

**SK≡PTIKO**  
science & spirituality

**COMPUTER  
SCIENCE  
EATS SCIENCE**

**#524-RIZ-VIRK**



1  
00:00:02,790 --> 00:00:01,240  
thomas

2  
00:00:04,710 --> 00:00:02,800  
[Music]

3  
00:00:07,190 --> 00:00:04,720  
you seem particularly triggered right

4  
00:00:10,470 --> 00:00:07,200  
now can you tell me what happened

5  
00:00:13,190 --> 00:00:10,480  
i've had dreams that weren't just dreams

6  
00:00:17,510 --> 00:00:13,200  
that's right he's back

7  
00:00:19,990 --> 00:00:17,520  
neil's back the matrix four is rebooted

8  
00:00:22,550 --> 00:00:20,000  
maybe neo can straighten all this out

9  
00:00:25,349 --> 00:00:22,560  
speaking of coming back we have a just

10  
00:00:29,349 --> 00:00:25,359  
terrific interview with a guy i have so

11  
00:00:31,750 --> 00:00:29,359  
much respect for so so smart resverk new

12  
00:00:33,670 --> 00:00:31,760  
book the simulated universe and mit

13  
00:00:35,590 --> 00:00:33,680

computer scientist explores parallel

14

00:00:38,630 --> 00:00:35,600

universes the simulation hypothesis

15

00:00:40,869 --> 00:00:38,640

quantum computing and the mandela effect

16

00:00:43,110 --> 00:00:40,879

i've been doing a number of shows lately

17

00:00:45,910 --> 00:00:43,120

on computing because i think it just

18

00:00:47,750 --> 00:00:45,920

fundamentally ties into really all the

19

00:00:49,029 --> 00:00:47,760

stuff we're talking about but not

20

00:00:50,950 --> 00:00:49,039

everyone is

21

00:00:52,790 --> 00:00:50,960

always making that connection so i feel

22

00:00:54,950 --> 00:00:52,800

the need to do it riz of course

23

00:00:57,270 --> 00:00:54,960

certainly fits in that category as

24

00:00:59,510 --> 00:00:57,280

you'll hear in this interview

25

00:01:00,790 --> 00:00:59,520

here are some clips i do hope you stick

26

00:01:02,630 --> 00:01:00,800

around for the whole thing i think it's

27

00:01:03,510 --> 00:01:02,640

really good check it out

28

00:01:05,990 --> 00:01:03,520

now

29

00:01:07,910 --> 00:01:06,000

in computation we try to figure out

30

00:01:10,830 --> 00:01:07,920

which of those

31

00:01:13,990 --> 00:01:10,840

values of this graph are worth

32

00:01:14,950 --> 00:01:14,000

traversing right and so you can think of

33

00:01:17,590 --> 00:01:14,960

any

34

00:01:19,590 --> 00:01:17,600

process which is a series of choices

35

00:01:21,429 --> 00:01:19,600

as a multiverse and that's kind of the

36

00:01:23,510 --> 00:01:21,439

the idea that i'm putting forward

37

00:01:26,630 --> 00:01:23,520

whether they are physical or not becomes

38

00:01:28,870 --> 00:01:26,640

irrelevant because they become physical

39

00:01:31,670 --> 00:01:28,880

only when we render them

40

00:01:32,950 --> 00:01:31,680

meaning when we choose to explore that

41

00:01:35,830 --> 00:01:32,960

path

42

00:01:39,590 --> 00:01:35,840

okay let me go all skeptical on you

43

00:01:41,830 --> 00:01:39,600

are you stretching the metaphor too far

44

00:01:44,550 --> 00:01:41,840

if we just start down

45

00:01:46,870 --> 00:01:44,560

the path of consciousness is fundamental

46

00:01:48,789 --> 00:01:46,880

well i i think the metaphor fits pretty

47

00:01:50,149 --> 00:01:48,799

well you know i mean i i spent a lot of

48

00:01:53,030 --> 00:01:50,159

time with the

49

00:01:54,789 --> 00:01:53,040

near-death experience and you know many

50

00:01:55,830 --> 00:01:54,799

of them report

51  
00:01:57,749 --> 00:01:55,840  
uh

52  
00:01:59,749 --> 00:01:57,759  
that they were able to

53  
00:02:01,749 --> 00:01:59,759  
look back in what's called a life review

54  
00:02:04,310 --> 00:02:01,759  
right and so they were able to

55  
00:02:06,149 --> 00:02:04,320  
kind of go back and view the events and

56  
00:02:09,350 --> 00:02:06,159  
many of them describe it

57  
00:02:11,910 --> 00:02:09,360  
as a room with a big projector right

58  
00:02:13,830 --> 00:02:11,920  
and so they're using this metaphor and

59  
00:02:16,309 --> 00:02:13,840  
it's like replaying

60  
00:02:18,390 --> 00:02:16,319  
something that has been recorded

61  
00:02:20,070 --> 00:02:18,400  
but if you get past that and you look at

62  
00:02:22,630 --> 00:02:20,080  
the accounts overwhelmingly

63  
00:02:25,589 --> 00:02:22,640

statistically number one thing

64

00:02:26,630 --> 00:02:25,599

love number one thing connection number

65

00:02:28,949 --> 00:02:26,640

one thing

66

00:02:32,470 --> 00:02:28,959

spirituality that

67

00:02:33,830 --> 00:02:32,480

doesn't really conform very well well

68

00:02:35,350 --> 00:02:33,840

yeah it depends which metaphor you're

69

00:02:37,589 --> 00:02:35,360

using and exactly how you're using it i

70

00:02:39,110 --> 00:02:37,599

mean for me i think let's use a

71

00:02:40,070 --> 00:02:39,120

different metaphor instead of a video

72

00:02:42,949 --> 00:02:40,080

game

73

00:02:45,270 --> 00:02:42,959

let's use social networks right which

74

00:02:47,430 --> 00:02:45,280

people use all the time today and

75

00:02:49,509 --> 00:02:47,440

creates lots of angst but

76  
00:02:52,550 --> 00:02:49,519  
why do we use social networks we create

77  
00:02:54,390 --> 00:02:52,560  
an identity online but primarily

78  
00:02:55,830 --> 00:02:54,400  
what makes a social network different

79  
00:02:57,910 --> 00:02:55,840  
from a website

80  
00:02:59,190 --> 00:02:57,920  
is the social part of it i would say the

81  
00:03:01,830 --> 00:02:59,200  
reason to be here perhaps is

82  
00:03:03,990 --> 00:03:01,840  
relationship right it's to to give

83  
00:03:06,390 --> 00:03:04,000  
ourselves the experience of having

84  
00:03:09,030 --> 00:03:06,400  
relationship with different parts

85  
00:03:10,149 --> 00:03:09,040  
of consciousness which we see as other

86  
00:03:13,270 --> 00:03:10,159  
people

87  
00:03:15,030 --> 00:03:13,280  
which eventually may be all connected

88  
00:03:17,430 --> 00:03:15,040

welcome to skeptico where we explore

89

00:03:20,070 --> 00:03:17,440

controversial science and spirituality

90

00:03:22,550 --> 00:03:20,080

with leading researchers thinkers and

91

00:03:23,830 --> 00:03:22,560

their critics i'm your host alex karis

92

00:03:26,309 --> 00:03:23,840

and today

93

00:03:28,470 --> 00:03:26,319

well we have a good one

94

00:03:31,589 --> 00:03:28,480

resverk is back to talk about his new

95

00:03:35,270 --> 00:03:31,599

book the simulated multiverse

96

00:03:38,710 --> 00:03:35,280

in case you don't remember who riz is he

97

00:03:41,110 --> 00:03:38,720

is like this super duper smart mit

98

00:03:43,910 --> 00:03:41,120

computer scientist we won't even mention

99

00:03:46,869 --> 00:03:43,920

the mba from stanford

100

00:03:49,110 --> 00:03:46,879

he's also an author filmmaker silicon

101  
00:03:51,110 --> 00:03:49,120  
valley entrepreneur and investor and

102  
00:03:54,149 --> 00:03:51,120  
we're not going to talk about that but

103  
00:03:57,110 --> 00:03:54,159  
if that is at all interesting to you

104  
00:03:58,470 --> 00:03:57,120  
he has some absolutely terrific books on

105  
00:04:01,270 --> 00:03:58,480  
that topic

106  
00:04:05,030 --> 00:04:01,280  
from this very interesting perspective

107  
00:04:05,990 --> 00:04:05,040  
that he has as a very successful

108  
00:04:09,030 --> 00:04:06,000  
game

109  
00:04:11,190 --> 00:04:09,040  
designer programmer maker you know i got

110  
00:04:12,949 --> 00:04:11,200  
30 million downloads on his games i

111  
00:04:15,110 --> 00:04:12,959  
think while he was still in his 20s or

112  
00:04:16,789 --> 00:04:15,120  
something so

113  
00:04:18,469 --> 00:04:16,799

he he really has this incredible

114

00:04:20,310 --> 00:04:18,479

background but what we're really going

115

00:04:22,950 --> 00:04:20,320

to talk about today

116

00:04:25,990 --> 00:04:22,960

is this new book the simulated

117

00:04:27,990 --> 00:04:26,000

multiverse so riz first of all welcome

118

00:04:29,350 --> 00:04:28,000

back thanks for thanks for coming back

119

00:04:31,510 --> 00:04:29,360

on

120

00:04:34,230 --> 00:04:31,520

sure nice to be with you again

121

00:04:36,550 --> 00:04:34,240

so i reached out to you because we've

122

00:04:40,469 --> 00:04:36,560

been doing a number of shows on

123

00:04:42,790 --> 00:04:40,479

ai quantum computing and

124

00:04:45,110 --> 00:04:42,800

the general angst that so many people

125

00:04:48,310 --> 00:04:45,120

are feeling about technology and

126  
00:04:49,510 --> 00:04:48,320  
technology advancement as it pops up all

127  
00:04:51,350 --> 00:04:49,520  
over the place

128  
00:04:54,070 --> 00:04:51,360  
so

129  
00:04:56,710 --> 00:04:54,080  
who better to talk to about that than

130  
00:04:58,870 --> 00:04:56,720  
not just the game master but the game

131  
00:05:01,029 --> 00:04:58,880  
maker himself uh

132  
00:05:04,310 --> 00:05:01,039  
are we living in a matrix that's what we

133  
00:05:08,310 --> 00:05:06,150  
well as you know that's you know my last

134  
00:05:11,430 --> 00:05:08,320  
book the simulation hypothesis was about

135  
00:05:13,909 --> 00:05:11,440  
that idea that we may be living inside

136  
00:05:15,270 --> 00:05:13,919  
some kind of technologically constructed

137  
00:05:17,670 --> 00:05:15,280  
reality

138  
00:05:19,990 --> 00:05:17,680

and uh you know very akin to what was

139

00:05:21,189 --> 00:05:20,000

shown in the movie of about the matrix

140

00:05:23,029 --> 00:05:21,199

and i was

141

00:05:24,629 --> 00:05:23,039

you know with that book i was hoping to

142

00:05:27,029 --> 00:05:24,639

tie it to

143

00:05:29,029 --> 00:05:27,039

uh not just you know the development of

144

00:05:30,550 --> 00:05:29,039

video game technology which is the area

145

00:05:32,790 --> 00:05:30,560

where i've spent you know good amount of

146

00:05:35,270 --> 00:05:32,800

my career as an entrepreneur and as an

147

00:05:37,270 --> 00:05:35,280

investor but also relating it to some of

148

00:05:39,990 --> 00:05:37,280

the spiritual traditions you know from

149

00:05:42,550 --> 00:05:40,000

thousands of years ago and talk about

150

00:05:44,790 --> 00:05:42,560

you know the matrix as a metaphor right

151  
00:05:46,870 --> 00:05:44,800  
uh whereas if you look at you know the

152  
00:05:48,390 --> 00:05:46,880  
religions they all use different

153  
00:05:50,310 --> 00:05:48,400  
metaphors you know in buddhism the

154  
00:05:52,870 --> 00:05:50,320  
metaphor of the dream

155  
00:05:54,469 --> 00:05:52,880  
uh is quite strong and that we are

156  
00:05:57,189 --> 00:05:54,479  
living in a dream and you wake up from

157  
00:05:59,350 --> 00:05:57,199  
the dream and of course shakespeare you

158  
00:06:02,070 --> 00:05:59,360  
know used the analogy or the metaphor of

159  
00:06:04,469 --> 00:06:02,080  
a stage play because that's what he did

160  
00:06:06,469 --> 00:06:04,479  
as did the leela's

161  
00:06:08,070 --> 00:06:06,479  
vedas which uh had the leela which was

162  
00:06:11,590 --> 00:06:08,080  
the grand play in the hindu vedas you

163  
00:06:13,590 --> 00:06:11,600

know 5 000 years ago or so uh and so you

164

00:06:15,110 --> 00:06:13,600

know my point is that if any of those

165

00:06:17,670 --> 00:06:15,120

folks were alive today they would use

166

00:06:21,110 --> 00:06:17,680

the metaphor of a video game uh which is

167

00:06:23,029 --> 00:06:21,120

like an interactive film script where

168

00:06:25,350 --> 00:06:23,039

the script can change based upon the

169

00:06:27,510 --> 00:06:25,360

choices of the characters along the way

170

00:06:29,590 --> 00:06:27,520

and so you know that's one axis of this

171

00:06:31,590 --> 00:06:29,600

whole thing is is using the development

172

00:06:34,790 --> 00:06:31,600

of technology to look at

173

00:06:37,029 --> 00:06:34,800

you know the world in a different way

174

00:06:39,430 --> 00:06:37,039

but yeah my answer last time was that i

175

00:06:41,670 --> 00:06:39,440

think it's more likely than not that we

176  
00:06:42,950 --> 00:06:41,680  
are living in some kind of a simulated

177  
00:06:45,029 --> 00:06:42,960  
reality

178  
00:06:46,629 --> 00:06:45,039  
right so i didn't want to

179  
00:06:48,150 --> 00:06:46,639  
that's great that you did that i didn't

180  
00:06:49,909 --> 00:06:48,160  
want to totally roll this back to the

181  
00:06:51,270 --> 00:06:49,919  
last book but now that you mention it i

182  
00:06:53,110 --> 00:06:51,280  
think it's good

183  
00:06:55,430 --> 00:06:53,120  
what does introducing

184  
00:06:57,029 --> 00:06:55,440  
kind of the multiple timelines

185  
00:06:59,749 --> 00:06:57,039  
multiverse

186  
00:07:00,629 --> 00:06:59,759  
how does that change things

187  
00:07:04,870 --> 00:07:00,639  
and

188  
00:07:06,390 --> 00:07:04,880

i guess

189

00:07:07,990 --> 00:07:06,400

sure well you know when i finished the

190

00:07:10,469 --> 00:07:08,000

first book i thought i was uh you know

191

00:07:12,309 --> 00:07:10,479

had been down the the rabbit hole and

192

00:07:14,070 --> 00:07:12,319

was pretty much done with the simulation

193

00:07:15,909 --> 00:07:14,080

stuff or at least the big questions

194

00:07:17,510 --> 00:07:15,919

resulting from simulations for a while

195

00:07:21,350 --> 00:07:17,520

and i could go back to

196

00:07:23,189 --> 00:07:21,360

my career in silicon valley and academia

197

00:07:25,110 --> 00:07:23,199

and then you know i had a lunch with a

198

00:07:27,830 --> 00:07:25,120

friend a friend of mine from who had

199

00:07:29,670 --> 00:07:27,840

just started working at google so i was

200

00:07:31,029 --> 00:07:29,680

living in mountain view at california

201  
00:07:32,629 --> 00:07:31,039  
which is right down the road from google

202  
00:07:33,830 --> 00:07:32,639  
headquarters and he had just flown in

203  
00:07:36,070 --> 00:07:33,840  
from boston

204  
00:07:38,469 --> 00:07:36,080  
and you know we got to talking about the

205  
00:07:40,070 --> 00:07:38,479  
simulation hypothesis and he was an mit

206  
00:07:42,309 --> 00:07:40,080  
alum as well so of course we were

207  
00:07:44,710 --> 00:07:42,319  
talking about technology and and how

208  
00:07:46,230 --> 00:07:44,720  
these things could be built and then you

209  
00:07:47,670 --> 00:07:46,240  
know he said well you know have you

210  
00:07:49,830 --> 00:07:47,680  
looked at this thing called the mandela

211  
00:07:50,950 --> 00:07:49,840  
effect i said yeah you know i've heard

212  
00:07:52,790 --> 00:07:50,960  
of it but

213  
00:07:54,869 --> 00:07:52,800

you know i kind of dismissed it as many

214

00:07:57,510 --> 00:07:54,879

people in the scientific community did

215

00:07:59,510 --> 00:07:57,520

maybe it's just a case of faulty memory

216

00:08:01,670 --> 00:07:59,520

and he said well you know the simulation

217

00:08:04,150 --> 00:08:01,680

idea is actually the most

218

00:08:06,469 --> 00:08:04,160

likely or interesting explanation for

219

00:08:08,070 --> 00:08:06,479

something like the mandela effect

220

00:08:09,350 --> 00:08:08,080

and for those who don't know

221

00:08:10,950 --> 00:08:09,360

many of your listeners have probably

222

00:08:13,830 --> 00:08:10,960

heard of it but the mandela effect is

223

00:08:15,110 --> 00:08:13,840

the idea that a subgroup of people a

224

00:08:17,670 --> 00:08:15,120

minority

225

00:08:19,029 --> 00:08:17,680

remember certain events happening a

226

00:08:21,990 --> 00:08:19,039

different way

227

00:08:24,869 --> 00:08:22,000

from the consensus reality so the name

228

00:08:28,309 --> 00:08:24,879

comes aft comes because of nelson

229

00:08:30,950 --> 00:08:28,319

mandela who some say die they remember

230

00:08:31,909 --> 00:08:30,960

that he died in prison in the 1980s of

231

00:08:33,829 --> 00:08:31,919

course

232

00:08:35,829 --> 00:08:33,839

we all know that not to be the case if

233

00:08:37,670 --> 00:08:35,839

you just look it up on the internet

234

00:08:39,350 --> 00:08:37,680

or if you lived through those events

235

00:08:41,589 --> 00:08:39,360

mandela was released from prison in the

236

00:08:43,589 --> 00:08:41,599

90s became the first black president of

237

00:08:46,389 --> 00:08:43,599

south africa

238

00:08:48,310 --> 00:08:46,399

and then he died in 2013 and yet many

239

00:08:49,670 --> 00:08:48,320

people remembered not just that he died

240

00:08:51,509 --> 00:08:49,680

but they remember

241

00:08:53,110 --> 00:08:51,519

you know a whole bunch of festivities

242

00:08:55,670 --> 00:08:53,120

around his funeral

243

00:08:57,990 --> 00:08:55,680

including his wife speaking

244

00:08:58,949 --> 00:08:58,000

and so these are very specific memories

245

00:09:01,110 --> 00:08:58,959

and uh

246

00:09:03,350 --> 00:09:01,120

you know mainstream science dismisses

247

00:09:05,590 --> 00:09:03,360

this as well these are just you know a

248

00:09:07,590 --> 00:09:05,600

case of faulty memory perhaps it was

249

00:09:09,670 --> 00:09:07,600

this other black leader from south

250

00:09:11,430 --> 00:09:09,680

africa that died in the 80s and

251  
00:09:12,870 --> 00:09:11,440  
therefore people are confusing the two

252  
00:09:14,870 --> 00:09:12,880  
but it turns out there's a whole series

253  
00:09:16,870 --> 00:09:14,880  
of events like this some some of which

254  
00:09:19,110 --> 00:09:16,880  
are small some of which are movie lines

