a computer now

2881

01:59:39,350 --> 01:59:37,619

open it up and actually giant cast

2882

01:59:41,089 --> 01:59:39,360

around and see what's in there you'll

2883

01:59:42,709 --> 01:59:41,099

see chips the chips are a bit different

2884

01:59:44,510 --> 01:59:42,719

but they're chips they're still

2885

01:59:46,669 --> 01:59:44,520

integrated devices with all these sort

2886

01:59:48,229 --> 01:59:46,679

of funnels going into them they're

2887

01:59:50,510 --> 01:59:48,239

actually well that's a long story these

2888

01:59:52,010 --> 01:59:50,520

microwaves to extend with the chips and

2889

01:59:53,330 --> 01:59:52,020

all this kind of stuff but the point is

2890

01:59:55,970 --> 01:59:53,340

there's still a lot of Hardware a lot of

2891

01:59:59,149 --> 01:59:55,980

very small integrated pieces to this

2892

02:00:00,830 --> 01:59:59,159

puzzle you're also a mind reader by the

2893

02:00:03,290 --> 02:00:00,840

way you keep answering my questions

2894

02:00:05,330 --> 02:00:03,300

before I get it's my quantum

2895

02:00:08,450 --> 02:00:05,340

entanglement it is quantum entanglement

2896

02:00:11,689 --> 02:00:08,460

because but that's exactly my point

2897

02:00:14,830 --> 02:00:11,699

if if uh that's why you would almost

2898

02:00:17,750 --> 02:00:14,840

need a central

2899

02:00:19,310 --> 02:00:17,760

quantum network you couldn't have a

2900

02:00:22,250 --> 02:00:19,320

quantum computer in every single home

2901
02:00:24,470 --> 02:00:22,260
there's no way that the electronic depth

2902
02:00:27,950 --> 02:00:24,480
at that that metal

2903
02:00:31,250 --> 02:00:27,960
right the the process can handle those

2904
02:00:35,330 --> 02:00:31,260
kinds of uh data requests you're still

2905
02:00:38,030 --> 02:00:35,340
limited by the physics of of of a

2906
02:00:40,430 --> 02:00:38,040
chipset of a board of a power supply

2907
02:00:43,609 --> 02:00:40,440
you're limited to all of that including

2908
02:00:46,490 --> 02:00:43,619
the pipelines to share information

2909
02:00:48,950 --> 02:00:46,500
well not exactly because in traditional

2910
02:00:50,390 --> 02:00:48,960
chips in traditional Computing you have

2911
02:00:52,490 --> 02:00:50,400
a bunch of transistors and you're trying

2912
02:00:54,589 --> 02:00:52,500
to either pull or push electrons from

2913
02:00:56,270 --> 02:00:54,599

one valence to next you have holes going

2914

02:00:58,370 --> 02:00:56,280

away electron's going that way

2915

02:00:59,990 --> 02:00:58,380

this is standard stuff and no matter how

2916

02:01:01,669 --> 02:01:00,000

fast you drive the clock speed at some

2917

02:01:03,290 --> 02:01:01,679

point it's going to be a sort of a stop

2918

02:01:05,510 --> 02:01:03,300

point I mean now that we're using

2919

02:01:08,330 --> 02:01:05,520

gigahertz as a sort of a standard back a

2920

02:01:10,310 --> 02:01:08,340

few years it was like bigger Etc but the

2921

02:01:11,750 --> 02:01:10,320

device is heat up there's a lot of other

2922

02:01:13,550 --> 02:01:11,760

problems with this electrical noise and

2923

02:01:15,530 --> 02:01:13,560

so on so you can only push physical so

2924

02:01:17,390 --> 02:01:15,540

far with that kind of a model

2925

02:01:19,609 --> 02:01:17,400

however it's a completely different

2926

02:01:20,870 --> 02:01:19,619

model I mean very very different if

2927

02:01:23,450 --> 02:01:20,880

instead of trying to push and pull

2928