255  
00:09:20,070 --> 00:09:19,120  
some of which are big events

256  
00:09:21,350 --> 00:09:20,080  
and so

257  
00:09:22,310 --> 00:09:21,360  
in my case

258  
00:09:23,750 --> 00:09:22,320  
i thought well that's kind of

259  
00:09:26,310 --> 00:09:23,760  
interesting why don't i you know spend a

260  
00:09:28,230 --> 00:09:26,320  
little more time looking into it uh and

261  
00:09:29,350 --> 00:09:28,240  
when i had written the first book i had

262  
00:09:30,949 --> 00:09:29,360  
interviewed

263  
00:09:32,470 --> 00:09:30,959

the wife of science fiction writer

264

00:09:37,670 --> 00:09:32,480

philip k dick

265

00:09:40,230 --> 00:09:37,680

uh sort of famous within certain circle

266

00:09:41,590 --> 00:09:40,240

speech in mets france in 1977 saying

267

00:09:43,509 --> 00:09:41,600

that we are living in a

268

00:09:45,509 --> 00:09:43,519

computer-programmed reality and the only

269

00:09:48,150 --> 00:09:45,519

clue we have to it is when some variable

270

00:09:49,829 --> 00:09:48,160

is altered and so i had you know talked

271

00:09:52,230 --> 00:09:49,839

to her and i thought this was a fun way

272

00:09:54,710 --> 00:09:52,240

to talk about the matrix because you

273

00:09:56,389 --> 00:09:54,720

know supposedly the the wachowskis who

274

00:09:58,870 --> 00:09:56,399

created the matrix were inspired by the

275

00:10:00,550 --> 00:09:58,880

work of philip k dick and i thought you

276

00:10:03,509 --> 00:10:00,560

know it was just a fun way to talk about

277

00:10:05,030 --> 00:10:03,519

the idea well after you know having my

278

00:10:07,829 --> 00:10:05,040

conversation with my friend at google i

279

00:10:09,750 --> 00:10:07,839

went back to my conversation with tessa

280

00:10:12,630 --> 00:10:09,760

and then i went back and re-watched what

281

00:10:14,150 --> 00:10:12,640

philip k dick was saying back in the 70s

282

00:10:15,990 --> 00:10:14,160

and i read his whole speech and i

283

00:10:17,430 --> 00:10:16,000

watched the video and it turns out the

284

00:10:18,949 --> 00:10:17,440

first part of that statement which is

285

00:10:20,230 --> 00:10:18,959

the one that most of us focus on that

286

00:10:22,790 --> 00:10:20,240

we're living in a computer program

287

00:10:24,870 --> 00:10:22,800

reality was not the most important part

288

00:10:27,829 --> 00:10:24,880

of his speech what he said was that some

289

00:10:31,030 --> 00:10:27,839

variables would change and then it would

290

00:10:33,110 --> 00:10:31,040

be run again and so you know he said we

291

00:10:35,990 --> 00:10:33,120

would have uh this

292

00:10:38,949 --> 00:10:36,000

impression of reliving the same events

293

00:10:41,030 --> 00:10:38,959

again and again and he gave the

294

00:10:44,069 --> 00:10:41,040

the phenomenon of deja vu

295

00:10:46,870 --> 00:10:44,079

as evidenced that this was happening and

296

00:10:48,630 --> 00:10:46,880

he came to believe that we actually had

297

00:10:51,990 --> 00:10:48,640

multiple timelines and that there were

298

00:10:54,710 --> 00:10:52,000

people or entities changing small little

299

00:10:56,389 --> 00:10:54,720

variables uh and then re-running the

300

00:10:57,990 --> 00:10:56,399

events in in his book the man in the

301  
00:10:59,350 --> 00:10:58,000  
high castle and we might have talked

302  
00:11:00,630 --> 00:10:59,360  
about this last time but you know he

303  
00:11:03,110 --> 00:11:00,640  
actually believed

304  
00:11:05,269 --> 00:11:03,120  
that that was a real timeline where

305  
00:11:07,110 --> 00:11:05,279  
germany and japan won the war and for

306  
00:11:09,829 --> 00:11:07,120  
whatever reason that was not an optimal

307  
00:11:11,829 --> 00:11:09,839  
timeline so they quote unquote

308  
00:11:14,389 --> 00:11:11,839  
rewound the timeline changed some

309  
00:11:16,389 --> 00:11:14,399  
variables and re-ran it again and that's

310  
00:11:19,110 --> 00:11:16,399  
how we ended up in the current timeline

311  
00:11:20,949 --> 00:11:19,120  
and so this idea of a simulation you

312  
00:11:22,470 --> 00:11:20,959  
know why do we run simulations to see

313  
00:11:23,990 --> 00:11:22,480

what will happen

314

00:11:25,590 --> 00:11:24,000

and how do we do that we change

315

00:11:27,509 --> 00:11:25,600

variables and we run them again and

316

00:11:29,190 --> 00:11:27,519

again that's how we predict the weather

317

00:11:30,310 --> 00:11:29,200

that's how we predict many things these

318

00:11:32,630 --> 00:11:30,320

days

319

00:11:34,550 --> 00:11:32,640

and so this idea you know kind of lodged

320

00:11:36,230 --> 00:11:34,560

in my mind that said

321

00:11:38,310 --> 00:11:36,240

kind of like you know the quote from i

322

00:11:39,910 --> 00:11:38,320

think it was voltaire who said when

323

00:11:41,990 --> 00:11:39,920

somebody asked him do we live multiple

324

00:11:43,110 --> 00:11:42,000

times and you know i guess he believed

325

00:11:45,509 --> 00:11:43,120

we did but he said it's no more

326

00:11:47,590 --> 00:11:45,519

surprising that we live multiple times

327

00:11:49,829 --> 00:11:47,600

than it is that we live once

328

00:11:51,590 --> 00:11:49,839

and so it occurred to me that if they're

329

00:11:53,590 --> 00:11:51,600

in a computer simulation it would be no

330

00:11:55,990 --> 00:11:53,600

more surprising for us to have multiple

331

00:11:58,150 --> 00:11:56,000

runs of the simulation than just one in

332

00:11:59,990 --> 00:11:58,160

fact it would make much more sense and

333

00:12:01,590 --> 00:12:00,000

explain a lot of the

334

00:12:03,110 --> 00:12:01,600

the weirdness of quantum physics that i

335

00:12:05,590 --> 00:12:03,120

came across during my research and

336

00:12:06,949 --> 00:12:05,600

simulation so anyway that's you know a

337

00:12:09,190 --> 00:12:06,959

little bit of a story there but that

338

00:12:11,350 --> 00:12:09,200

that's kind of what got me back down the

339

00:12:13,269 --> 00:12:11,360

rabbit hole and really exploring this

340

00:12:14,629 --> 00:12:13,279

idea of a multiverse in multiple

341

00:12:17,030 --> 00:12:14,639

timelines

342

00:12:19,269 --> 00:12:17,040

great so we might have our own multiple

343

00:12:21,430 --> 00:12:19,279

timelines in this little discussion

344

00:12:24,150 --> 00:12:21,440

which will be great i think it's

345

00:12:26,470 --> 00:12:24,160

so interesting the perspective that you

346

00:12:28,389 --> 00:12:26,480

bring the gamer perspective and i want

347

00:12:29,670 --> 00:12:28,399

to talk about that i want to talk about

348

00:12:31,829 --> 00:12:29,680

that

349

00:12:33,590 --> 00:12:31,839

in all aspects of life as an

350

00:12:36,710 --> 00:12:33,600

entrepreneur what that brings to the

351  
00:12:38,870 --> 00:12:36,720  
table as a computer scientist even

352  
00:12:40,230 --> 00:12:38,880  
spirituality what the gamer kind of

353  
00:12:42,710 --> 00:12:40,240  
perspective

354  
00:12:44,310 --> 00:12:42,720  
brings maybe we ought to uh

355  
00:12:45,590 --> 00:12:44,320  
maybe we ought to go there

356  
00:12:47,430 --> 00:12:45,600  
right now since we're going to have

357  
00:12:49,110 --> 00:12:47,440  
multiple timelines and i can come back

358  
00:12:51,190 --> 00:12:49,120  
and hit all those other points but have

359  
00:12:54,069 --> 00:12:51,200  
you ever thought about that as you've

360  
00:12:56,629 --> 00:12:54,079  
gone through your career

361  
00:12:58,310 --> 00:12:56,639  
have you ever thought you know i kind of

362  
00:13:00,389 --> 00:12:58,320  
look at things

363  
00:13:02,470 --> 00:13:00,399

a little bit differently in it all i

364

00:13:05,509 --> 00:13:02,480

look at things kind of like a game do

365

00:13:08,150 --> 00:13:05,519

you does that resonate with you or no

366

00:13:10,870 --> 00:13:08,160

i it does because uh

367

00:13:14,150 --> 00:13:10,880

especially through my research in this

368

00:13:16,310 --> 00:13:14,160

area you know the more i looked into it

369

00:13:17,990 --> 00:13:16,320

you know the more i began to see that

370

00:13:18,710 --> 00:13:18,000

this was

371

00:13:22,949 --> 00:13:18,720

an

372

00:13:25,269 --> 00:13:22,959

explain

373

00:13:27,269 --> 00:13:25,279

so many different aspects of life and

374

00:13:28,949 --> 00:13:27,279

you know i've spent a lot of time with

375

00:13:30,710 --> 00:13:28,959

scientists i've spent a lot of time with

376

00:13:32,550 --> 00:13:30,720

engineers and technologists and i've

377

00:13:34,710 --> 00:13:32,560

spent a lot of time with people who

378

00:13:36,790 --> 00:13:34,720

would classify as mystics

379

00:13:38,150 --> 00:13:36,800

uh you know who are always

380

00:13:40,710 --> 00:13:38,160

exploring different states of

381

00:13:43,509 --> 00:13:40,720

consciousness and i realized that this

382

00:13:46,550 --> 00:13:43,519

is a way to really connect all these

383

00:13:48,310 --> 00:13:46,560

threads together uh and so that's why i

384

00:13:50,150 --> 00:13:48,320

became so enamored with it that's why i

385

00:13:52,550 --> 00:13:50,160

decided to write the book

386

00:13:54,550 --> 00:13:52,560

the first book and the second book but

387

00:13:56,870 --> 00:13:54,560

during that process you know people ask

388

00:13:58,389 --> 00:13:56,880

me well so what does this mean for me

389

00:14:01,189 --> 00:13:58,399

you know if i'm just a character at a

390

00:14:02,870 --> 00:14:01,199

game does that mean that nothing matters

391

00:14:04,710 --> 00:14:02,880

and i say well no

392

00:14:06,069 --> 00:14:04,720

it's not quite like that i mean the way

393

00:14:07,509 --> 00:14:06,079

that i view it is

394

00:14:09,350 --> 00:14:07,519

if you think of how video games are

395

00:14:12,470 --> 00:14:09,360

constructed today

396

00:14:15,110 --> 00:14:12,480

we have characters we have avatars that

397

00:14:17,430 --> 00:14:15,120

represent you and then the avatars have

398

00:14:19,750 --> 00:14:17,440

certain story lines and certain

399

00:14:21,509 --> 00:14:19,760

characteristics uh you know it's kind of

400

00:14:23,430 --> 00:14:21,519

like in the old days we used to play

401  
00:14:25,509 --> 00:14:23,440  
dungeons and dragons on a sheet of paper

402  
00:14:27,030 --> 00:14:25,519  
and we used to have different attributes

403  
00:14:29,910 --> 00:14:27,040  
for the characters like strength

404  
00:14:31,750 --> 00:14:29,920  
charisma intelligence you know all these

405  
00:14:34,629 --> 00:14:31,760  
different things it turns out each

406  
00:14:36,150 --> 00:14:34,639  
character was slightly different uh and

407  
00:14:37,269 --> 00:14:36,160  
we'd have story lines for those

408  
00:14:39,110 --> 00:14:37,279  
characters

409  
00:14:41,269 --> 00:14:39,120  
and i believe that that happens to us in

410  
00:14:43,269 --> 00:14:41,279  
this life each of us has you know

411  
00:14:44,710 --> 00:14:43,279  
different strengths different

412  
00:14:47,110 --> 00:14:44,720  
proclivities there are things that we

413  
00:14:49,269 --> 00:14:47,120

are inclined to do like i always knew i

414

00:14:51,590 --> 00:14:49,279

was going to be a

415

00:14:53,509 --> 00:14:51,600

computer software entrepreneur and

416

00:14:55,350 --> 00:14:53,519

eventually become a writer even when i

417

00:14:58,069 --> 00:14:55,360

was like 10 years old now how did i know

418

00:14:59,590 --> 00:14:58,079

that it was just the sense that i had in

419

00:15:02,150 --> 00:14:59,600

the back of my mind

420

00:15:04,389 --> 00:15:02,160

that was the story line that i had

421

00:15:06,629 --> 00:15:04,399

chosen to run and if you look at how

422

00:15:08,949 --> 00:15:06,639

games are constructed today not only do

423

00:15:10,710 --> 00:15:08,959

you have these big story lines

424

00:15:12,790 --> 00:15:10,720

which are based upon the character you

425

00:15:13,750 --> 00:15:12,800

choose but then you have a lot of

426  
00:15:16,629 --> 00:15:13,760  
smaller

427  
00:15:17,990 --> 00:15:16,639  
quests and challenges and achievements

428  
00:15:20,150 --> 00:15:18,000  
along the way

429  
00:15:22,550 --> 00:15:20,160  
and if we didn't have those then you

430  
00:15:24,829 --> 00:15:22,560  
know the game would get kind of boring

431  
00:15:27,829 --> 00:15:24,839  
and you know if the game got to be too

432  
00:15:30,230 --> 00:15:27,839  
easy uh you know it wouldn't be fun

433  
00:15:30,949 --> 00:15:30,240  
anymore right and so you know there's

434  
00:15:37,189 --> 00:15:30,959  
the

435  
00:15:38,629 --> 00:15:37,199  
nolan bushnell who's kind of you know

436  
00:15:40,790 --> 00:15:38,639  
the grandfather of the video game

437  
00:15:43,110 --> 00:15:40,800  
industry you know and he said it was he

438  
00:15:46,150 --> 00:15:43,120

wanted something that was easy to play

439

00:15:47,509 --> 00:15:46,160

or easy to learn but difficult to master

440

00:15:49,269 --> 00:15:47,519

right and he said that's what keeps the

441

00:15:51,269 --> 00:15:49,279

game interesting that's what keeps you

442

00:15:53,030 --> 00:15:51,279

coming back again and again and i think

443

00:15:55,189 --> 00:15:53,040

we can view life that way right there

444

00:15:57,910 --> 00:15:55,199

it's easy to play but it's not so easy

445

00:15:59,829 --> 00:15:57,920

to master and so if we look at the

446

00:16:01,430 --> 00:15:59,839

challenges that we have in line which

447

00:16:02,629 --> 00:16:01,440

many of us do especially as we get older

448

00:16:05,030 --> 00:16:02,639

we realize

449

00:16:06,949 --> 00:16:05,040

you know life isn't all fun and games

450

00:16:08,790 --> 00:16:06,959

even if it is a game

451  
00:16:11,110 --> 00:16:08,800  
there are challenges along the way and

452  
00:16:14,069 --> 00:16:11,120  
without those challenges uh just like a

453  
00:16:15,509 --> 00:16:14,079  
movie that has doesn't have a lot of

454  
00:16:17,269 --> 00:16:15,519  
obstacles for the main character well

455  
00:16:18,870 --> 00:16:17,279  
that becomes a vignette that's not an

456  
00:16:21,189 --> 00:16:18,880  
interesting story or maybe like if

457  
00:16:22,790 --> 00:16:21,199  
indiana jones just got the map at the

458  
00:16:24,790 --> 00:16:22,800  
beginning and said okay here's the ark

459  
00:16:26,389 --> 00:16:24,800  
of the covenant here's the x go get it

460  
00:16:28,150 --> 00:16:26,399  
that's not quite as interesting as

461  
00:16:30,629 --> 00:16:28,160  
having to follow a clue

462  
00:16:32,710 --> 00:16:30,639  
and to to overcome that challenge and go

463  
00:16:35,030 --> 00:16:32,720

to the next one and so if we view the

464

00:16:36,550 --> 00:16:35,040

the obstacles in our lives as challenges

465

00:16:37,670 --> 00:16:36,560

that perhaps we have signed up for

466

00:16:39,990 --> 00:16:37,680

whether we

467

00:16:42,310 --> 00:16:40,000

remember it or not it can change our

468

00:16:43,670 --> 00:16:42,320

perspective on things you know

469

00:16:45,110 --> 00:16:43,680

hey that's

470

00:16:47,590 --> 00:16:45,120

that's super interesting and that's

471

00:16:50,550 --> 00:16:47,600

going to get super spiritual in just a

472

00:16:52,470 --> 00:16:50,560

minute um but i am going to try to kind

473

00:16:53,990 --> 00:16:52,480

of step back a little bit for the

474

00:16:55,829 --> 00:16:54,000

multiple timeline thing because i think

475

00:16:57,829 --> 00:16:55,839

it's super interesting and i think it's

476  
00:16:59,030 --> 00:16:57,839  
super interesting to connect that to

477  
00:17:00,310 --> 00:16:59,040  
science

478  
00:17:01,829 --> 00:17:00,320  
and

479  
00:17:03,829 --> 00:17:01,839  
we're going to get to this awesome quote

480  
00:17:05,669 --> 00:17:03,839  
from you computer science is eating all

481  
00:17:07,350 --> 00:17:05,679  
the other sciences which i really want

482  
00:17:09,669 --> 00:17:07,360  
to get to but

483  
00:17:12,309 --> 00:17:09,679  
when i think of this multiple timeline

484  
00:17:13,750 --> 00:17:12,319  
thing and i think how uncomfortable it

485  
00:17:15,429 --> 00:17:13,760  
is for

486  
00:17:17,429 --> 00:17:15,439  
all of us i was going to say folks you

487  
00:17:20,710 --> 00:17:17,439  
have like somebody else but no for all

488  
00:17:23,110 --> 00:17:20,720

of us the idea of multiple simultaneous

489

00:17:25,110 --> 00:17:23,120

timelines is is kind of uncomfortable

490

00:17:27,429 --> 00:17:25,120

but i always think back to

491

00:17:29,270 --> 00:17:27,439

the dean raiden pre-sentiment experiment

492

00:17:30,870 --> 00:17:29,280

are you familiar with that

493

00:17:32,470 --> 00:17:30,880

i don't remember that one specifically i

494

00:17:35,110 --> 00:17:32,480

mean i've met dean and i know him oh

495

00:17:37,590 --> 00:17:35,120

okay well then you probably know maybe

496

00:17:38,950 --> 00:17:37,600

so the most one of the most famous

497

00:17:40,710 --> 00:17:38,960

experiments that

498

00:17:41,990 --> 00:17:40,720

dean rayden did and it was brilliant the

499

00:17:44,230 --> 00:17:42,000

way that he set it up because he just

500

00:17:46,470 --> 00:17:44,240

took a standard kind of freshman

501  
00:17:47,990 --> 00:17:46,480  
psychology experiments where you sit in

502  
00:17:49,350 --> 00:17:48,000  
front of the computer and the computer

503  
00:17:52,470 --> 00:17:49,360  
flashes you an image and then we're

504  
00:17:53,830 --> 00:17:52,480  
going to measure how you react to it

505  
00:17:55,830 --> 00:17:53,840  
and what he did was really quite

506  
00:17:57,990 --> 00:17:55,840  
brilliant he said why are we assuming

507  
00:18:00,470 --> 00:17:58,000  
this timeline why why are we assuming

508  
00:18:02,710 --> 00:18:00,480  
your reaction comes after the computer

509  
00:18:04,710 --> 00:18:02,720  
selects and displays the image

510  
00:18:06,070 --> 00:18:04,720  
and lo and behold that was the

511  
00:18:07,830 --> 00:18:06,080  
pre-sentiment

512  
00:18:09,750 --> 00:18:07,840  
we can't really call it precognition

513  
00:18:11,270 --> 00:18:09,760

because it wasn't at a cognitive level

514

00:18:13,110 --> 00:18:11,280

it was just

515

00:18:15,190 --> 00:18:13,120

the sensations in your body dilation

516

00:18:16,150 --> 00:18:15,200

your pupils can change all that kind of

517

00:18:19,830 --> 00:18:16,160

stuff

518

00:18:21,350 --> 00:18:19,840

i mean this is a six sigma replicated

519

00:18:24,150 --> 00:18:21,360

throughout the world multiple labs

520

00:18:26,150 --> 00:18:24,160

replicated by him timing this this would

521

00:18:28,390 --> 00:18:26,160

if you really were objective you'd say

522

00:18:30,070 --> 00:18:28,400

this is one of the most reliably

523

00:18:32,310 --> 00:18:30,080

statistically one of the most reliable

524

00:18:35,270 --> 00:18:32,320

experiments we have all in science and

525

00:18:37,909 --> 00:18:35,280

it completely blows away our idea of the

526

00:18:40,630 --> 00:18:37,919

timeline it fits in perfectly

527

00:18:43,190 --> 00:18:40,640

with at least the beginnings of what

528

00:18:46,070 --> 00:18:43,200

you're talking about that we so here

529

00:18:48,310 --> 00:18:46,080

science is telling us

530

00:18:49,270 --> 00:18:48,320

forget it it's it's the timeline thing

531

00:18:50,870 --> 00:18:49,280

it's just

532

00:18:53,350 --> 00:18:50,880

i mean we probably knew this since

533

00:18:55,669 --> 00:18:53,360

einstein but we could never really get

534

00:18:57,990 --> 00:18:55,679

wrap our arms around it now it's kind of

535

00:19:00,470 --> 00:18:58,000

right there in that experiment what do

536

00:19:01,909 --> 00:19:00,480

you think about that

537

00:19:04,390 --> 00:19:01,919

yeah well i think there's you know

538

00:19:07,350 --> 00:19:04,400

something to that uh that if

539

00:19:10,070 --> 00:19:07,360

we are not only in a single timeline you

540

00:19:11,110 --> 00:19:10,080

know we are able to know at a certain

541

00:19:13,430 --> 00:19:11,120

level

542

00:19:14,230 --> 00:19:13,440

how things might evolve

543

00:19:16,230 --> 00:19:14,240

uh

544

00:19:17,669 --> 00:19:16,240

you know based upon how they've gone in

545

00:19:19,190 --> 00:19:17,679

the past but we may or may not

546

00:19:22,789 --> 00:19:19,200

consciously remember like you said it

547

00:19:24,710 --> 00:19:22,799

may not be at the level of cognition and

548

00:19:26,549 --> 00:19:24,720

you know i like to use science fiction

549

00:19:28,630 --> 00:19:26,559

as a good way of for people to kind of

550

00:19:30,710 --> 00:19:28,640

understand it and you know there's this

551

00:19:32,549 --> 00:19:30,720

element of uh

552

00:19:34,310 --> 00:19:32,559

the movie groundhog day right which i

553

00:19:36,789 --> 00:19:34,320

guess is sort of science fiction sort of

554

00:19:39,430 --> 00:19:36,799

not right but you know bill murray has

555

00:19:41,510 --> 00:19:39,440

to relive the same day again and again

556

00:19:43,830 --> 00:19:41,520

and as he goes through again and again

557

00:19:45,990 --> 00:19:43,840

he learns more and more about what's

558

00:19:48,070 --> 00:19:46,000

happening and he's able to react

559

00:19:49,750 --> 00:19:48,080

differently and to kind of master the

560

00:19:52,870 --> 00:19:49,760

events of the day well if you think

561

00:19:55,669 --> 00:19:52,880

about a.i and how it works today

562

00:19:57,669 --> 00:19:55,679

like when we're training ai we train it

563

00:19:59,029 --> 00:19:57,679

by running the same events again and

564

00:20:01,750 --> 00:19:59,039

again

565

00:20:03,750 --> 00:20:01,760

and then we use that to for it to become

566

00:20:05,669 --> 00:20:03,760

better knowledgeable because it knows

567

00:20:08,470 --> 00:20:05,679

what might happen in this situation or

568

00:20:10,630 --> 00:20:08,480

that situation and so for example you

569

00:20:12,710 --> 00:20:10,640

know uh the

570

00:20:14,310 --> 00:20:12,720

the ai you know beat chet the first

571

00:20:15,270 --> 00:20:14,320

chess player the grand master a long

572

00:20:17,590 --> 00:20:15,280

time ago

573

00:20:18,789 --> 00:20:17,600

ibm's uh uh

574

00:20:21,590 --> 00:20:18,799

you know a chess playing computer but

575

00:20:23,430 --> 00:20:21,600

then more recently google's alphago was

576

00:20:25,110 --> 00:20:23,440

able to beat you know some of the best

577

00:20:27,110 --> 00:20:25,120

players that go in the world and the way

578

00:20:30,310 --> 00:20:27,120

they train that is through a process

579

00:20:31,510 --> 00:20:30,320

called self play it will play out each

580

00:20:33,590 --> 00:20:31,520

of those

581

00:20:36,149 --> 00:20:33,600

games millions of times and sometimes it

582

00:20:38,070 --> 00:20:36,159

will play with itself right so you have

583

00:20:40,710 --> 00:20:38,080

this kind of self-referential thing

584

00:20:42,870 --> 00:20:40,720

going on where you are doing something

585

00:20:45,909 --> 00:20:42,880

multiple times and then you are learning

586

00:20:48,950 --> 00:20:45,919

to pick what is most likely the best

587

00:20:51,669 --> 00:20:48,960

outcome of that and so that is a process

588

00:20:53,669 --> 00:20:51,679

that i call the core loop and it's a

589

00:20:54,710 --> 00:20:53,679

process that happens within computer

590

00:20:56,710 --> 00:20:54,720

science

591

00:20:57,990 --> 00:20:56,720

uh we try out different possibilities

592

00:21:00,310 --> 00:20:58,000

even if you go back to like when i used

593

00:21:02,470 --> 00:21:00,320

to make you know checkers games you know

594

00:21:04,630 --> 00:21:02,480

when i was first learning uh computer

595

00:21:06,710 --> 00:21:04,640

science it would go out and it would see

596

00:21:08,470 --> 00:21:06,720

what would happen if i were to do x y

597

00:21:11,190 --> 00:21:08,480

and z and then it would come back and

598

00:21:13,590 --> 00:21:11,200

say okay of those paths this is the most

599

00:21:15,270 --> 00:21:13,600

optimal path and so you know my

600

00:21:17,990 --> 00:21:15,280

conjecture here is that something like

601  
00:21:21,190 --> 00:21:18,000  
the core loop is happening

602  
00:21:23,909 --> 00:21:21,200  
within our lives we actually go and we

603  
00:21:24,870 --> 00:21:23,919  
run these timelines uh to see what would

604  
00:21:26,870 --> 00:21:24,880  
happen

605  
00:21:29,270 --> 00:21:26,880  
and then we come back and then we pick

606  
00:21:32,149 --> 00:21:29,280  
the next one that we want to be on so so

607  
00:21:33,750 --> 00:21:32,159  
that's where we are actually sensing

608  
00:21:35,350 --> 00:21:33,760  
right just like in this pre-sentiment

609  
00:21:37,669 --> 00:21:35,360  
experiment that you talked about that

610  
00:21:39,270 --> 00:21:37,679  
dean raiden did but also you know where

611  
00:21:42,230 --> 00:21:39,280  
we have these

612  
00:21:45,430 --> 00:21:42,240  
sort of hunches or feelings of deja vu

613  
00:21:47,669 --> 00:21:45,440

or funny feeling clues i call them about

614

00:21:49,350 --> 00:21:47,679

what's happening about the future now

615

00:21:51,590 --> 00:21:49,360

how can we have clues about the future

616

00:21:54,230 --> 00:21:51,600

if the future isn't at least

617

00:21:56,070 --> 00:21:54,240

defined in some way right as a set of

618

00:21:57,510 --> 00:21:56,080

probabilities now we'll this gets into

619

00:21:58,390 --> 00:21:57,520

the physics and how things work we can

620

00:22:00,390 --> 00:21:58,400

talk about

621

00:22:03,430 --> 00:22:00,400

that in a minute if you like

622

00:22:05,909 --> 00:22:03,440

but that to me is a sense that we are

623

00:22:08,870 --> 00:22:05,919

outside the timeline but then we bring

624

00:22:10,950 --> 00:22:08,880

ourselves in as an avatar and if you run

625

00:22:13,830 --> 00:22:10,960

the game multiple times each time it'll

626

00:22:15,190 --> 00:22:13,840

seem like you're just in that one path

627

00:22:17,750 --> 00:22:15,200

but that doesn't mean that there wasn't

628

00:22:19,190 --> 00:22:17,760

another path that had been run before

629

00:22:20,789 --> 00:22:19,200

and so that's kind of what i came to

630

00:22:22,710 --> 00:22:20,799

believe and i defined this thing called

631

00:22:24,549 --> 00:22:22,720

a multiverse graph

632

00:22:26,710 --> 00:22:24,559

and the core loop in my new book and

633

00:22:28,950 --> 00:22:26,720

those you know those are the underlying

634

00:22:30,549 --> 00:22:28,960

processes of how i think this whole

635

00:22:32,870 --> 00:22:30,559

thing works

636

00:22:34,950 --> 00:22:32,880

let's talk about this computer science

637

00:22:35,990 --> 00:22:34,960

is eating the other sciences and i want

638

00:22:38,149 --> 00:22:36,000

to kind of talk about it from two

639

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

perspectives one is

640

00:22:42,470 --> 00:22:40,159

the stuff you're laying out you're

641

00:22:43,669 --> 00:22:42,480

making it sound like

642

00:22:46,470 --> 00:22:43,679

science

643

00:22:48,470 --> 00:22:46,480

in general is right there with you and

644

00:22:50,549 --> 00:22:48,480

is supportive of this kind of

645

00:22:53,110 --> 00:22:50,559

speculation that you're doing but it's

646

00:22:55,350 --> 00:22:53,120

it's really not in so many ways and then

647

00:22:57,190 --> 00:22:55,360

the flip side of that is as you point

648

00:22:59,270 --> 00:22:57,200

out if you look at it from a

649

00:23:01,190 --> 00:22:59,280

different perspective particularly as a

650

00:23:02,470 --> 00:23:01,200

computer scientist and i would say

651  
00:23:04,070 --> 00:23:02,480  
particularly as

652  
00:23:07,590 --> 00:23:04,080  
a computer

653  
00:23:09,990 --> 00:23:07,600  
science game designer and developer it's

654  
00:23:11,430 --> 00:23:10,000  
like i know how this game is playing out

655  
00:23:14,630 --> 00:23:11,440  
we don't know what the motive is

656  
00:23:17,029 --> 00:23:14,640  
completely for the resistance but

657  
00:23:19,510 --> 00:23:17,039  
i i don't know why

658  
00:23:21,990 --> 00:23:19,520  
so first point is

659  
00:23:22,870 --> 00:23:22,000  
do you think there's general acceptance

660  
00:23:24,470 --> 00:23:22,880  
of

661  
00:23:27,990 --> 00:23:24,480  
at least the framework that you're

662  
00:23:29,909 --> 00:23:28,000  
laying out within science as a whole

663  
00:23:31,830 --> 00:23:29,919

number two is why are they so resistant

664

00:23:33,669 --> 00:23:31,840

because i think they are and three

665

00:23:37,350 --> 00:23:33,679

doesn't that all just crumble as

666

00:23:39,830 --> 00:23:37,360

computer science eats the other sciences

667

00:23:42,549 --> 00:23:39,840

well you know those good good questions

668

00:23:44,230 --> 00:23:42,559

there and on all three fronts but i

669

00:23:47,029 --> 00:23:44,240

would say that you know

670

00:23:50,230 --> 00:23:47,039

my books are in fact speculation based

671

00:23:51,830 --> 00:23:50,240

upon scientific findings right and so

672

00:23:54,070 --> 00:23:51,840

it's not that science

673

00:23:56,149 --> 00:23:54,080

disagrees but you're right most

674

00:23:59,350 --> 00:23:56,159

scientists don't share

675

00:24:03,190 --> 00:23:59,360

uh my end perspective but we're relying

676  
00:24:05,350 --> 00:24:03,200  
on the same findings or set of data

677  
00:24:07,269 --> 00:24:05,360  
within science that's showing us that

678  
00:24:09,909 --> 00:24:07,279  
there's something strange

679  
00:24:13,110 --> 00:24:09,919  
about the world that we live in right

680  
00:24:15,750 --> 00:24:13,120  
and so you know in in in my last book i

681  
00:24:17,909 --> 00:24:15,760  
laid out the fact that space isn't what

682  
00:24:19,029 --> 00:24:17,919  
we think it is right

683  
00:24:21,990 --> 00:24:19,039  
and

684  
00:24:24,390 --> 00:24:22,000  
that it's really more about information

685  
00:24:26,549 --> 00:24:24,400  
and less about physical objects in fact

686  
00:24:28,950 --> 00:24:26,559  
in science you know the more they try to

687  
00:24:31,269 --> 00:24:28,960  
find this thing called matter

688  
00:24:33,269 --> 00:24:31,279

the more elusive it becomes they can't

689

00:24:35,590 --> 00:24:33,279

really find it it's like opening up

690

00:24:37,590 --> 00:24:35,600

those russian nested dolls i like to say

691

00:24:38,870 --> 00:24:37,600

and at the bottom you open it up and at

692

00:24:41,510 --> 00:24:38,880

the bottom there's really nothing there

693

00:24:43,350 --> 00:24:41,520

but information and so there was a quote

694

00:24:45,750 --> 00:24:43,360

from john wheeler who was you know one

695

00:24:47,510 --> 00:24:45,760

of the the giants of 20th century

696

00:24:49,269 --> 00:24:47,520

physics and he worked with einstein and

697

00:24:51,110 --> 00:24:49,279

boer and many others and he came up with

698

00:24:53,190 --> 00:24:51,120

this phrase it from bit

699

00:24:54,710 --> 00:24:53,200

and he said at its core

700

00:24:57,029 --> 00:24:54,720

he couldn't find

701  
00:24:58,549 --> 00:24:57,039  
matter as particles but he could find it

702  
00:25:00,470 --> 00:24:58,559  
as information

703  
00:25:02,710 --> 00:25:00,480  
right and and he felt that if you had a

704  
00:25:05,269 --> 00:25:02,720  
series of yes no questions

705  
00:25:07,590 --> 00:25:05,279  
those are the properties of what defines

706  
00:25:09,510 --> 00:25:07,600  
this thing that we call matter now the

707  
00:25:11,510 --> 00:25:09,520  
other big confounding thing that science

708  
00:25:13,510 --> 00:25:11,520  
has found is that time isn't what we

709  
00:25:16,390 --> 00:25:13,520  
think it is right we're used to thinking

710  
00:25:18,070 --> 00:25:16,400  
of time as going from the past

711  
00:25:19,430 --> 00:25:18,080  
you know slowly towards the future in

712  
00:25:20,549 --> 00:25:19,440  
one direction

713  
00:25:21,590 --> 00:25:20,559

uh but

714

00:25:23,590 --> 00:25:21,600

there's something called the delayed

715

00:25:25,990 --> 00:25:23,600

choice experiment which was proposed

716

00:25:29,510 --> 00:25:26,000

also by wheeler

717

00:25:32,149 --> 00:25:29,520

which was this idea of uh you know are

718

00:25:33,990 --> 00:25:32,159

there multiple futures and when as a

719

00:25:35,990 --> 00:25:34,000

choice get made and the best way to

720

00:25:37,830 --> 00:25:36,000

understand it is from the cosmic delay

721

00:25:39,510 --> 00:25:37,840

choice experiment suppose there's light

722

00:25:41,350 --> 00:25:39,520

from a quasar that's like a billion

723

00:25:43,510 --> 00:25:41,360

light years away coming to us and

724

00:25:45,669 --> 00:25:43,520

there's a black hole or a galaxy in the

725

00:25:47,190 --> 00:25:45,679

middle say a million light years away

726

00:25:49,750 --> 00:25:47,200

and the light has to go to the left or

727

00:25:51,669 --> 00:25:49,760

to the right of that black hole

728

00:25:53,669 --> 00:25:51,679

it can't go both it has to go one way or

729

00:25:57,029 --> 00:25:53,679

the other now we would think that that

730

00:25:58,630 --> 00:25:57,039

choice would have had to have been made

731

00:26:00,230 --> 00:25:58,640

a million years ago because the black

732

00:26:03,269 --> 00:26:00,240

hole is a million light years away and

733

00:26:05,430 --> 00:26:03,279

so it takes light a million years

734

00:26:07,510 --> 00:26:05,440

but what the delayed choice experiment

735

00:26:08,470 --> 00:26:07,520

has found is that it's not until you

736

00:26:10,549 --> 00:26:08,480

measure

737

00:26:12,789 --> 00:26:10,559

the light when it reaches us which is a

738

00:26:15,830 --> 00:26:12,799

million years after it reaches a black

739

00:26:18,230 --> 00:26:15,840

hole and maybe a billion years later

740

00:26:21,029 --> 00:26:18,240

from when it left the the very distant

741

00:26:23,430 --> 00:26:21,039

quasar for example that that choice

742

00:26:25,909 --> 00:26:23,440

doesn't happen until the measurement and

743

00:26:28,310 --> 00:26:25,919

so what this is telling us is that the

744

00:26:30,070 --> 00:26:28,320

past isn't what we think it is and the

745

00:26:32,390 --> 00:26:30,080

future isn't what we think it is that

746

00:26:33,590 --> 00:26:32,400

they're related in strange ways and so

747

00:26:35,430 --> 00:26:33,600

science doesn't have a great

748

00:26:37,510 --> 00:26:35,440

interpretation for that and the best

749

00:26:39,990 --> 00:26:37,520

interpretation that they've come up with

750

00:26:41,750 --> 00:26:40,000

uh within physics is the multiverse idea

751

00:26:44,470 --> 00:26:41,760

right so there's like two major

752

00:26:46,870 --> 00:26:44,480

interpretations of uh quantum physics

753

00:26:49,750 --> 00:26:46,880