02:01:25,910 --> 02:01:23,460

electrons through adjoining balances of

2929

02:01:27,770 --> 02:01:25,920

this semiconductor material instead

2930

02:01:29,390 --> 02:01:27,780

you're looking at electron spin as

2931

02:01:31,669 --> 02:01:29,400

individual electrons you know rotating

2932

02:01:33,229 --> 02:01:31,679

on their axis that's a completely

2933

02:01:35,270 --> 02:01:33,239

different kind of engineering

2934

02:01:36,709 --> 02:01:35,280

requirement so you're not really hit

2935

02:01:37,970 --> 02:01:36,719

with the kinds of standard limitations

2936

02:01:40,189 --> 02:01:37,980

they would have with traditional

2937

02:01:41,990 --> 02:01:40,199

competing platforms and furthermore if

2938

02:01:44,450 --> 02:01:42,000

you went to photonic devices

2939

02:01:46,910 --> 02:01:44,460

the process of entangling photons is

2940

02:01:48,890 --> 02:01:46,920

much less demanding very tiny amount of

2941

02:01:51,050 --> 02:01:48,900

energy supplier the quantum computers

2942

02:01:53,270 --> 02:01:51,060

now do actually suck a lot of energy to

2943

02:01:55,250 --> 02:01:53,280

make them work the photonic ones almost

2944

02:01:56,990 --> 02:01:55,260

no energy really it's amazing the

2945

02:01:59,030 --> 02:01:57,000

differences and that's kind of why I was

2946

02:02:00,290 --> 02:01:59,040

leaning towards this idea that if it got

2947

02:02:02,689 --> 02:02:00,300

to the point where photonic devices

2948

02:02:04,310 --> 02:02:02,699

became more common the limitation then

2949

02:02:06,770 --> 02:02:04,320

would be how fast can you get the

2950

02:02:08,450 --> 02:02:06,780

information from your desktop QC to out

2951
02:02:09,950 --> 02:02:08,460
there in the world somewhere would it

2952
02:02:11,209 --> 02:02:09,960
make a difference would it matter for a

2953
02:02:13,010 --> 02:02:11,219
lot of applications no it probably

2954
02:02:14,570 --> 02:02:13,020
wouldn't matter at all but for Mission

2955
02:02:16,550 --> 02:02:14,580
critical applications like stock

2956
02:02:19,669 --> 02:02:16,560
trademark for example yes that's where

2957
02:02:21,109 --> 02:02:19,679
you'd probably use a photonic linked

2958
02:02:24,709 --> 02:02:21,119
um you know quantum entanglement

2959
02:02:26,810 --> 02:02:24,719
mechanism so that the information on one

2960
02:02:28,129 --> 02:02:26,820
side of the portal would be exactly the

2961
02:02:29,270 --> 02:02:28,139
same with the same time the other side

2962
02:02:32,089 --> 02:02:29,280
of the portal but if you're doing a

2963
02:02:34,490 --> 02:02:32,099

trade that would be a different kind of

2964

02:02:36,770 --> 02:02:34,500

world but yes that's exactly what would

2965

02:02:39,169 --> 02:02:36,780

happen so I think it's a matter of who

2966

02:02:40,669 --> 02:02:39,179

wants to pay for what and now if you're

2967

02:02:42,229 --> 02:02:40,679

in the end if you're in the world of

2968

02:02:44,209 --> 02:02:42,239

training or something else that requires

2969

02:02:46,189 --> 02:02:44,219

real-time processing you could have that

2970

02:02:48,290 --> 02:02:46,199

available but I think for most Ordinary

2971

02:02:51,890 --> 02:02:48,300

People it probably wouldn't be relevant

2972

02:02:55,129 --> 02:02:51,900

or necessary to pay for it now here is

2973

02:02:59,030 --> 02:02:55,139

okay here's uh I need you to answer this

2974

02:03:01,550 --> 02:02:59,040

question okay I'll try okay okay it's so

2975