that are kind of considered you know

754

00:26:52,470 --> 00:26:49,760

accepted interpretations one is the

755

00:26:54,789 --> 00:26:52,480

collapse of the probability wave based

756

00:26:57,029 --> 00:26:54,799

upon observation and then the other is

757

00:26:59,510 --> 00:26:57,039

the multiverse idea and the multiverse

758

00:27:00,549 --> 00:26:59,520

idea has more and more adherence over

759

00:27:01,590 --> 00:27:00,559

time

760

00:27:03,190 --> 00:27:01,600

now there's some problems with the

761

00:27:05,190 --> 00:27:03,200

multiverse idea it basically says that

762

00:27:07,110 --> 00:27:05,200

every time there's a decision to be made

763

00:27:09,029 --> 00:27:07,120

the universe splits off

764

00:27:11,669 --> 00:27:09,039

into multiple branches so think of it

765

00:27:13,669 --> 00:27:11,679

like a tree a very large tree that just

766

00:27:14,710 --> 00:27:13,679

keeps spreading you know it's its

767

00:27:16,470 --> 00:27:14,720

branches

768

00:27:17,990 --> 00:27:16,480

outward forever

769

00:27:19,830 --> 00:27:18,000

and so you know this is a matter of

770

00:27:22,070 --> 00:27:19,840

debate within science

771

00:27:23,990 --> 00:27:22,080

and the question and my question is well

772

00:27:25,909 --> 00:27:24,000

if you're going to clone something

773

00:27:27,430 --> 00:27:25,919

you know what is it that you clone

774

00:27:29,750 --> 00:27:27,440

there's nothing in nature where you can

775

00:27:32,230 --> 00:27:29,760

clone like a giant object

776

00:27:35,669 --> 00:27:32,240

in an instant it takes time even in

777

00:27:38,070 --> 00:27:35,679

biology right you can you can clone

778

00:27:40,230 --> 00:27:38,080

a specific plant or

779

00:27:41,909 --> 00:27:40,240

if you're cloning a sheep

780

00:27:43,269 --> 00:27:41,919

you know it takes time you have to grow

781

00:27:45,669 --> 00:27:43,279

that clone

782

00:27:48,950 --> 00:27:45,679

but the one thing you can clone almost

783

00:27:50,630 --> 00:27:48,960

instantly is information right and so

784

00:27:52,630 --> 00:27:50,640

you know i believe that this model of a

785

00:27:53,990 --> 00:27:52,640

simulated multiverse actually bridges

786

00:27:57,029 --> 00:27:54,000

the gap between these different

787

00:27:59,190 --> 00:27:57,039

interpretations of quantum physics

788

00:28:01,510 --> 00:27:59,200

now the the big debate though i think

789

00:28:02,789 --> 00:28:01,520

that you're hinting at is this issue of

790

00:28:05,430 --> 00:28:02,799

consciousness

791

00:28:07,269 --> 00:28:05,440

existing or not existing and that to me

792

00:28:09,350 --> 00:28:07,279

the video game

793

00:28:11,430 --> 00:28:09,360

kind of point of view that i have i like

794

00:28:13,590 --> 00:28:11,440

to define as the npc

795

00:28:15,590 --> 00:28:13,600

versus the rpg

796

00:28:17,909 --> 00:28:15,600

debate or versions of the simulation

797

00:28:21,110 --> 00:28:17,919

hypothesis npcs being non-player

798

00:28:22,950 --> 00:28:21,120

characters rpg being role-playing games

799

00:28:25,909 --> 00:28:22,960

and so like whereas if you and i are in

800

00:28:27,830 --> 00:28:25,919

a game we have our avatars each of us is

801  
00:28:30,070 --> 00:28:27,840  
playing that avatar but then there are

802  
00:28:32,070 --> 00:28:30,080  
other characters that aren't necessarily

803  
00:28:34,149 --> 00:28:32,080  
conscious entities outside the game and

804  
00:28:36,070 --> 00:28:34,159  
so most scientists tend to go towards

805  
00:28:37,669 --> 00:28:36,080  
that interpretation which is a

806  
00:28:39,430 --> 00:28:37,679  
materialistic point of view that we're

807  
00:28:41,190 --> 00:28:39,440  
all npcs

808  
00:28:43,830 --> 00:28:41,200  
but there's this other interpretation of

809  
00:28:46,230 --> 00:28:43,840  
the rpg that we exist outside and we

810  
00:28:47,909 --> 00:28:46,240  
inhabit that that character

811  
00:28:51,430 --> 00:28:47,919  
that's where it seems to me that kind of

812  
00:28:54,149 --> 00:28:51,440  
a literal interpretation of the

813  
00:28:56,789 --> 00:28:54,159

multiverse multiverse theory is kind of

814

00:28:58,870 --> 00:28:56,799

silly i mean no one really thinks that

815

00:29:01,029 --> 00:28:58,880

because it implies that the whole

816

00:29:03,430 --> 00:29:01,039

consciousness is an illusion and it's

817

00:29:05,590 --> 00:29:03,440

this kind of weird interpretation i

818

00:29:08,230 --> 00:29:05,600

think of ultimately the double slit

819

00:29:10,870 --> 00:29:08,240

experiment which no it's just we're

820

00:29:12,470 --> 00:29:10,880

uncomfortable with the idea that

821

00:29:13,990 --> 00:29:12,480

we really are the observer that

822

00:29:15,909 --> 00:29:14,000

consciousness really is making a

823

00:29:18,070 --> 00:29:15,919

difference but again i point dean rayden

824

00:29:19,909 --> 00:29:18,080

you know no nobody he needs to stack up

825

00:29:21,269 --> 00:29:19,919

some nobel prizes on his bookshelf or

826

00:29:22,549 --> 00:29:21,279

something because the other experiment

827

00:29:24,389 --> 00:29:22,559

that he did that i thought was

828

00:29:26,710 --> 00:29:24,399

incredibly

829

00:29:29,269 --> 00:29:26,720

you know poignant and relevant to right

830

00:29:31,430 --> 00:29:29,279

now is he said okay i'll settle any of

831

00:29:33,269 --> 00:29:31,440

this kind of debate

832

00:29:35,750 --> 00:29:33,279

it's not even very hard anymore i can

833

00:29:37,909 --> 00:29:35,760

set up a photon bean generator in my lab

834

00:29:38,870 --> 00:29:37,919

and i can bring in a meditator and i'll

835

00:29:41,029 --> 00:29:38,880

have him

836

00:29:42,870 --> 00:29:41,039

you know look the other way and then say

837

00:29:45,269 --> 00:29:42,880

okay focus your attention on the photon

838

00:29:47,430 --> 00:29:45,279

beam and boom you know we can control

839

00:29:50,070 --> 00:29:47,440

that really well and he does and another

840

00:29:52,310 --> 00:29:50,080

six sigma result yeah if i tell this guy

841

00:29:54,549 --> 00:29:52,320

who's this zen buddhist

842

00:29:57,190 --> 00:29:54,559

twenty thousand hour meditator to focus

843

00:29:57,909 --> 00:29:57,200

on the photon beam he can show an effect

844

00:30:00,549 --> 00:29:57,919

so

845

00:30:02,470 --> 00:30:00,559

to me it's it's kind of a

846

00:30:04,789 --> 00:30:02,480

i just don't even wanna go there in

847

00:30:06,789 --> 00:30:04,799

terms of materialist materialistic uh

848

00:30:09,510 --> 00:30:06,799

science consciousness is an illusion

849

00:30:11,990 --> 00:30:09,520

kind of crap it just seems to be a huge

850

00:30:14,310 --> 00:30:12,000

anchor holding us down so

851

00:30:15,350 --> 00:30:14,320

where i see you really going i mean i

852

00:30:18,070 --> 00:30:15,360

know you have to fit it in the

853

00:30:19,750 --> 00:30:18,080

multiverse thing but i almost see you

854

00:30:22,789 --> 00:30:19,760

doing some kind of

855

00:30:25,830 --> 00:30:22,799

hybrid but i i'm my

856

00:30:28,789 --> 00:30:25,840

my wonder my concern my thought is

857

00:30:31,510 --> 00:30:28,799

are you being too materialistic

858

00:30:32,789 --> 00:30:31,520

in that interpretation of it i mean one

859

00:30:35,269 --> 00:30:32,799

of the things we talked about before and

860

00:30:37,669 --> 00:30:35,279

i think it's still at play is the kind

861

00:30:39,669 --> 00:30:37,679

kind of infinite regress you know who's

862

00:30:42,470 --> 00:30:39,679

who's simulating the simulation of the

863

00:30:44,870 --> 00:30:42,480

simulation kind of thing so i bundled a

864

00:30:46,870 --> 00:30:44,880

bunch of stuff there doesn't materialist

865

00:30:48,149 --> 00:30:46,880

science consciousness is an illusion

866

00:30:50,789 --> 00:30:48,159

isn't that kind of

867

00:30:52,470 --> 00:30:50,799

out the window in terms of really moving

868

00:30:54,789 --> 00:30:52,480

us forward

869

00:30:56,549 --> 00:30:54,799

well you know i i tend to

870

00:30:58,470 --> 00:30:56,559

be very sympathetic with that that point

871

00:30:59,430 --> 00:30:58,480

of view and uh also you know you

872

00:31:01,909 --> 00:30:59,440

mentioned

873

00:31:04,549 --> 00:31:01,919

dean's experiments but also uh you know

874

00:31:06,470 --> 00:31:04,559

the the the pair the princeton uh

875

00:31:09,350 --> 00:31:06,480

engineering advanced research

876

00:31:10,870 --> 00:31:09,360

uh experiments around uh quantum random

877

00:31:14,230 --> 00:31:10,880

number generators and you didn't even

878

00:31:16,470 --> 00:31:14,240

need a zen monk who's a meditator with

879

00:31:20,070 --> 00:31:16,480

20 000 you just got random people to

880

00:31:22,230 --> 00:31:20,080

come in right that you sat down and and

881

00:31:24,070 --> 00:31:22,240

so the way that works is you know the

882

00:31:26,470 --> 00:31:24,080

the only thing we know truly random are

883

00:31:28,310 --> 00:31:26,480

these quantum processes and so you know

884

00:31:29,750 --> 00:31:28,320

theoretically over time if you do 10 000

885

00:31:32,789 --> 00:31:29,760

of these it should get closer and closer

886

00:31:34,070 --> 00:31:32,799

to 50 50 but by thinking about it or not

887

00:31:36,310 --> 00:31:34,080

thinking about it they were able to

888

00:31:38,710 --> 00:31:36,320

verify they were able to make the

889

00:31:41,830 --> 00:31:38,720

variations in those numbers and show

890

00:31:44,149 --> 00:31:41,840

that consciousness was somehow affecting

891

00:31:47,029 --> 00:31:44,159

what was going on there but you know

892

00:31:48,710 --> 00:31:47,039

getting back to the multiverse theory

893

00:31:51,029 --> 00:31:48,720

and and consciousness i feel like this

894

00:31:52,950 --> 00:31:51,039

is a way to bridge the gap and you know

895

00:31:54,710 --> 00:31:52,960

there was a there's a well-known

896

00:31:56,389 --> 00:31:54,720

physicist from university of oregon

897

00:31:58,389 --> 00:31:56,399

named ahmed koswami and you know he

898

00:32:00,149 --> 00:31:58,399

wrote a few books like the self-aware

899

00:32:01,509 --> 00:32:00,159

universe and i remember

900

00:32:04,230 --> 00:32:01,519

meeting him once when he was in mountain

901  
00:32:05,830 --> 00:32:04,240  
view and somebody was asking him about

902  
00:32:08,149 --> 00:32:05,840  
these different interpretations and what

903  
00:32:10,470 --> 00:32:08,159  
what are the probabilities mean

904  
00:32:11,990 --> 00:32:10,480  
that we get into when we talk about the

905  
00:32:13,269 --> 00:32:12,000  
collapse of the probability with and

906  
00:32:17,190 --> 00:32:13,279  
what does it mean

907  
00:32:18,149 --> 00:32:17,200  
multiverse and he said well all these

908  
00:32:20,310 --> 00:32:18,159  
things that we're calling the

909  
00:32:22,789 --> 00:32:20,320  
probabilities are what would happen if

910  
00:32:24,630 --> 00:32:22,799  
you ran the same process again and again

911  
00:32:26,710 --> 00:32:24,640  
and again and that's why you get the

912  
00:32:28,389 --> 00:32:26,720  
probability wave and that's what you

913  
00:32:30,470 --> 00:32:28,399

know for me was an interesting insight

914

00:32:32,870 --> 00:32:30,480

because it ties to this idea of the

915

00:32:35,590 --> 00:32:32,880

simulated multiverse that

916

00:32:38,070 --> 00:32:35,600

the multiverse is what would happen if

917

00:32:39,830 --> 00:32:38,080

you ran the same process again and again

918

00:32:41,669 --> 00:32:39,840

so it doesn't necessarily mean that

919

00:32:44,230 --> 00:32:41,679

we're always running an infinite number

920

00:32:46,870 --> 00:32:44,240

of processes it means we run in in

921

00:32:49,430 --> 00:32:46,880

computer programming the the way that we

922

00:32:51,990 --> 00:32:49,440

do it with quantum computers so

923

00:32:53,509 --> 00:32:52,000

uh quantum computing is a whole new area

924

00:32:56,230 --> 00:32:53,519

that's quite interesting and i think it

925

00:32:57,909 --> 00:32:56,240

reveals a lot about both computation and

926

00:33:00,310 --> 00:32:57,919

the physical universe because it tries

927

00:33:02,549 --> 00:33:00,320

to to combine the two now quantum

928

00:33:05,269 --> 00:33:02,559

computers theoretically are able to find

929

00:33:07,830 --> 00:33:05,279

an answer to a problem like breaking

930

00:33:08,789 --> 00:33:07,840

cryptography for example that might take

931

00:33:11,669 --> 00:33:08,799

you know

932

00:33:12,470 --> 00:33:11,679

uh two to the 256

933

00:33:14,950 --> 00:33:12,480

you know

934

00:33:16,389 --> 00:33:14,960

values and and and there's so many

935

00:33:18,230 --> 00:33:16,399

values there that it would literally

936

00:33:20,310 --> 00:33:18,240

take a classical computer

937

00:33:22,870 --> 00:33:20,320

thousands of years to run through all of

938

00:33:25,350 --> 00:33:22,880

those possibilities right but a quantum

939

00:33:27,669 --> 00:33:25,360

computer is able to find the answer

940

00:33:30,149 --> 00:33:27,679

theoretically by doing this computation

941

00:33:32,149 --> 00:33:30,159

in multiple universes see theoretically

942

00:33:33,750 --> 00:33:32,159

because that's still a controversial

943

00:33:35,830 --> 00:33:33,760

explanation but nobody's come up with a

944

00:33:37,190 --> 00:33:35,840

better one yet for exactly how that

945

00:33:38,549 --> 00:33:37,200

works and so

946

00:33:40,710 --> 00:33:38,559

i like to think of the world as a

947

00:33:42,710 --> 00:33:40,720

quantum computation which says it's not

948

00:33:44,870 --> 00:33:42,720

that we're necessarily spinning off all

949

00:33:48,950 --> 00:33:44,880

these realities and they always exist

950

00:33:50,830 --> 00:33:48,960

for all time it's that we as individuals

951  
00:33:53,669 --> 00:33:50,840  
are tapping into this

952  
00:33:56,470 --> 00:33:53,679  
multiplayer quantum computing reality

953  
00:33:58,950 --> 00:33:56,480  
and we are each able to run as many

954  
00:34:00,470 --> 00:33:58,960  
scenarios as we need to to solve the

955  
00:34:02,549 --> 00:34:00,480  
quantum computing problem that we're

956  
00:34:04,389 --> 00:34:02,559  
trying to solve which for us may be to

957  
00:34:06,470 --> 00:34:04,399  
have an experience

958  
00:34:07,990 --> 00:34:06,480  
as a player of a video game so now we're

959  
00:34:09,909 --> 00:34:08,000  
tying the quantum computing back to

960  
00:34:11,349 --> 00:34:09,919  
video games and so that's a way that i

961  
00:34:13,270 --> 00:34:11,359  
kind of like to think about it and it

962  
00:34:16,149 --> 00:34:13,280  
does i believe tie together all of this

963  
00:34:17,589 --> 00:34:16,159

stuff in kind of a a unique way you know

964

00:34:19,430 --> 00:34:17,599

yeah you're gonna have to break that

965

00:34:21,909 --> 00:34:19,440

down i always say michael scott you know

966

00:34:23,510 --> 00:34:21,919

like i tell it to me like i'm in first

967

00:34:25,430 --> 00:34:23,520

grade kind of thing but

968

00:34:27,430 --> 00:34:25,440

no there's an important

969

00:34:29,829 --> 00:34:27,440

gap to bridge there that i think people

970

00:34:30,790 --> 00:34:29,839

can understand because enough people

971

00:34:32,790 --> 00:34:30,800

have

972

00:34:34,629 --> 00:34:32,800

kind of at least done the intro to

973

00:34:37,270 --> 00:34:34,639

quantum computing

974

00:34:38,629 --> 00:34:37,280

and understand that it's kind of set up

975

00:34:40,230 --> 00:34:38,639

at least the way we were able to

976  
00:34:41,750 --> 00:34:40,240  
engineer it now and we should add you

977  
00:34:44,149 --> 00:34:41,760  
know it's not like

978  
00:34:45,990 --> 00:34:44,159  
theoretical at this point there's how

979  
00:34:48,550 --> 00:34:46,000  
many qubits are we up to

980  
00:34:49,589 --> 00:34:48,560  
with the most advanced

981  
00:34:51,990 --> 00:34:49,599  
you know i don't know the number because

982  
00:34:54,069 --> 00:34:52,000  
it keeps changing every month or two but

983  
00:34:55,909 --> 00:34:54,079  
uh you know a couple like a year or two

984  
00:34:57,829 --> 00:34:55,919  
ago i was only like four cube bits and

985  
00:34:59,990 --> 00:34:57,839  
then it was eight and i believe there's

986  
00:35:02,150 --> 00:35:00,000  
a 50 cubit machine i'm not sure if it's

987  
00:35:04,390 --> 00:35:02,160  
been rolled out but it's getting there

988  
00:35:05,829 --> 00:35:04,400

and so cubits for most people

989

00:35:07,829 --> 00:35:05,839

i just want you to explain before we

990

00:35:10,069 --> 00:35:07,839

even get into that because the numbers

991

00:35:12,390 --> 00:35:10,079

will throw people it's like the way we

992

00:35:15,510 --> 00:35:12,400

think about it the way i i think about

993

00:35:17,750 --> 00:35:15,520

it is for certain kinds of problems i

994

00:35:20,069 --> 00:35:17,760

can set up this huge

995

00:35:22,069 --> 00:35:20,079

matrix like mathematical matrix and i

996

00:35:24,230 --> 00:35:22,079

can go down all the paths

997

00:35:26,710 --> 00:35:24,240

at the same time

998

00:35:28,630 --> 00:35:26,720

and for certain problems

999

00:35:31,109 --> 00:35:28,640

if we try to do it linearly like you're

1000

00:35:32,630 --> 00:35:31,119

saying or i guess whatever you know we

1001  
00:35:34,710 --> 00:35:32,640  
just couldn't do it and this way we can

1002  