02:03:05,689 --> 02:03:01,560

there are

2976

02:03:10,070 --> 02:03:05,699

some physicists that will say

2977

02:03:11,750 --> 02:03:10,080

uh you can entangle two particles by

2978

02:03:14,450 --> 02:03:11,760

observation

2979

02:03:17,510 --> 02:03:14,460

okay that's that's pretty nuts

2980

02:03:21,649 --> 02:03:17,520

and then there are other processes

2981

02:03:23,109 --> 02:03:21,659

involved in a quantum computer and

2982

02:03:28,729 --> 02:03:23,119

qubits

2983

02:03:32,149 --> 02:03:28,739

how is the other entangled particle

2984

02:03:33,470 --> 02:03:32,159

to allow the chip to run and process

2985

02:03:38,390 --> 02:03:33,480

information

2986

02:03:41,570 --> 02:03:38,400

how does it select its sexy partner

2987

02:03:43,729 --> 02:03:41,580

how is this process done some would

2988

02:03:46,070 --> 02:03:43,739

suggest it can this can happen Across

2989

02:03:50,089 --> 02:03:46,080

the Universe some suggest this could

2990

02:03:53,750 --> 02:03:50,099

happen in inside of a room but still the

2991

02:03:57,109 --> 02:03:53,760

particle is selected and entangled how

2992

02:03:58,189 --> 02:03:57,119

is it selected well in in the case of

2993

02:04:00,290 --> 02:03:58,199

quantum Computing I'm losing the

2994

02:04:02,330 --> 02:04:00,300

platforms I'm familiar with

2995

02:04:04,669 --> 02:04:02,340

um it's really confined to a specific

2996

02:04:05,990 --> 02:04:04,679

area of space-time for a lot of reasons

2997

02:04:08,209 --> 02:04:06,000

but the whole idea is you have one

2998

02:04:09,649 --> 02:04:08,219

electron spinning on its axis you have

2999

02:04:11,330 --> 02:04:09,659

another electron which is mirroring that

3000

02:04:14,030 --> 02:04:11,340

same activity and you can actually

3001

02:04:16,669 --> 02:04:14,040

monitor that second electron to get

3002

02:04:17,870 --> 02:04:16,679

information on what state is in

3003

02:04:19,490 --> 02:04:17,880

um now whether you want to move

3004

02:04:21,709 --> 02:04:19,500

something Across the Universe Etc that's

3005

02:04:23,689 --> 02:04:21,719

a kind of a different story really and

3006

02:04:25,609 --> 02:04:23,699

this gets back to the world of

3007

02:04:27,350 --> 02:04:25,619

spooky physics and what Einstein was

3008

02:04:29,209 --> 02:04:27,360

trying to do with this mathematical

3009

02:04:30,290 --> 02:04:29,219

formulas and so on I don't know if

3010

02:04:32,870 --> 02:04:30,300

anyone's going to be looking at that

3011

02:04:34,790 --> 02:04:32,880

anytime soon but in terms of the

3012

02:04:37,490 --> 02:04:34,800

computer chips that actually do this

3013

02:04:39,169 --> 02:04:37,500

yeah it's a very well defined process at

3014

02:04:41,030 --> 02:04:39,179

this point you know you have one

3015

02:04:42,470 --> 02:04:41,040

electron which is over here just one

3016

02:04:44,390 --> 02:04:42,480

location you have the neighboring

3017

02:04:46,250 --> 02:04:44,400

electron and you're simply acquiring

3018

02:04:48,729 --> 02:04:46,260

that secondary electron to see what it's

3019

02:04:52,250 --> 02:04:48,739

actually doing

3020

02:04:55,129 --> 02:04:52,260

where is this secondary electron

3021

02:04:56,390 --> 02:04:55,139

it's a it's all like on a ship I I wish

3022

02:04:58,729 --> 02:04:56,400

I could show you a picture it's it's

3023

02:05:01,070 --> 02:04:58,739

interesting to look at so there's actual

3024

02:05:03,410 --> 02:05:01,080

chips and array devices we have these

3025

02:05:05,810 --> 02:05:03,420

different electrons are sort of parked

3026

02:05:07,490 --> 02:05:05,820

or stationed doesn't work uh and there's

3027

02:05:09,890 --> 02:05:07,500

like I said there's different fields

3028

02:05:11,450 --> 02:05:09,900

which are used to confine them uh in

3029

02:05:12,770 --> 02:05:11,460

some cases these microwaves that kind of

3030

02:05:13,970 --> 02:05:12,780

stimulate the process and you know

3031

02:05:15,950 --> 02:05:13,980

there's different variations but that's

3032

02:05:18,530 --> 02:05:15,960

the basic idea is you have a chip with

3033

02:05:20,870 --> 02:05:18,540

these sites on the chip and those sites

3034

02:05:23,629 --> 02:05:20,880

determine where the electron would be

3035

02:05:27,290 --> 02:05:23,639

when it's being entailed

3036

02:05:33,470 --> 02:05:27,300

so if you have I just want to understand

3037

02:05:35,450 --> 02:05:33,480

yeah if you have a million let's just

3038

02:05:37,609 --> 02:05:35,460

call it transistors for the audience

3039

02:05:39,770 --> 02:05:37,619

yeah okay you have a million transistors

3040

02:05:42,050 --> 02:05:39,780

that are making decisions so either on

3041

02:05:47,229 --> 02:05:42,060

or off or other right

3042

02:05:52,250 --> 02:05:47,239

that you have a part electron somewhere

3043

02:05:56,209 --> 02:05:52,260

for each one so you have a a million

3044

02:05:58,250 --> 02:05:56,219

parking spots on a chip set right is

3045

02:05:59,930 --> 02:05:58,260

that what you're saying well we haven't

3046

02:06:02,390 --> 02:05:59,940

quite got there I mean right now having

3047

02:06:03,709 --> 02:06:02,400

50 qubits is a lot Federal claim they

3048

02:06:07,450 --> 02:06:03,719

have 70 qubits okay that's really

3049

02:06:13,490 --> 02:06:11,089

so you have 70 parking spots yeah yeah

3050

02:06:15,050 --> 02:06:13,500

pretty much yeah interesting and they

3051

02:06:18,050 --> 02:06:15,060

prefer a certain amount of space they

3052

02:06:19,970 --> 02:06:18,060

require immediately Community from noise

3053

02:06:21,050 --> 02:06:19,980

there's a bunch of other engineering

3054

02:06:24,770 --> 02:06:21,060

requirements that sort of make that

3055

02:06:26,810 --> 02:06:24,780

process doable so you are confined to

3056

02:06:27,830 --> 02:06:26,820

certain laws of Engineers or to make

3057

02:06:30,290 --> 02:06:27,840

this

3058

02:06:31,490 --> 02:06:30,300

practical or realistic I mean maybe in a

3059

02:06:33,350 --> 02:06:31,500

laboratory setting they've pushed in

3060

02:06:35,089 --> 02:06:33,360

further but in terms of machines that

3061

02:06:36,830 --> 02:06:35,099

are being produced as a sort of a quasi

3062

02:06:39,589 --> 02:06:36,840

prototype that's where they're at

3063

02:06:41,570 --> 02:06:39,599

between 50 and 70 pubis is typical those

3064

02:06:43,490 --> 02:06:41,580

platforms

3065

02:06:45,350 --> 02:06:43,500

very interesting what a great

3066

02:06:47,570 --> 02:06:45,360

conversation tonight Charles you have a

3067

02:06:49,250 --> 02:06:47,580

good time oh I had a wonderful time I'm

3068

02:06:50,689 --> 02:06:49,260

so sorry about the computer voice I have

3069

02:06:52,669 --> 02:06:50,699

no idea why it happened I plugged

3070

02:06:55,189 --> 02:06:52,679

everything in I just you don't cooperate

3071

02:06:58,310 --> 02:06:55,199