00:35:37,190 --> 00:35:34,720  
do it but the the leap that you're

1003  
00:35:39,109 --> 00:35:37,200  
making that i want you to kind of

1004  
00:35:42,310 --> 00:35:39,119  
support a little bit more is you're

1005  
00:35:45,349 --> 00:35:42,320  
drawing are you saying it's analogous to

1006  
00:35:48,870 --> 00:35:45,359  
a multiverse or are you saying at some

1007  
00:35:50,870 --> 00:35:48,880  
deep quantum physics level it is

1008  
00:35:54,150 --> 00:35:50,880  
a a truly

1009  
00:35:57,190 --> 00:35:54,160  
a quantum event to have that uh

1010  
00:35:59,270 --> 00:35:57,200  
massively parallel processing

1011  
00:36:01,510 --> 00:35:59,280  
which is it

1012  
00:36:04,950 --> 00:36:01,520  
well you know so just for people who

1013  
00:36:09,030 --> 00:36:04,960

don't know so a qubit is a bit that can

1014

00:36:11,829 --> 00:36:09,040

have a value of both 0 and 1. so uh

1015

00:36:13,990 --> 00:36:11,839

qubit is a bit which normally has a

1016

00:36:14,870 --> 00:36:14,000

value of just zero or one one or the

1017

00:36:16,470 --> 00:36:14,880

other

1018

00:36:19,190 --> 00:36:16,480

it's in superposition i like to say that

1019

00:36:21,190 --> 00:36:19,200

it's kind of drunk right it doesn't know

1020

00:36:23,510 --> 00:36:21,200

which value it has in fact it has both

1021

00:36:25,670 --> 00:36:23,520

values so if you were to have like eight

1022

00:36:27,510 --> 00:36:25,680

bits most people have heard of 8-bit

1023

00:36:29,829 --> 00:36:27,520

16-bit what it means is you have a

1024

00:36:32,630 --> 00:36:29,839

series of zeros and ones you have eight

1025

00:36:36,069 --> 00:36:32,640

of them and so you can have two to the

1026

00:36:37,990 --> 00:36:36,079

eight or 256 possible values if you were

1027

00:36:40,230 --> 00:36:38,000

to make every single bit have a value of

1028

00:36:41,510 --> 00:36:40,240

zero and one and so by its name what

1029

00:36:43,670 --> 00:36:41,520

i'm saying is that

1030

00:36:44,870 --> 00:36:43,680

any process that can be represented as

1031

00:36:47,510 --> 00:36:44,880

information

1032

00:36:49,990 --> 00:36:47,520

has this multiverse graph

1033

00:36:52,390 --> 00:36:50,000

right it's there whether whether we

1034

00:36:55,030 --> 00:36:52,400

think of it as real or not because those

1035

00:36:57,430 --> 00:36:55,040

are the possible values now

1036

00:36:59,349 --> 00:36:57,440

in computation we try to figure out

1037

00:37:02,069 --> 00:36:59,359

which of those

1038

00:37:03,510 --> 00:37:02,079

values of this graph are worth

1039

00:37:07,190 --> 00:37:03,520

traversing

1040

00:37:10,069 --> 00:37:07,200

searching for it right so if you want to

1041

00:37:12,390 --> 00:37:10,079

search if you you can take two roads

1042

00:37:14,069 --> 00:37:12,400

from here to you know philadelphia to

1043

00:37:15,750 --> 00:37:14,079

new york and you want to figure out

1044

00:37:17,349 --> 00:37:15,760

which is the best road well you have to

1045

00:37:19,510 --> 00:37:17,359

go down each one

1046

00:37:22,069 --> 00:37:19,520

but if those two roads have two more

1047

00:37:23,430 --> 00:37:22,079

roads you know it's a new work or some

1048

00:37:26,550 --> 00:37:23,440

place right you have to keep making

1049

00:37:28,150 --> 00:37:26,560

these decisions along the way and so you

1050

00:37:30,790 --> 00:37:28,160

can think of any

1051

00:37:32,790 --> 00:37:30,800

process which is a series of choices

1052

00:37:34,630 --> 00:37:32,800

as a multiverse and that's kind of the

1053

00:37:36,710 --> 00:37:34,640

the idea that i'm putting forward

1054

00:37:39,829 --> 00:37:36,720

whether they are physical or not becomes

1055

00:37:42,069 --> 00:37:39,839

irrelevant because they become physical

1056

00:37:44,870 --> 00:37:42,079

only when we render them

1057

00:37:46,470 --> 00:37:44,880

meaning when we choose to explore that

1058

00:37:48,470 --> 00:37:46,480

path and so what i'm saying is that

1059

00:37:49,430 --> 00:37:48,480

quantum computing shows us

1060

00:37:52,069 --> 00:37:49,440

that

1061

00:37:54,630 --> 00:37:52,079

there is something inherent in physical

1062

00:37:57,109 --> 00:37:54,640

matter that allows us to explore

1063

00:37:59,670 --> 00:37:57,119

multiple paths simultaneously and to

1064

00:38:01,589 --> 00:37:59,680

discard those paths that we don't need

1065

00:38:04,069 --> 00:38:01,599

it's kind of a what we call garbage

1066

00:38:06,230 --> 00:38:04,079

collection in the computer science world

1067

00:38:07,750 --> 00:38:06,240

where you've got all this extra data

1068

00:38:10,870 --> 00:38:07,760

that might have been needed at some

1069

00:38:13,030 --> 00:38:10,880

point but it's not needed anymore and so

1070

00:38:13,829 --> 00:38:13,040

uh i guess what i'm saying is i think

1071

00:38:15,910 --> 00:38:13,839

that

1072

00:38:17,670 --> 00:38:15,920

the multiverse idea

1073

00:38:18,630 --> 00:38:17,680

doesn't have to be physical it ties back

1074

00:38:20,390 --> 00:38:18,640

to

1075

00:38:23,190 --> 00:38:20,400

my statement earlier that computer

1076  
00:38:25,109 --> 00:38:23,200  
science is eating all the other sciences

1077  
00:38:26,390 --> 00:38:25,119  
that everything can be represented as

1078  
00:38:29,109 --> 00:38:26,400  
information

1079  
00:38:30,630 --> 00:38:29,119  
and this is true with biology this is

1080  
00:38:33,109 --> 00:38:30,640  
true with physical objects if you think

1081  
00:38:35,430 --> 00:38:33,119  
of like genetics well genetics is kind

1082  
00:38:37,109 --> 00:38:35,440  
of an information science right if you

1083  
00:38:39,910 --> 00:38:37,119  
look at they theorized the idea of the

1084  
00:38:42,550 --> 00:38:39,920  
gene before they actually discovered dna

1085  
00:38:44,550 --> 00:38:42,560  
but it's just defined as a series of

1086  
00:38:46,630 --> 00:38:44,560  
bits of information

1087  
00:38:48,390 --> 00:38:46,640  
and so more and more you're seeing

1088  
00:38:50,310 --> 00:38:48,400

within university settings you have

1089

00:38:52,630 --> 00:38:50,320

bioinformatics you have kind of these

1090

00:38:54,550 --> 00:38:52,640

departments that are like a blend of the

1091

00:38:56,630 --> 00:38:54,560

traditional department you have physics

1092

00:38:58,870 --> 00:38:56,640

but then you have digital physics well

1093

00:39:00,790 --> 00:38:58,880

what's digital physics digital physics

1094

00:39:02,310 --> 00:39:00,800

is about the information in the universe

1095

00:39:03,910 --> 00:39:02,320

right i mean we used to talk about the

1096

00:39:05,030 --> 00:39:03,920

conservation of

1097

00:39:07,030 --> 00:39:05,040

energy

1098

00:39:08,630 --> 00:39:07,040

conservation of matter all of these

1099

00:39:10,630 --> 00:39:08,640

types of things

1100

00:39:13,589 --> 00:39:10,640

and now we talk about the conservation

1101

00:39:15,990 --> 00:39:13,599

of information that isn't lost and so

1102

00:39:18,069 --> 00:39:16,000

there's this i think greater

1103

00:39:19,670 --> 00:39:18,079

understanding that's developing across

1104

00:39:20,550 --> 00:39:19,680

all of the sciences

1105

00:39:23,349 --> 00:39:20,560

that

1106

00:39:25,829 --> 00:39:23,359

the world is comprised of information

1107

00:39:27,910 --> 00:39:25,839

and and i don't think you know science

1108

00:39:29,910 --> 00:39:27,920

has quite figured out how does it go

1109

00:39:31,430 --> 00:39:29,920

from information to what we think of as

1110

00:39:33,589 --> 00:39:31,440

physical right and that's where the

1111

00:39:36,150 --> 00:39:33,599

video game analogy comes into play

1112

00:39:37,990 --> 00:39:36,160

because at the moment you are rendering

1113

00:39:41,190 --> 00:39:38,000

one of those possibilities and that to

1114

00:39:43,030 --> 00:39:41,200

you seems like the real physical world

1115

00:39:44,950 --> 00:39:43,040

but that just happens to be physical

1116

00:39:47,829 --> 00:39:44,960

while it's being rendered out of the

1117

00:39:50,069 --> 00:39:47,839

information that comprises all of that

1118

00:39:51,829 --> 00:39:50,079

behind the scenes so i guess that's kind

1119

00:39:53,349 --> 00:39:51,839

of an overview of the way that i'm

1120

00:39:56,950 --> 00:39:53,359

thinking

1121

00:39:58,069 --> 00:39:56,960

yeah that's it's amazing um let me again

1122

00:40:00,550 --> 00:39:58,079

try and break it down because i think

1123

00:40:02,550 --> 00:40:00,560

there's layers i think the the computer

1124

00:40:04,870 --> 00:40:02,560

science is eating all the other science

1125

00:40:06,870 --> 00:40:04,880

is kind of a really interesting thing

1126

00:40:08,230 --> 00:40:06,880

and and especially for me the more i

1127

00:40:11,190 --> 00:40:08,240

thought about it is

1128

00:40:12,390 --> 00:40:11,200

you kind of step it down you know like

1129

00:40:14,630 --> 00:40:12,400

first

1130

00:40:15,750 --> 00:40:14,640

on a very concrete level

1131

00:40:18,309 --> 00:40:15,760

like what you're talking about with

1132

00:40:20,790 --> 00:40:18,319

biology they get it from the fact that

1133

00:40:22,630 --> 00:40:20,800

like the old school guy you know who's

1134

00:40:24,790 --> 00:40:22,640

the head of the department he's like has

1135

00:40:26,710 --> 00:40:24,800

to call everybody in how do you run this

1136

00:40:28,230 --> 00:40:26,720

program that does this thing again you

1137

00:40:31,990 --> 00:40:28,240

know it got me there

1138

00:40:34,550 --> 00:40:32,000

so in that way it's kind of eating away

1139

00:40:36,630 --> 00:40:34,560

at it and then what you're talking about

1140

00:40:38,230 --> 00:40:36,640

though is kind of this next level if

1141

00:40:40,230 --> 00:40:38,240

somebody really thinks about it and kind

1142

00:40:41,829 --> 00:40:40,240

of goes into the future and says okay

1143

00:40:44,470 --> 00:40:41,839

what are the problems we're really

1144

00:40:46,710 --> 00:40:44,480

facing you know from a biologic biology

1145

00:40:49,030 --> 00:40:46,720

standpoint or genetic standpoint just in

1146

00:40:50,390 --> 00:40:49,040

terms of academic curiosity you know

1147

00:40:52,230 --> 00:40:50,400

what would we how would we solve that

1148

00:40:53,990 --> 00:40:52,240

what are the really difficult problems

1149

00:40:56,470 --> 00:40:54,000

boom they're coming right back to you

1150

00:40:58,069 --> 00:40:56,480

and they're going res how would we solve

1151

00:41:00,150 --> 00:40:58,079

this and you're going well you know

1152

00:41:01,750 --> 00:41:00,160

there's some kind of ai modelings

1153

00:41:03,430 --> 00:41:01,760

learning that could we could apply there

1154

00:41:05,589 --> 00:41:03,440

or hey that's a problem that seems to

1155

00:41:08,069 --> 00:41:05,599

fit with what's going on in quantum

1156

00:41:10,069 --> 00:41:08,079

computing and suddenly

1157

00:41:12,630 --> 00:41:10,079

they've kind of lost

1158

00:41:14,390 --> 00:41:12,640

lost control to a certain extent so in

1159

00:41:16,950 --> 00:41:14,400

that way it's kind of

1160

00:41:19,030 --> 00:41:16,960

eating all the other sciences but then

1161

00:41:22,309 --> 00:41:19,040

what you're kind of even alluding to is

1162

00:41:25,829 --> 00:41:22,319

kind of a whole other level of that that

1163

00:41:27,670 --> 00:41:25,839

is implied by the multiverse kind of

1164

00:41:30,150 --> 00:41:27,680

thing so

1165

00:41:31,109 --> 00:41:30,160

walk us walk us through that and is

1166

00:41:32,470 --> 00:41:31,119

there

1167

00:41:34,550 --> 00:41:32,480

yeah just walk us through that any

1168

00:41:36,069 --> 00:41:34,560

thoughts on that

1169

00:41:38,470 --> 00:41:36,079

yeah well it's a good point that you

1170

00:41:39,990 --> 00:41:38,480

know obviously there's the practical

1171

00:41:41,670 --> 00:41:40,000

if you're doing any science today you

1172

00:41:44,150 --> 00:41:41,680

have to like run programs and do

1173

00:41:45,910 --> 00:41:44,160

simulations right uh and so there's the

1174

00:41:48,550 --> 00:41:45,920

practical side of hey let me bring in

1175

00:41:51,589 --> 00:41:48,560

the computer guy who can knows how to

1176

00:41:53,430 --> 00:41:51,599

run these programs right uh but

1177

00:41:56,309 --> 00:41:53,440

i'm trying to get beyond that to say

1178

00:41:59,430 --> 00:41:56,319

that the fundamental entities

1179

00:42:02,470 --> 00:41:59,440

that we have been describing

1180

00:42:05,270 --> 00:42:02,480

as nature and physical

1181

00:42:06,630 --> 00:42:05,280

are not nature and physical and so

1182

00:42:08,470 --> 00:42:06,640

perhaps you know when i say computer

1183

00:42:10,950 --> 00:42:08,480

science i'm using it as a catch-all term

1184

00:42:14,309 --> 00:42:10,960

for several things computer programming

1185

00:42:16,870 --> 00:42:14,319

ai but also information science i get

1186

00:42:18,630 --> 00:42:16,880

that i wonder and and you maybe you just

1187

00:42:21,109 --> 00:42:18,640

totally don't agree with this

1188

00:42:23,430 --> 00:42:21,119

but i wonder if we're not

1189

00:42:26,550 --> 00:42:23,440

kind of converging to the same point to

1190

00:42:28,390 --> 00:42:26,560

a certain extent in that when that guy

1191

00:42:31,030 --> 00:42:28,400

at the biology department who's been

1192

00:42:32,630 --> 00:42:31,040

there forever or when his sharpest

1193

00:42:33,670 --> 00:42:32,640

brightest

1194

00:42:36,390 --> 00:42:33,680

you know

1195

00:42:38,069 --> 00:42:36,400

post-grad assistant kind of sees the

1196

00:42:40,550 --> 00:42:38,079

future and

1197

00:42:43,030 --> 00:42:40,560

goes and starts diving into

1198

00:42:44,870 --> 00:42:43,040

ai and starts diving into

1199

00:42:46,309 --> 00:42:44,880

uh

1200

00:42:47,589 --> 00:42:46,319

quantum computing and all the rest of

1201  
00:42:49,510 --> 00:42:47,599  
that and says i gotta go back and get a

1202  
00:42:50,470 --> 00:42:49,520  
phd in quantum computing as well because

1203  
00:42:51,750 --> 00:42:50,480  
that's where everything's heading and

1204  
00:42:54,390 --> 00:42:51,760  
stuff like that

1205  
00:42:57,750 --> 00:42:54,400  
it's almost like for you to even think

1206  
00:43:00,630 --> 00:42:57,760  
along these lines you had to have

1207  
00:43:01,990 --> 00:43:00,640  
everything that you have in your head

1208  
00:43:04,470 --> 00:43:02,000  
aren't a lot of people in the other

1209  
00:43:07,750 --> 00:43:04,480  
sciences gonna have to go there to where

1210  
00:43:10,390 --> 00:43:07,760  
they can you know even get to truly

1211  
00:43:13,109 --> 00:43:10,400  
making this leap that you're making

1212  
00:43:15,829 --> 00:43:13,119  
well i think over time paradigms shift

1213  
00:43:17,990 --> 00:43:15,839

and and people become more comfortable

1214

00:43:19,829 --> 00:43:18,000

with new paradigms and new ways of

1215

00:43:21,030 --> 00:43:19,839

thinking about things like 100 years ago

1216

00:43:22,710 --> 00:43:21,040

in the sciences

1217

00:43:24,630 --> 00:43:22,720

you know they didn't like the idea of

1218

00:43:26,630 --> 00:43:24,640

quantum mechanics right i mean even

1219

00:43:28,630 --> 00:43:26,640

einstein said you know

1220

00:43:31,990 --> 00:43:28,640

god doesn't play dice right so he didn't

1221

00:43:32,950 --> 00:43:32,000

like the idea of probabilities uh and

1222

00:43:35,190 --> 00:43:32,960

you know there were people who didn't

1223

00:43:38,150 --> 00:43:35,200

like einstein's ideas of

1224

00:43:40,309 --> 00:43:38,160

of uh relativity and so what happens

1225

00:43:43,510 --> 00:43:40,319

over time is that we become more

1226  
00:43:44,790 --> 00:43:43,520  
familiar with concepts and we're able to

1227  
00:43:46,550 --> 00:43:44,800  
integrate them

1228  
00:43:49,190 --> 00:43:46,560  
you know into our thinking and this

1229  
00:43:52,150 --> 00:43:49,200  
happens with scientists as well and so

1230  
00:43:53,510 --> 00:43:52,160  
you don't have to know exactly how

1231  
00:43:55,270 --> 00:43:53,520  
you know

1232  
00:43:57,510 --> 00:43:55,280  
a uh

1233  
00:44:00,230 --> 00:43:57,520  
an automobile engine right internal

1234  
00:44:02,790 --> 00:44:00,240  
combustion engine works in order to be

1235  
00:44:04,309 --> 00:44:02,800  
able to understand the idea

1236  
00:44:06,870 --> 00:44:04,319  
uh behind the car right you don't have

1237  
00:44:08,630 --> 00:44:06,880  
to know all the details of the equations

1238  
00:44:10,230 --> 00:44:08,640

of how the gas burns but you know

1239

00:44:13,349 --> 00:44:10,240

there's gas you put it in it's

1240

00:44:15,030 --> 00:44:13,359

converting energy so that idea becomes

1241

00:44:17,190 --> 00:44:15,040

uh something we can use as a building

1242

00:44:18,950 --> 00:44:17,200

block and so i think you know within

1243

00:44:20,230 --> 00:44:18,960

this computing world like for example at

1244

00:44:22,470 --> 00:44:20,240

mit

1245

00:44:23,750 --> 00:44:22,480

they just established a new college of

1246

00:44:25,109 --> 00:44:23,760

computing

1247

00:44:27,270 --> 00:44:25,119

which is different from the college of

1248

00:44:29,030 --> 00:44:27,280

computer your science or the engineering

1249

00:44:30,870 --> 00:44:29,040

college which computer science is a part

1250

00:44:32,950 --> 00:44:30,880

of it's it's like a whole separate like

1251

00:44:34,309 --> 00:44:32,960

there's the college of liberal arts you

1252

00:44:35,750 --> 00:44:34,319

know the business school there's like a

1253

00:44:38,309 --> 00:44:35,760

whole new college of computing what does

1254

00:44:41,829 --> 00:44:38,319

that mean it's about applying computing

1255

00:44:43,430 --> 00:44:41,839

ideas with emphasis on quantum computing

1256

00:44:46,550 --> 00:44:43,440

but not only coming out of computing

1257

00:44:48,710 --> 00:44:46,560

into all the other areas so i think this

1258

00:44:50,470 --> 00:44:48,720

does lead us to that point it may take

1259

00:44:52,470 --> 00:44:50,480

people some time to get there i mean in

1260

00:44:53,589 --> 00:44:52,480

my own case i've been thinking about

1261

00:44:56,710 --> 00:44:53,599

these things

1262

00:44:58,630 --> 00:44:56,720

uh you know since i was a kid but also

1263

00:45:01,270 --> 00:44:58,640

by spending peop time with people

1264

00:45:04,470 --> 00:45:01,280

outside of the world of science uh and

1265

00:45:06,790 --> 00:45:04,480

so you know that that leap i think come

1266

00:45:08,150 --> 00:45:06,800

uh with with more scientists

1267

00:45:09,030 --> 00:45:08,160

acknowledging

1268

00:45:15,990 --> 00:45:09,040

that

1269

00:45:18,470 --> 00:45:16,000

to the leap around

1270

00:45:20,230 --> 00:45:18,480

consciousness and viewing in the same

1271

00:45:22,230 --> 00:45:20,240

way that you and i are not really

1272

00:45:24,630 --> 00:45:22,240

talking to each other right now are we

1273

00:45:27,109 --> 00:45:24,640

right we're actually in a virtual world

1274

00:45:29,190 --> 00:45:27,119

if you think about it right i my avatar

1275

00:45:30,470 --> 00:45:29,200

which is just a series of bits that

1276

00:45:32,390 --> 00:45:30,480

looks like me

1277

00:45:34,470 --> 00:45:32,400

is talking to your avatar

1278

00:45:36,470 --> 00:45:34,480

right over the internet and so i think

1279

00:45:39,030 --> 00:45:36,480

that idea becomes something that people

1280

00:45:40,870 --> 00:45:39,040

can understand now uh whereas you know

1281

00:45:42,390 --> 00:45:40,880

30 50 years ago people wouldn't

1282

00:45:44,790 --> 00:45:42,400

understand that idea like that was

1283

00:45:46,950 --> 00:45:44,800

strange to think of talking to someone

1284

00:45:49,910 --> 00:45:46,960

over a computer like that just didn't

1285

00:45:52,470 --> 00:45:49,920

make any sense right the term avatar was

1286

00:45:55,670 --> 00:45:52,480

introduced in the 80s by a couple guys

1287

00:45:57,910 --> 00:45:55,680

working at lucas near george lucas's uh

1288

00:45:59,829 --> 00:45:57,920

nascent video game company back then and

1289

00:46:01,430 --> 00:45:59,839

so i guess my point is that as new

1290

00:46:03,750 --> 00:46:01,440

generations grow up they're more

1291

00:46:07,270 --> 00:46:03,760

comfortable with certain ideas and then

1292

00:46:09,030 --> 00:46:07,280

those ideas become easy enough to extend

1293

00:46:11,589 --> 00:46:09,040

and combine whereas before they were

1294

00:46:12,950 --> 00:46:11,599

thought to be completely separate you

1295

00:46:15,910 --> 00:46:12,960

know and so i think that's an ongoing

1296

00:46:18,790 --> 00:46:15,920

process that will happen over time

1297

00:46:21,349 --> 00:46:18,800

okay let me go all skeptical on you

1298

00:46:22,470 --> 00:46:21,359

are you stretching the metaphor

1299

00:46:24,790 --> 00:46:22,480

too far

1300

00:46:27,349 --> 00:46:24,800

if we just start down

1301

00:46:29,030 --> 00:46:27,359

the path of consciousness is fundamental

1302

00:46:31,190 --> 00:46:29,040

take a whole different kind of

1303

00:46:32,390 --> 00:46:31,200

perspective consciousness is fundamental

1304

00:46:34,230 --> 00:46:32,400

we start

1305

00:46:35,829 --> 00:46:34,240

looking at the data sets that we have

1306

00:46:37,109 --> 00:46:35,839

out there we start looking at near-death

1307

00:46:39,589 --> 00:46:37,119

experience

1308

00:46:42,150 --> 00:46:39,599

science you know over 200 peer-reviewed

1309

00:46:45,109 --> 00:46:42,160

studies all coming back and saying that

1310

00:46:48,230 --> 00:46:45,119

consciousness is now immediately outside

1311

00:46:51,109 --> 00:46:48,240

of this time space continuum

1312

00:46:53,270 --> 00:46:51,119

that i think you're kind of depending on

1313

00:46:55,030 --> 00:46:53,280

in a way are you or are you not where

1314

00:46:57,589 --> 00:46:55,040

would that put us

1315

00:46:59,910 --> 00:46:57,599

relatively if you look at reincarnation

1316

00:47:02,230 --> 00:46:59,920

science we've had jim tucker from the

1317

00:47:05,030 --> 00:47:02,240

university of virginia on the show on

1318

00:47:07,430 --> 00:47:05,040

one hand you could say wow it fits in

1319

00:47:08,950 --> 00:47:07,440

with what rizz is saying on the other

1320

00:47:11,670 --> 00:47:08,960

hand you could say no there's some kind

1321

00:47:12,550 --> 00:47:11,680

of fundamental contradictions in terms

1322

00:47:16,069 --> 00:47:12,560

of

1323

00:47:19,190 --> 00:47:16,079

consciousness because it's definitely

1324

00:47:21,270 --> 00:47:19,200

implying some kind of hierarchy that

1325

00:47:23,670 --> 00:47:21,280

isn't really modeled in what you're

1326  
00:47:26,309 --> 00:47:23,680  
talking about well i think the metaphor

1327  
00:47:28,150 --> 00:47:26,319  
fits pretty well uh you know i mean i i

1328  
00:47:31,589 --> 00:47:28,160  
spent a lot of time with the

1329  
00:47:33,910 --> 00:47:31,599  
near-death experiencers uh and

1330  
00:47:34,950 --> 00:47:33,920  
you know many of them report

1331  
00:47:36,870 --> 00:47:34,960  
uh

1332  
00:47:38,870 --> 00:47:36,880  
that they were able to

1333  
00:47:40,870 --> 00:47:38,880  
look back in what's called a life review

1334  
00:47:43,670 --> 00:47:40,880  
right and so they were able to

1335  
00:47:45,670 --> 00:47:43,680  
uh kind of go back and view the events

1336  
00:47:48,870 --> 00:47:45,680  
and many of them describe it

1337  
00:47:51,349 --> 00:47:48,880  
as a room with a big projector right

1338  
00:47:53,349 --> 00:47:51,359

and so they're using this metaphor and

1339

00:47:55,670 --> 00:47:53,359

it's like replaying

1340

00:47:57,510 --> 00:47:55,680

something that has been recorded right

1341

00:47:59,750 --> 00:47:57,520

but what what was interesting to me and

1342

00:48:01,910 --> 00:47:59,760

why i wrote the second book and included

1343

00:48:03,910 --> 00:48:01,920

a chapter on that you know near the end

1344

00:48:06,390 --> 00:48:03,920

is that sometimes they report being able

1345

00:48:08,790 --> 00:48:06,400

to see what would have happened right

1346

00:48:11,750 --> 00:48:08,800

had they made different choices as if

1347

00:48:14,150 --> 00:48:11,760

that wasn't that different from what

1348

00:48:16,549 --> 00:48:14,160

actually happened and so i think the

1349

00:48:18,309 --> 00:48:16,559

metaphor of the the simulation or video

1350

00:48:20,390 --> 00:48:18,319

game works pretty well because it means

1351  
00:48:22,390 --> 00:48:20,400  
you can rerun i mean they're talking

1352  
00:48:24,630 --> 00:48:22,400  
about a life review of things that

1353  
00:48:26,549 --> 00:48:24,640  
hadn't happened right but that might

1354  
00:48:28,710 --> 00:48:26,559  
have happened and they're watching it as

1355  
00:48:31,270 --> 00:48:28,720  
if they had actually happened and turns

1356  
00:48:35,270 --> 00:48:31,280  
out you know when when people

1357  
00:48:37,109 --> 00:48:35,280  
talk about the the the life preview

1358  
00:48:38,309 --> 00:48:37,119  
uh extended in what the buddhist called

1359  
00:48:40,630 --> 00:48:38,319  
a bardot

1360  
00:48:42,470 --> 00:48:40,640  
which some people remember through

1361  
00:48:44,710 --> 00:48:42,480  
whether it's through hypnosis etc and

1362  
00:48:47,670 --> 00:48:44,720  
some people even in jim tucker's case

1363  
00:48:50,069 --> 00:48:47,680

remember that experience of before they

1364

00:48:52,390 --> 00:48:50,079

were incarnated into this life they talk

1365

00:48:54,549 --> 00:48:52,400

about being able to see paths

1366

00:48:56,230 --> 00:48:54,559

of like these trees

1367

00:48:58,870 --> 00:48:56,240

that move out and that there are these

1368

00:49:00,630 --> 00:48:58,880

major decision points and that they can

1369

00:49:01,510 --> 00:49:00,640

watch what would have happened in new

1370

00:49:03,510 --> 00:49:01,520

york

1371

00:49:05,510 --> 00:49:03,520

uh and you know a journey of souls from

1372

00:49:08,230 --> 00:49:05,520

dr michael newton is a

1373

00:49:09,910 --> 00:49:08,240

good example of a series of case studies

1374

00:49:11,829 --> 00:49:09,920

along these lines and they said it was

1375

00:49:14,470 --> 00:49:11,839

weird it was as if i was actually

1376

00:49:17,190 --> 00:49:14,480

watching life in new york before i had

1377

00:49:19,349 --> 00:49:17,200

been born and so you know what what does

1378

00:49:21,750 --> 00:49:19,359

that mean how do we fit that into a

1379

00:49:23,910 --> 00:49:21,760

model that we as human beings

1380

00:49:26,230 --> 00:49:23,920

can understand you know with our with

1381

00:49:27,910 --> 00:49:26,240

our minds and i think the the video game

1382

00:49:30,390 --> 00:49:27,920

metaphor is a very good one because it

1383

00:49:32,390 --> 00:49:30,400

means you just run that part of the game

1384

00:49:34,150 --> 00:49:32,400

you watch what would happen

1385

00:49:35,670 --> 00:49:34,160

and you say well it's as if it was

1386

00:49:37,510 --> 00:49:35,680

actually happening well that's because

1387

00:49:38,309 --> 00:49:37,520

when it actually happens it's just the

1388

00:49:39,829 --> 00:49:38,319

run

1389

00:49:41,829 --> 00:49:39,839

of the game or the simulation that

1390

00:49:43,910 --> 00:49:41,839

you've decided to be in it's not that

1391

00:49:45,750 --> 00:49:43,920

different like a potential run of the

1392

00:49:48,549 --> 00:49:45,760

simulation isn't that different from

1393

00:49:49,990 --> 00:49:48,559

what is it is actually run

1394

00:49:51,990 --> 00:49:50,000

and so i think the metaphor actually

1395

00:49:53,230 --> 00:49:52,000

works pretty well as a way to understand

1396

00:49:56,549 --> 00:49:53,240

now it's not

1397

00:49:59,109 --> 00:49:56,559

exactly that because you say well in

1398

00:50:01,430 --> 00:49:59,119

video game i'm a physical person outside

1399

00:50:04,470 --> 00:50:01,440

of the game so am i a physical person

1400

00:50:06,549 --> 00:50:04,480

outside of our simulation right or am i

1401  
00:50:08,230 --> 00:50:06,559  
just pure consciousness well that

1402  
00:50:10,150 --> 00:50:08,240  
depends right

1403  
00:50:11,190 --> 00:50:10,160  
when people talk about a near-death

1404  
00:50:12,870 --> 00:50:11,200  
experience

1405  
00:50:15,829 --> 00:50:12,880  
or they remember

1406  
00:50:17,430 --> 00:50:15,839  
the the in between state

1407  
00:50:18,870 --> 00:50:17,440  
they all describe it similarly but

1408  
00:50:20,230 --> 00:50:18,880  
differently right

1409  
00:50:21,829 --> 00:50:20,240  
some people describe something that

1410  
00:50:24,150 --> 00:50:21,839  
looks like heaven some people describe a

1411  
00:50:25,910 --> 00:50:24,160  
city some people describe a garden well

1412  
00:50:27,670 --> 00:50:25,920  
those are just additional simulations

1413  
00:50:30,150 --> 00:50:27,680

right that's why they can be different

1414

00:50:32,950 --> 00:50:30,160

and so you know i i guess there is in my

1415

00:50:35,589 --> 00:50:32,960

opinion you know a hierarchy of these

1416

00:50:38,309 --> 00:50:35,599

types of simulations that get created

1417

00:50:41,510 --> 00:50:38,319

for us and in the end yeah it probably

1418

00:50:43,349 --> 00:50:41,520

goes back to pure pure consciousness

1419

00:50:44,390 --> 00:50:43,359

we were all connected trying to have an

1420

00:50:46,069 --> 00:50:44,400

experience

1421

00:50:48,390 --> 00:50:46,079

why do we play video games in the first

1422

00:50:50,630 --> 00:50:48,400

place this is a question i like to ask

1423

00:50:52,950 --> 00:50:50,640

when people say what's the point of of

1424

00:50:54,630 --> 00:50:52,960

having a simulation there's two two main

1425

00:50:55,829 --> 00:50:54,640

reasons we play video games or run

1426

00:50:57,990 --> 00:50:55,839

simulations

1427

00:51:00,069 --> 00:50:58,000

one is to see what would happen if we

1428

00:51:02,390 --> 00:51:00,079

run simulations with different variables

1429

00:51:04,470 --> 00:51:02,400

and the second is to have experiences

1430

00:51:06,549 --> 00:51:04,480

that we can't have outside of that

1431

00:51:08,950 --> 00:51:06,559

environment like i can't fly in a dragon

1432

00:51:10,870 --> 00:51:08,960

in this particular physical reality i

1433

00:51:12,630 --> 00:51:10,880

can do it inside a video game so it's

1434

00:51:14,630 --> 00:51:12,640

possible that you know what we're

1435

00:51:16,470 --> 00:51:14,640

experiencing here in this reality is

1436

00:51:18,549 --> 00:51:16,480

something that we can't experience

1437

00:51:20,390 --> 00:51:18,559

outside and we need to embody ourselves

1438

00:51:21,910 --> 00:51:20,400

to run the simulation so yeah i mean i

1439

00:51:24,549 --> 00:51:21,920

do think there is some kind of a

1440

00:51:26,549 --> 00:51:24,559

hierarchy uh that goes on i i can't

1441

00:51:27,910 --> 00:51:26,559

claim to have the exact answers for what

1442

00:51:29,670 --> 00:51:27,920

that looks well you're talking about god

1443

00:51:31,190 --> 00:51:29,680

now i mean you're talking about god if

1444

00:51:34,870 --> 00:51:31,200

there's a hierarchy of consciousness

1445

00:51:37,109 --> 00:51:34,880

that's just code speak for god

1446

00:51:38,390 --> 00:51:37,119

eventually there's some entity or kind

1447

00:51:40,870 --> 00:51:38,400

or thing

1448

00:51:43,349 --> 00:51:40,880

that we are all a part of that is

1449

00:51:44,309 --> 00:51:43,359

running this simulation now people say

1450

00:51:46,230 --> 00:51:44,319

well

1451  
00:51:48,150 --> 00:51:46,240  
you know who are the simulators and i

1452  
00:51:49,829 --> 00:51:48,160  
say well first of all it could be us

1453  
00:51:51,030 --> 00:51:49,839  
right it does it doesn't have to be like

1454  
00:51:53,109 --> 00:51:51,040  
you know one

1455  
00:51:54,870 --> 00:51:53,119  
simulator we could each be having

1456  
00:51:57,109 --> 00:51:54,880  
experiences because we're all running

1457  
00:51:59,349 --> 00:51:57,119  
this as players but you're right i think

1458  
00:52:01,589 --> 00:51:59,359  
if you take that metaphor further you do

1459  
00:52:03,670 --> 00:52:01,599  
end up with some kind of single

1460  
00:52:06,390 --> 00:52:03,680  
consciousness or spurs

1461  
00:52:09,510 --> 00:52:06,400  
eventual simulator if you will that is

1462  
00:52:11,190 --> 00:52:09,520  
akin to what some people call god

1463  
00:52:13,510 --> 00:52:11,200

i mean i think the big question that

1464

00:52:16,150 --> 00:52:13,520

we're kind of struggling with and i just

1465

00:52:18,549 --> 00:52:16,160

like i think you're adding so so much to

1466

00:52:19,430 --> 00:52:18,559

the discussion in a really important way

1467

00:52:22,549 --> 00:52:19,440

of

1468

00:52:24,309 --> 00:52:22,559

you're grounding it in a way that

1469

00:52:26,309 --> 00:52:24,319

we're familiar with or at least think

1470

00:52:27,349 --> 00:52:26,319

we're familiar with because we think we

1471

00:52:28,870 --> 00:52:27,359

know how

1472

00:52:31,190 --> 00:52:28,880

computers work

1473

00:52:32,790 --> 00:52:31,200

but the big question like i studied uh

1474

00:52:35,910 --> 00:52:32,800

near death experience for the longest

1475

00:52:37,510 --> 00:52:35,920

time and if you look at all the books

1476  
00:52:38,870 --> 00:52:37,520  
on and on and on they're talking about

1477  
00:52:40,390 --> 00:52:38,880  
evidence and evidence and evidence and

1478  
00:52:42,309 --> 00:52:40,400  
there's this big battle between science

1479  
00:52:44,630 --> 00:52:42,319  
and consciousness extend beyond bodily

1480  
00:52:46,549 --> 00:52:44,640  
death but if you get past that and you

1481  
00:52:49,109 --> 00:52:46,559  
look at the account overwhelmingly

1482  
00:52:52,069 --> 00:52:49,119  
statistically number one thing

1483  
00:52:54,790 --> 00:52:52,079  
love number one thing connection number

1484  
00:52:56,510 --> 00:52:54,800  
one thing uh

1485  
00:53:02,790 --> 00:52:56,520  
spirit

1486  
00:53:05,589 --> 00:53:02,800  
doesn't really conform very well seems

1487  
00:53:07,750 --> 00:53:05,599  
to seems to not fit as comfortably in

1488  
00:53:08,950 --> 00:53:07,760

some of those models what people are

1489

00:53:11,270 --> 00:53:08,960

saying

1490

00:53:12,950 --> 00:53:11,280

over and over again is hey you know what

1491

00:53:14,790 --> 00:53:12,960

religion if that

1492

00:53:17,589 --> 00:53:14,800

if that floats your boat fine but it's

1493

00:53:20,870 --> 00:53:17,599

really not about that it's really about

1494

00:53:23,510 --> 00:53:20,880

this connection this feeling of a

1495

00:53:26,549 --> 00:53:23,520

connection that is fundamental to who we

1496

00:53:29,829 --> 00:53:26,559

are but is obscured by

1497

00:53:32,549 --> 00:53:29,839