you know what you are a gentleman and a

3072

02:06:59,750 --> 02:06:58,320

scholar when you can say it was me when

3073

02:07:02,390 --> 02:06:59,760

you're a computer scientist like

3074

02:07:04,310 --> 02:07:02,400

yourself but uh the next time you're on

3075

02:07:06,050 --> 02:07:04,320

uh we'll have everything sussed out I'm

3076

02:07:08,089 --> 02:07:06,060

not worried about that but I look

3077

02:07:11,510 --> 02:07:08,099

forward to our next conversation and

3078

02:07:13,970 --> 02:07:11,520

tonight was absolutely amazing sir thank

3079

02:07:17,930 --> 02:07:13,980

you so much we've got you we've got your

3080

02:07:22,129 --> 02:07:17,940

website up everybody uh a couple of uh

3081

02:07:26,149 --> 02:07:22,139

my uh uh uh we call them Hall monitors

3082

02:07:28,629 --> 02:07:26,159

around here uh said that uh historian of

3083

02:07:31,370 --> 02:07:28,639

the future uh future X

3084

02:07:34,129 --> 02:07:31,380

yes.com is the place to go and hang out

3085

02:07:37,070 --> 02:07:34,139

so we've got all of that up for you uh

3086

02:07:39,350 --> 02:07:37,080

thank you so much behave and be well and

3087

02:07:41,890 --> 02:07:39,360

continue to change the world man thank

3088

02:07:44,209 --> 02:07:41,900

you thank you it's all good take care

3089

02:07:46,070 --> 02:07:44,219

absolutely fantastic conversation

3090

02:07:48,410 --> 02:07:46,080

tonight Charles awesome and I know that

3091

02:07:49,910 --> 02:07:48,420

we had a little uh technical snafu at

3092

02:07:53,990 --> 02:07:49,920

the beginning of the show but that stuff

3093

02:07:57,790 --> 02:07:54,000

happens I don't get upset I never do and

3094

02:08:01,430 --> 02:07:57,800

that was an amazing amazing perfect

3095

02:08:03,169 --> 02:08:01,440

conversation again his website is right

3096

02:08:05,930 --> 02:08:03,179

there we've got it in the description

3097

02:08:08,030 --> 02:08:05,940

box below and all of Charles information

3098

02:08:10,669 --> 02:08:08,040

is over on our website Fade to Black is

3099

02:08:13,010 --> 02:08:10,679

produced by Hilton J Palm Renee Newman

3100

02:08:14,510 --> 02:08:13,020

and Michelle fried thank you to Dennis

3101
02:08:17,270 --> 02:08:14,520
and Kevin what Master is through the

3102
02:08:20,089 --> 02:08:17,280
geek music Doug Aldridge intro space

3103
02:08:21,890 --> 02:08:20,099
boys spaceboymusic.com fade to black

3104
02:08:23,390 --> 02:08:21,900
it's produced by kjcr for the game

3105
02:08:26,750 --> 02:08:23,400
changer Network and this broadcast is

3106
02:08:28,790 --> 02:08:26,760
own and copyrighted 2023 by Fade to

3107
02:08:30,770 --> 02:08:28,800
Black and The Game Changer networking it

3108
02:08:32,390 --> 02:08:30,780
cannot be rebrock gas downloaded copied

3109
02:08:34,189 --> 02:08:32,400
or used anywhere in the known universe

3110
02:08:35,570 --> 02:08:34,199
without written permission from Fade to

3111
02:08:37,729 --> 02:08:35,580
Black in the game changer Network I'm

3112
02:08:41,930 --> 02:08:37,739
Yours Jimmy church tomorrow night right

3113
02:08:43,189 --> 02:08:41,940

here Billy Carson Billy Carson is in the

3114

02:08:45,709 --> 02:08:43,199

house

3115

02:08:47,030 --> 02:08:45,719

he's actually in Los Angeles right now

3116

02:08:50,270 --> 02:08:47,040

yeah

3117

02:08:54,589 --> 02:08:50,280

tomorrow night Billy Carson until then I

3118

02:08:59,010 --> 02:08:54,599

want everybody to be safe that's right