the game by the simulation and that when

1498

00:53:35,750 --> 00:53:32,559

people get outside of time space either

1499

00:53:37,750 --> 00:53:35,760

in near-death experience or in obe or

1500

00:53:40,230 --> 00:53:37,760

doing psychedelics or whatever they

1501  
00:53:42,710 --> 00:53:40,240  
immediately see things

1502  
00:53:44,470 --> 00:53:42,720  
differently and there i just think

1503  
00:53:46,150 --> 00:53:44,480  
the metaphor if we look at it as

1504  
00:53:48,069 --> 00:53:46,160  
consciousness is fundamental and it's

1505  
00:53:50,630 --> 00:53:48,079  
all about uh light and love and

1506  
00:53:52,069 --> 00:53:50,640  
hierarchy of consciousness it it then it

1507  
00:53:53,589 --> 00:53:52,079  
looks like we're kind of stretching the

1508  
00:53:55,589 --> 00:53:53,599  
metaphor to me what do you think about

1509  
00:53:56,390 --> 00:53:55,599  
that

1510  
00:53:57,670 --> 00:53:56,400  
well

1511  
00:53:59,270 --> 00:53:57,680  
yeah it depends which metaphor you're

1512  
00:54:01,430 --> 00:53:59,280  
using and exactly how you're using it i

1513  
00:54:02,950 --> 00:54:01,440

mean for me i i think let's use a

1514

00:54:03,990 --> 00:54:02,960

different metaphor instead of a video

1515

00:54:06,790 --> 00:54:04,000

game

1516

00:54:07,670 --> 00:54:06,800

let's use social networks right which

1517

00:54:09,670 --> 00:54:07,680

people

1518

00:54:11,270 --> 00:54:09,680

use all the time today and creates lots

1519

00:54:13,430 --> 00:54:11,280

of angst but

1520

00:54:16,390 --> 00:54:13,440

why do we use social networks we create

1521

00:54:18,309 --> 00:54:16,400

an identity online but primarily

1522

00:54:19,750 --> 00:54:18,319

what makes a social network different

1523

00:54:22,390 --> 00:54:19,760

from a website

1524

00:54:25,430 --> 00:54:22,400

is the social part of it it's that there

1525

00:54:27,030 --> 00:54:25,440

are other people and we define ourselves

1526

00:54:29,109 --> 00:54:27,040

by what we are sharing and our

1527

00:54:31,510 --> 00:54:29,119

interactions within those people so if

1528

00:54:33,190 --> 00:54:31,520

you think about it for a second uh you

1529

00:54:35,270 --> 00:54:33,200

know getting away from all the negative

1530

00:54:38,390 --> 00:54:35,280

stuff around social networks

1531

00:54:40,230 --> 00:54:38,400

the purpose of a social network is

1532

00:54:42,069 --> 00:54:40,240

connections right now you can say people

1533

00:54:44,069 --> 00:54:42,079

have you know toxic connections they may

1534

00:54:46,230 --> 00:54:44,079

have good actions they may have

1535

00:54:48,870 --> 00:54:46,240

spiritual inspiring they may have bad

1536

00:54:50,870 --> 00:54:48,880

connections you know uh people get more

1537

00:54:52,470 --> 00:54:50,880

anxious when they all these things that

1538

00:54:54,390 --> 00:54:52,480

happen with those connections well you

1539

00:54:56,390 --> 00:54:54,400

could be describing life right i mean

1540

00:54:58,150 --> 00:54:56,400

that's what happens in life right if

1541

00:55:00,390 --> 00:54:58,160

we're coming here to have connections

1542

00:55:02,069 --> 00:55:00,400

and experiences with other people

1543

00:55:05,349 --> 00:55:02,079

during that time we have all these

1544

00:55:06,789 --> 00:55:05,359

problems we have anxieties things go

1545

00:55:08,710 --> 00:55:06,799

wrong

1546

00:55:10,789 --> 00:55:08,720

but really it's about the connection so

1547

00:55:12,789 --> 00:55:10,799

i think that metaphor is a good way to

1548

00:55:15,349 --> 00:55:12,799

describe this idea of

1549

00:55:17,430 --> 00:55:15,359

we're all jumping into this thing to

1550

00:55:19,589 --> 00:55:17,440

have these experiences but there is an

1551  
00:55:21,670 --> 00:55:19,599  
element of unpredictability to what

1552  
00:55:23,990 --> 00:55:21,680  
happens because each of us is still

1553  
00:55:25,990 --> 00:55:24,000  
making choices along the way and that

1554  
00:55:28,630 --> 00:55:26,000  
creates a lot of the friction that we

1555  
00:55:31,030 --> 00:55:28,640  
see in the world in the video game and

1556  
00:55:33,349 --> 00:55:31,040  
in in the social network but perhaps

1557  
00:55:35,430 --> 00:55:33,359  
it's all you know a carefully crafted

1558  
00:55:37,430 --> 00:55:35,440  
illusion and and we chose to be here and

1559  
00:55:39,270 --> 00:55:37,440  
play you know in the game so that's kind

1560  
00:55:42,309 --> 00:55:39,280  
of kind of how how i think about it and

1561  
00:55:44,950 --> 00:55:42,319  
so you know if you back up

1562  
00:55:47,589 --> 00:55:44,960  
you still get to that same place of the

1563  
00:55:49,270 --> 00:55:47,599

reason to be here is love but i would

1564

00:55:51,829 --> 00:55:49,280

say the reason to be here perhaps is

1565

00:55:53,990 --> 00:55:51,839

relationship right it's to to give

1566

00:55:56,390 --> 00:55:54,000

ourselves the experience of having a

1567

00:55:59,109 --> 00:55:56,400

relationship with different parts

1568

00:56:00,150 --> 00:55:59,119

of consciousness which we see as other

1569

00:56:02,789 --> 00:56:00,160

people

1570

00:56:05,270 --> 00:56:02,799

which eventually may be all connected

1571

00:56:07,109 --> 00:56:05,280

great let me hit the spiritual angle

1572

00:56:09,190 --> 00:56:07,119

from one other perspective you know

1573

00:56:12,309 --> 00:56:09,200

you're always going to be tied

1574

00:56:14,549 --> 00:56:12,319

to the matrix movies whether you want to

1575

00:56:15,990 --> 00:56:14,559

or not it kind of connects connects

1576

00:56:17,910 --> 00:56:16,000

people to your work i think in a

1577

00:56:19,589 --> 00:56:17,920

wonderful way i i think it's really a

1578

00:56:21,030 --> 00:56:19,599

positive thing but there's kind of two

1579

00:56:22,870 --> 00:56:21,040

ways to read the matrix you know from a

1580

00:56:24,710 --> 00:56:22,880

spiritual perspective one of the groups

1581

00:56:26,309 --> 00:56:24,720

that really latches on to the matrix are

1582

00:56:28,789 --> 00:56:26,319

the gnostic people they go that's a

1583

00:56:30,470 --> 00:56:28,799

gnostic movie that's you know right

1584

00:56:33,430 --> 00:56:30,480

create better than the creator guys and

1585

00:56:35,349 --> 00:56:33,440

there are some very gnostic themes to it

1586

00:56:37,430 --> 00:56:35,359

and i kind of look at the spirituality

1587

00:56:40,230 --> 00:56:37,440

thing from kind of

1588

00:56:41,910 --> 00:56:40,240

i kind of have a western yogic kind of

1589

00:56:45,349 --> 00:56:41,920

philosophy

1590

00:56:47,270 --> 00:56:45,359

the western yogis to me are are the best

1591

00:56:48,470 --> 00:56:47,280

of combining

1592

00:56:50,630 --> 00:56:48,480

some of that

1593

00:56:53,430 --> 00:56:50,640

deep deep wisdom with

1594

00:56:55,109 --> 00:56:53,440

kind of a more current view but the the

1595

00:56:57,349 --> 00:56:55,119

two ways of looking at it i think is one

1596

00:56:58,390 --> 00:56:57,359

is kind of the gnostic is this battle

1597

00:57:00,230 --> 00:56:58,400

you know the

1598

00:57:02,150 --> 00:57:00,240

create better than the creator gods

1599

00:57:04,789 --> 00:57:02,160

which is

1600

00:57:07,270 --> 00:57:04,799

i think that sums up what the matrix is

1601  
00:57:09,990 --> 00:57:07,280  
about but the matrix is very

1602  
00:57:11,109 --> 00:57:10,000  
materialistic science right they are you

1603  
00:57:13,190 --> 00:57:11,119  
know

1604  
00:57:16,390 --> 00:57:13,200  
neo really is

1605  
00:57:18,870 --> 00:57:16,400  
some place and he really is experiencing

1606  
00:57:21,910 --> 00:57:18,880  
something and then he's experiencing

1607  
00:57:23,430 --> 00:57:21,920  
a false created reality false maybe is

1608  
00:57:24,789 --> 00:57:23,440  
not the right word you know when he does

1609  
00:57:25,750 --> 00:57:24,799  
this

1610  
00:57:30,150 --> 00:57:25,760  
what

1611  
00:57:31,030 --> 00:57:30,160  
you're saying that's all maya you know i

1612  
00:57:33,829 --> 00:57:31,040  
mean just

1613  
00:57:36,549 --> 00:57:33,839

you don't even have to engage in any of

1614

00:57:39,109 --> 00:57:36,559

it you are instantly connected and it's

1615

00:57:41,270 --> 00:57:39,119

not a matter of uh

1616

00:57:43,030 --> 00:57:41,280

it's just a matter of realizing it

1617

00:57:45,030 --> 00:57:43,040

it's not a matter of getting anywhere

1618

00:57:47,190 --> 00:57:45,040

it's just a matter of accepting that

1619

00:57:48,390 --> 00:57:47,200

that instant connection is there and

1620

00:57:49,910 --> 00:57:48,400

that we're going to talk about

1621

00:57:54,470 --> 00:57:49,920

collapsing

1622

00:57:56,950 --> 00:57:54,480

collapses everything so what about those

1623

00:58:00,870 --> 00:57:56,960

two competing kind of

1624

00:58:03,190 --> 00:58:00,880

spiritual ideas what do you make of that

1625

00:58:05,190 --> 00:58:03,200

yeah you know i i find it interesting i

1626

00:58:06,950 --> 00:58:05,200

mean i don't claim to be an expert on

1627

00:58:08,230 --> 00:58:06,960

the gnostic you know points of view but

1628

00:58:09,750 --> 00:58:08,240

familiar with some of the the broad

1629

00:58:12,789 --> 00:58:09,760

outlines but when you think of the

1630

00:58:14,950 --> 00:58:12,799

western yogis right i mean one of the

1631

00:58:17,349 --> 00:58:14,960

the yogis from the east that really

1632

00:58:20,069 --> 00:58:17,359

introduced you know a lot of the way we

1633

00:58:22,870 --> 00:58:20,079

think about yoga and meditation was uh

1634

00:58:24,950 --> 00:58:22,880

yogananda uh you know who came over back

1635

00:58:26,870 --> 00:58:24,960

in the 1990s and wrote autobiography of

1636

00:58:28,789 --> 00:58:26,880

yogi i'm actually working on a book

1637

00:58:30,950 --> 00:58:28,799

about lessons you know for modern

1638

00:58:32,870 --> 00:58:30,960

seekers you know from yogananda and his

1639

00:58:35,430 --> 00:58:32,880

autobiography but i'm writing it here in

1640

00:58:38,470 --> 00:58:35,440

the us for harpercollins in india which

1641

00:58:40,150 --> 00:58:38,480

is a whole whole interesting thing uh

1642

00:58:41,670 --> 00:58:40,160

you know it's a little bit of the pizza

1643

00:58:43,589 --> 00:58:41,680

effect they call it you know how pizza

1644

00:58:45,750 --> 00:58:43,599

came from italy to here but then it went

1645

00:58:47,510 --> 00:58:45,760

back what we think of as pizza and what

1646

00:58:49,510 --> 00:58:47,520

you find as pizza in italy is not what

1647

00:58:51,829 --> 00:58:49,520

was originally pizza there and so you

1648

00:58:54,470 --> 00:58:51,839

have this mix you know of east and west

1649

00:58:56,549 --> 00:58:54,480

but you know one of yogananda's points

1650

00:58:59,349 --> 00:58:56,559

was and he used a different metaphor it

1651  
00:59:01,589 --> 00:58:59,359  
was in the 1920s and 30s and 40s that he

1652  
00:59:04,069 --> 00:59:01,599  
primarily taught and he used a metaphor

1653  
00:59:05,829 --> 00:59:04,079  
of the the film projector because that

1654  
00:59:08,549 --> 00:59:05,839  
was you know the new technology at the

1655  
00:59:10,710 --> 00:59:08,559  
time and and you know he looked at world

1656  
00:59:11,910 --> 00:59:10,720  
war one you know which went on during

1657  
00:59:13,670 --> 00:59:11,920  
his lifetime

1658  
00:59:15,349 --> 00:59:13,680  
uh and said you know look at all this

1659  
00:59:17,589 --> 00:59:15,359  
suffering and all these things that are

1660  
00:59:20,630 --> 00:59:17,599  
going on and he said well it's like a

1661  
00:59:23,270 --> 00:59:20,640  
movie right the the movie needs to have

1662  
00:59:24,549 --> 00:59:23,280  
that there and we are so engrossed in it

1663  
00:59:27,190 --> 00:59:24,559

that we forget

1664

00:59:29,349 --> 00:59:27,200

that it's a movie and that the players

1665

00:59:32,390 --> 00:59:29,359

are there you know they have agreed to

1666

00:59:34,150 --> 00:59:32,400

be there and go through a lot of that

1667

00:59:36,710 --> 00:59:34,160

for the purpose of having this

1668

00:59:40,150 --> 00:59:36,720

experience so you know personally i tend

1669

00:59:42,230 --> 00:59:40,160

to to be more on that side i guess with

1670

00:59:44,390 --> 00:59:42,240

you the western yogis or this mix of

1671

00:59:46,549 --> 00:59:44,400

western and eastern uh but you know even

1672

00:59:47,589 --> 00:59:46,559

philip k dick who i reference a lot in

1673

00:59:50,150 --> 00:59:47,599

this book

1674

00:59:51,589 --> 00:59:50,160

uh you know we came up with this idea of

1675

00:59:53,670 --> 00:59:51,599

the simulation and the multiple

1676  
00:59:55,190 --> 00:59:53,680  
timelines he he said well there was a

1677  
00:59:58,870 --> 00:59:55,200  
programmer

1678  
01:00:01,589 --> 00:59:58,880  
like they're sitting across the table

1679  
01:00:02,950 --> 01:00:01,599  
from each other playing chess and one

1680  
01:00:05,990 --> 01:00:02,960  
would change a variable and it would

1681  
01:00:07,990 --> 01:00:06,000  
change it in time like a while ago and

1682  
01:00:09,190 --> 01:00:08,000  
that would change everything today and

1683  
01:00:12,309 --> 01:00:09,200  
you know i found this just an

1684  
01:00:15,030 --> 01:00:12,319  
interesting fascinating another metaphor

1685  
01:00:17,589 --> 01:00:15,040  
that is a way of looking at things uh

1686  
01:00:19,910 --> 01:00:17,599  
which led me to the mandela effect

1687  
01:00:21,589 --> 01:00:19,920  
you know uh which is about how why do

1688  
01:00:23,109 --> 01:00:21,599

things change and one of the aspects of

1689

01:00:24,470 --> 01:00:23,119

the mandela effect that

1690

01:00:26,230 --> 01:00:24,480

if you look online is this idea of

1691

01:00:29,109 --> 01:00:26,240

scriptural changes like

1692

01:00:32,309 --> 01:00:29,119

is the bible changing like are the

1693

01:00:34,549 --> 01:00:32,319

actual words you know with isaiah uh

1694

01:00:36,309 --> 01:00:34,559

about the lion and the lamb and turns

1695

01:00:37,990 --> 01:00:36,319

out well there you know that that

1696

01:00:39,510 --> 01:00:38,000

particular verse does not talk about the

1697

01:00:40,390 --> 01:00:39,520

lion and the lamb it talks about the

1698

01:00:41,990 --> 01:00:40,400

wolf

1699

01:00:44,069 --> 01:00:42,000

and the lamb and yet there are people

1700

01:00:46,950 --> 01:00:44,079

who have pictures that they've created

1701

01:00:48,950 --> 01:00:46,960

of lions and lambs you know based upon

1702

01:00:50,230 --> 01:00:48,960

this quote that everybody thinks they

1703

01:00:51,990 --> 01:00:50,240

remembers and some people say well it

1704

01:00:53,589 --> 01:00:52,000

was actually my physical bible has

1705

01:00:55,349 --> 01:00:53,599

changed well

1706

01:00:56,950 --> 01:00:55,359

in the islamic traditions

1707

01:00:58,870 --> 01:00:56,960

you know they actually memorize the

1708

01:01:01,670 --> 01:00:58,880

quran word for word

1709

01:01:03,190 --> 01:01:01,680

and you know one of the the sufi

1710

01:01:05,109 --> 01:01:03,200

leaders of one of the the u.s sufi

1711

01:01:07,030 --> 01:01:05,119

organizations was saying the reason for

1712

01:01:09,990 --> 01:01:07,040

that is supposedly there are these

1713

01:01:12,309 --> 01:01:10,000

entities these jinns who don't exist in

1714

01:01:14,309 --> 01:01:12,319

time like you and i do they can go back

1715

01:01:15,510 --> 01:01:14,319

and change physical objects in time but

1716

01:01:18,069 --> 01:01:15,520

they can't change your memory

1717

01:01:19,910 --> 01:01:18,079

necessarily and so one of the reasons we

1718

01:01:22,150 --> 01:01:19,920

don't rely on the written text but we

1719

01:01:24,549 --> 01:01:22,160

make sure everybody knows every word

1720

01:01:26,230 --> 01:01:24,559

orally and has memorized it is because

1721

01:01:27,990 --> 01:01:26,240

it may change now that's another

1722

01:01:30,069 --> 01:01:28,000

interesting perspective you know i mean

1723

01:01:32,789 --> 01:01:30,079

i i tend to uh

1724

01:01:36,069 --> 01:01:32,799

you know lean more on the the yogananda

1725

01:01:38,950 --> 01:01:36,079

metaphors uh and that perspective myself

1726

01:01:41,349 --> 01:01:38,960

but you know it it it all ties together

1727

01:01:43,030 --> 01:01:41,359

the one thing they both agree on is what

1728

01:01:45,190 --> 01:01:43,040

we think of as time and space is a kind

1729

01:01:47,030 --> 01:01:45,200

of illusion right it's

1730

01:01:49,589 --> 01:01:47,040

the meaning of the word maya is a

1731

01:01:51,829 --> 01:01:49,599

carefully crafted illusion right if you

1732

01:01:54,630 --> 01:01:51,839

look at kind of the the idiom and what

1733

01:01:55,910 --> 01:01:54,640

it actually means uh it's crafted for

1734

01:01:57,510 --> 01:01:55,920

our benefit and turns out that's

1735

01:01:59,750 --> 01:01:57,520

something you can find agreement on in

1736

01:02:01,349 --> 01:01:59,760

the quran and across you know all the

1737

01:02:02,549 --> 01:02:01,359

major religions and so that's you know

1738

01:02:05,109 --> 01:02:02,559

part of what i like to do with this

1739

01:02:07,190 --> 01:02:05,119

metaphor is is find the commonalities

1740

01:02:08,710 --> 01:02:07,200

and say we can at least agree on this

1741

01:02:10,630 --> 01:02:08,720

if we can't agree on some of these other

1742

01:02:12,390 --> 01:02:10,640

things yeah yeah that's that's quite

1743

01:02:14,549 --> 01:02:12,400

extraordinary you know yogananda always

1744

01:02:16,630 --> 01:02:14,559

has a special place in my heart you know

1745

01:02:18,630 --> 01:02:16,640

when i was uh when i was an entrepreneur

1746

01:02:20,829 --> 01:02:18,640

and i started my company at a small ai

1747

01:02:23,910 --> 01:02:20,839

company in dallas i was doing the

1748

01:02:25,670 --> 01:02:23,920

correspondence classes with yogananda

1749

01:02:27,190 --> 01:02:25,680

you know they went back way back in the

1750

01:02:30,150 --> 01:02:27,200

day you know they'd send them to you

1751

01:02:31,589 --> 01:02:30,160

weekly and now i like

1752

01:02:35,270 --> 01:02:31,599

now i live

1753

01:02:39,430 --> 01:02:35,280

seven miles from his ashram out here in

1754

01:02:41,270 --> 01:02:39,440

san diego and every week i uh bicycle up

1755

01:02:43,589 --> 01:02:41,280

and do yoga

1756

01:02:45,270 --> 01:02:43,599

looking out over this beautiful scenery

1757

01:02:48,630 --> 01:02:45,280

in cardiff and you look at the ocean and

1758

01:02:50,870 --> 01:02:48,640

you look right at his incredible um

1759

01:02:52,470 --> 01:02:50,880

self-realization fellowship house that

1760

01:02:54,309 --> 01:02:52,480

he built and they kind of keep it as a

1761

01:02:55,750 --> 01:02:54,319

museum and stuff it's a very very very

1762

01:02:57,750 --> 01:02:55,760

special place

1763

01:02:59,670 --> 01:02:57,760

it is in fact i was just there this

1764

01:03:01,829 --> 01:02:59,680

summer as part of my research and so i

1765

01:03:03,829 --> 01:03:01,839

went to the room where he wrote you know

1766

01:03:06,069 --> 01:03:03,839

autobiography of a yogi and it's i guess

1767

01:03:08,309 --> 01:03:06,079

in encinitas there in cardiff and

1768

01:03:09,270 --> 01:03:08,319

they're looking out over the ocean and

1769

01:03:10,470 --> 01:03:09,280

and

1770

01:03:11,670 --> 01:03:10,480

you know so it was quite quite an

1771

01:03:14,470 --> 01:03:11,680

experience for me to be there it was

1772

01:03:16,950 --> 01:03:14,480

quite fun actually and and just for for

1773

01:03:19,750 --> 01:03:16,960

people who don't know i mean

1774

01:03:22,309 --> 01:03:19,760

you talk about a simulated multiverse

1775

01:03:24,470 --> 01:03:22,319

the title of your latest book

1776

01:03:26,470 --> 01:03:24,480

anyone who picks up that book and reads

1777

01:03:28,309 --> 01:03:26,480

the first 30 pages

1778

01:03:30,470 --> 01:03:28,319

i mean riz

1779

01:03:31,510 --> 01:03:30,480

exactly this is your point i guess is

1780

01:03:35,270 --> 01:03:31,520

you know

1781

01:03:37,349 --> 01:03:35,280

shape-shifting time uh all sorts of uh

1782

01:03:39,910 --> 01:03:37,359

time you know appearing here and then

1783

01:03:41,910 --> 01:03:39,920

bilocating over there i mean it it's

1784

01:03:44,230 --> 01:03:41,920

just writes like a script for what

1785

01:03:45,589 --> 01:03:44,240

you're talking about right so it's funny

1786

01:03:47,349 --> 01:03:45,599

that you're that you're going to write

1787

01:03:49,589 --> 01:03:47,359

that book

1788

01:03:51,190 --> 01:03:49,599

yeah that's right absolutely and now you

1789

01:03:53,589 --> 01:03:51,200

know a lot of the i've always been

1790

01:03:56,470 --> 01:03:53,599

fascinated by the accounts of

1791

01:03:59,829 --> 01:03:56,480

the eastern yogis uh with you know these

1792

01:04:01,109 --> 01:03:59,839

different tales of miracles and by

1793

01:04:03,190 --> 01:04:01,119

location

1794

01:04:04,470 --> 01:04:03,200

and you know it turns out that you know

1795

01:04:06,230 --> 01:04:04,480

that's not just in the eastern

1796

01:04:08,549 --> 01:04:06,240

traditions in the catholic traditions

1797

01:04:10,630 --> 01:04:08,559

right i spent some time speaking with

1798

01:04:13,670 --> 01:04:10,640

you know diana walsh basuka you know who

1799

01:04:16,230 --> 01:04:13,680

is a professor of catholic studies at uh

1800

01:04:18,710 --> 01:04:16,240

in north carolina and you know she her

1801

01:04:20,950 --> 01:04:18,720

research you know went into some of the

1802

01:04:23,589 --> 01:04:20,960

uh examples of my location within the

1803

01:04:25,829 --> 01:04:23,599

catholic you know canon uh within the

1804

01:04:28,549 --> 01:04:25,839

americas and and europe and somebody

1805

01:04:31,190 --> 01:04:28,559

being you know uh a particular nun being

1806

01:04:32,950 --> 01:04:31,200

seen by the indians in in new mexico and

1807

01:04:35,750 --> 01:04:32,960

so i've always been fascinated by all of

1808

01:04:37,430 --> 01:04:35,760

this stuff and so for me that a

1809

01:04:39,910 --> 01:04:37,440

simulation and then a simulated

1810

01:04:41,829 --> 01:04:39,920

multiverse provides you know the best

1811

01:04:43,589 --> 01:04:41,839

way to bridge the gap between these

1812

01:04:45,109 --> 01:04:43,599

things because one approach that people

1813

01:04:47,190 --> 01:04:45,119

in the science and technology world say

1814

01:04:49,190 --> 01:04:47,200

oh that's all nonsense it doesn't happen

1815

01:04:51,670 --> 01:04:49,200

and i said well perhaps our

1816

01:04:54,470 --> 01:04:51,680

understanding isn't quite complete but

1817

01:04:56,870 --> 01:04:54,480

this idea of the simulation is one that

1818

01:04:58,390 --> 01:04:56,880

can bridge that gap and that's really

1819

01:05:00,870 --> 01:04:58,400

one of the reasons why i felt compelled

1820

01:05:02,230 --> 01:05:00,880

to spend so much time uh and hopefully

1821

01:05:03,910 --> 01:05:02,240

now in the second book i'm done with the

1822

01:05:05,829 --> 01:05:03,920

topic for a little while

1823

01:05:08,069 --> 01:05:05,839

yeah great okay so i want to wrap it up

1824

01:05:09,990 --> 01:05:08,079

but you brought up diana welsh basulka

1825

01:05:11,829 --> 01:05:10,000

and i thought her book american cosmic

1826

01:05:12,630 --> 01:05:11,839

and she was on the show

1827

01:05:14,390 --> 01:05:12,640

is

1828

01:05:16,309 --> 01:05:14,400

i got it what do you think i mean that's

1829

01:05:18,470 --> 01:05:16,319

one of the most challenging

1830

01:05:20,710 --> 01:05:18,480

kind of books you talk about

1831

01:05:23,190 --> 01:05:20,720

screwing with the timeline i mean as

1832

01:05:25,510 --> 01:05:23,200

soon as we introduce e.t the timeline

1833

01:05:27,990 --> 01:05:25,520

looks completely different on this other

1834

01:05:30,470 --> 01:05:28,000

realm of on this other aspect of how

1835

01:05:33,109 --> 01:05:30,480

long have we been here how are we part

1836

01:05:35,750 --> 01:05:33,119

of an ongoing

1837

01:05:37,349 --> 01:05:35,760

physical genetic engineering timeline

1838

01:05:38,710 --> 01:05:37,359

that spans

1839

01:05:40,230 --> 01:05:38,720

hundreds of thousands of years when you

1840

01:05:41,910 --> 01:05:40,240

look at the genealogical record there's

1841

01:05:43,990 --> 01:05:41,920

something going on a lot of things point

1842

01:05:47,349 --> 01:05:44,000

to that and then here comes daniel

1843

01:05:50,150 --> 01:05:47,359

posoka goes yeah i was out collecting

1844

01:05:52,549 --> 01:05:50,160

space junk in the desert and then your

1845

01:05:54,630 --> 01:05:52,559

friend jacques villa is carrying around

1846

01:05:57,670 --> 01:05:54,640

you know little bits of spaceships in

1847

01:05:59,510 --> 01:05:57,680

his pocket that says i can't really say

1848

01:06:02,069 --> 01:05:59,520

how this could be engineered or

1849

01:06:04,630 --> 01:06:02,079

manufactured in this timeline

1850

01:06:06,230 --> 01:06:04,640

so do you even go there or do you just

1851

01:06:08,069 --> 01:06:06,240

kind of

1852

01:06:10,069 --> 01:06:08,079

well i i don't go there so much in the

1853

01:06:12,549 --> 01:06:10,079

new book but in the last book i went

1854

01:06:14,630 --> 01:06:12,559

there a little bit uh because i feel

1855

01:06:17,589 --> 01:06:14,640

like uh there is

1856

01:06:19,750 --> 01:06:17,599

an overlap uh here which is that we have

1857

01:06:21,589 --> 01:06:19,760

to broaden our thinking

1858

01:06:24,710 --> 01:06:21,599

you know when we talk about this et

1859

01:06:27,589 --> 01:06:24,720

phenomenon that it may not be as jacques

1860

01:06:30,230 --> 01:06:27,599

valet you know has said for many years

1861

01:06:32,870 --> 01:06:30,240

is that there's an element of the absurd

1862

01:06:34,549 --> 01:06:32,880

and there's an element of staging right

1863

01:06:37,270 --> 01:06:34,559

it's almost like these things are being

1864

01:06:40,069 --> 01:06:37,280

staged for us in some way and you know

1865

01:06:41,990 --> 01:06:40,079

when i interviewed jacques for for my

1866

01:06:44,069 --> 01:06:42,000

fur for the for the previous book you

1867

01:06:46,470 --> 01:06:44,079

know he said there were instances where

1868

01:06:48,630 --> 01:06:46,480

people say they saw a ufo coming at like

1869

01:06:50,710 --> 01:06:48,640

a 45 degree angle

1870

01:06:52,470 --> 01:06:50,720

you know and he went out and he looked

1871

01:06:53,829 --> 01:06:52,480

at where they were saying it landed and

1872

01:06:56,710 --> 01:06:53,839

despite the fact that there was some

1873

01:06:58,870 --> 01:06:56,720

physical like you know some burned areas

1874

01:07:00,069 --> 01:06:58,880

on the ground he looked at the 45 degree

1875

01:07:02,549 --> 01:07:00,079

angle he said that would have to go

1876  
01:07:04,150 --> 01:07:02,559  
through these massive redwood trees

1877  
01:07:06,230 --> 01:07:04,160  
right i mean it would literally had to

1878  
01:07:07,829 --> 01:07:06,240  
cut through the trees and they're like

1879  
01:07:09,990 --> 01:07:07,839  
yeah but i didn't want to say that to

1880  
01:07:12,549 --> 01:07:10,000  
the other investigators because it just

1881  
01:07:14,390 --> 01:07:12,559  
sounded absurd right so it's almost like

1882  
01:07:17,510 --> 01:07:14,400  
the witnesses aren't willing because

1883  
01:07:19,190 --> 01:07:17,520  
they know we live in kind of a rational

1884  
01:07:22,069 --> 01:07:19,200  
rationally minded world they weren't

1885  
01:07:25,190 --> 01:07:22,079  
willing to uh speak about these more

1886  
01:07:27,190 --> 01:07:25,200  
absurd elements and you know turns out

1887  
01:07:28,630 --> 01:07:27,200  
well that the fact that perhaps these

1888  
01:07:31,430 --> 01:07:28,640

things are both physical and

1889

01:07:33,589 --> 01:07:31,440

non-physical that they're coming into

1890

01:07:36,150 --> 01:07:33,599

our reality and rendering at a certain

1891

01:07:37,910 --> 01:07:36,160

point provides an explanation for how

1892

01:07:39,910 --> 01:07:37,920

they could go through physical matter so

1893

01:07:41,750 --> 01:07:39,920

easily and so you know i i don't

1894

01:07:42,470 --> 01:07:41,760

personally you know speculate too much

1895

01:07:44,789 --> 01:07:42,480

on

1896

01:07:45,589 --> 01:07:44,799

what these timelines are but i do think

1897

01:07:52,630 --> 01:07:45,599

that

1898

01:07:55,029 --> 01:07:52,640

we have to broaden our perspective

1899

01:07:56,390 --> 01:07:55,039

of what we think that it's just

1900

01:07:58,309 --> 01:07:56,400

you know we know what the universe is

1901

01:08:00,309 --> 01:07:58,319

like i mean the reality is our science

1902

01:08:01,910 --> 01:08:00,319

may only be seven percent

1903

01:08:05,029 --> 01:08:01,920

of what we have to discover which means

1904

01:08:07,510 --> 01:08:05,039

90 plus percent has not even been

1905

01:08:10,390 --> 01:08:07,520

discovered yet uh and so the multiverse

1906

01:08:12,069 --> 01:08:10,400

idea provides a way to think about

1907

01:08:13,510 --> 01:08:12,079

at least a framework to think about how

1908

01:08:14,870 --> 01:08:13,520

these multiple timelines could be

1909

01:08:17,430 --> 01:08:14,880

happening

1910

01:08:18,950 --> 01:08:17,440

and how each of these are different runs

1911

01:08:21,430 --> 01:08:18,960

or experiments

1912

01:08:23,749 --> 01:08:21,440

of that simulation so i think it ties

1913

01:08:25,189 --> 01:08:23,759

you know both in terms of

1914

01:08:26,870 --> 01:08:25,199

ufos

1915

01:08:28,550 --> 01:08:26,880

science and of course science fiction

1916

01:08:30,309 --> 01:08:28,560

you know it's a very popular topic these

1917

01:08:32,070 --> 01:08:30,319

days in science fiction with

1918

01:08:33,990 --> 01:08:32,080

the marvel multiverse and you know i

1919

01:08:36,070 --> 01:08:34,000

don't know if you saw the show loki

1920

01:08:37,829 --> 01:08:36,080

uh it's all about having these different

1921

01:08:40,070 --> 01:08:37,839

versions of superheroes on these

1922

01:08:41,910 --> 01:08:40,080

different timelines uh and so it's an

1923

01:08:44,870 --> 01:08:41,920

interesting you know i think metaphor

1924

01:08:47,510 --> 01:08:44,880

that cuts across the worlds of some of

1925

01:08:49,269 --> 01:08:47,520

the ufos conspiracy as well as

1926

01:08:51,430 --> 01:08:49,279

more pop culture

1927

01:08:53,110 --> 01:08:51,440

absolutely our guest again has been

1928

01:08:55,910 --> 01:08:53,120

resverk you definitely want to check out

1929

01:08:57,669 --> 01:08:55,920

this book it's already number one as a

1930

01:08:58,470 --> 01:08:57,679

pre-release by the time you listen to

1931

01:09:01,030 --> 01:08:58,480

this

1932

01:09:02,950 --> 01:09:01,040

it'll be out the simulated multiverse

1933

01:09:04,550 --> 01:09:02,960

and mit computer scientist explores

1934

01:09:06,950 --> 01:09:04,560

parallel universes the simulation

1935

01:09:09,030 --> 01:09:06,960

hypothesis quantum computing and the

1936

01:09:11,189 --> 01:09:09,040

mandela effect

1937

01:09:13,749 --> 01:09:11,199

fantastic you want to check that out his

1938

01:09:15,349 --> 01:09:13,759

other books which you'll find at his

1939

01:09:16,870 --> 01:09:15,359

amazon page

1940

01:09:19,110 --> 01:09:16,880

the one that we talked about last time

1941

01:09:21,349 --> 01:09:19,120

the simulation hypothesis and then some

1942

01:09:23,990 --> 01:09:21,359

really really cool

1943

01:09:26,789 --> 01:09:24,000

entrepreneur books that have this

1944

01:09:28,789 --> 01:09:26,799

computer science angle which is so great

1945

01:09:31,110 --> 01:09:28,799

because this guy we didn't even talk

1946

01:09:33,349 --> 01:09:31,120

about his experience at play labs but i

1947

01:09:34,709 --> 01:09:33,359

mean he's still an active

1948

01:09:36,390 --> 01:09:34,719

entrepreneur

1949

01:09:37,990 --> 01:09:36,400

and he's kind of one of these helper

1950

01:09:40,550 --> 01:09:38,000

entrepreneurs where he's trying to help

1951

01:09:41,910 --> 01:09:40,560

other people who are trying to do this

1952

01:09:43,829 --> 01:09:41,920

and

1953

01:09:45,510 --> 01:09:43,839

make it happen at a time when so many

1954

01:09:46,229 --> 01:09:45,520

people have this angst and stuff like

1955

01:09:48,870 --> 01:09:46,239

that

1956

01:09:49,910 --> 01:09:48,880

this is like an exciting time isn't it i

1957

01:09:52,229 --> 01:09:49,920

mean this is like one of the most

1958

01:09:54,470 --> 01:09:52,239

exciting times in history for

1959

01:09:56,229 --> 01:09:54,480

development of new technology there's so

1960

01:09:57,669 --> 01:09:56,239

many things that are

1961

01:09:59,590 --> 01:09:57,679

what do you think about that rizz isn't

1962

01:10:01,350 --> 01:09:59,600

this a great time for entrepreneurs to

1963

01:10:02,709 --> 01:10:01,360

jump in the game if they have that skill

1964

01:10:04,550 --> 01:10:02,719

set

1965

01:10:06,550 --> 01:10:04,560

yeah i think this is you know a great

1966

01:10:08,950 --> 01:10:06,560

time for entrepreneurs and we're going

1967

01:10:10,790 --> 01:10:08,960

through a level of technological change

1968

01:10:12,630 --> 01:10:10,800

really that hasn't been seen since the

1969

01:10:15,030 --> 01:10:12,640

industrial revolution right you know i

1970

01:10:17,110 --> 01:10:15,040

grew up in detroit and you know i used

1971

01:10:18,709 --> 01:10:17,120

to wonder why does gm have buick and

1972

01:10:20,550 --> 01:10:18,719

cadillac and well they're not these are

1973

01:10:22,790 --> 01:10:20,560

all entrepreneurs who created these

1974

01:10:25,030 --> 01:10:22,800

companies you know back in the day uh

1975

01:10:27,830 --> 01:10:25,040

and today what's happening with you know

1976

01:10:30,390 --> 01:10:27,840

networking and with blockchain and with

1977

01:10:31,910 --> 01:10:30,400

virtual reality and with ai

1978

01:10:33,750 --> 01:10:31,920

you know computers are touching every

1979

01:10:35,350 --> 01:10:33,760

part of our lives and so you know that's

1980

01:10:37,669 --> 01:10:35,360

where i spent you know good part of my

1981

01:10:39,430 --> 01:10:37,679

career and so now i try to help other

1982

01:10:41,350 --> 01:10:39,440

other folks you know sometimes as an

1983

01:10:43,350 --> 01:10:41,360

investor or advisor through different

1984

01:10:45,590 --> 01:10:43,360

accelerator programs like the one i did

1985

01:10:46,870 --> 01:10:45,600

at mit play labs but yeah i think this

1986

01:10:48,630 --> 01:10:46,880

this is definitely a great time you know

1987

01:10:50,950 --> 01:10:48,640

i always wish i was 20 years younger

1988

01:10:52,790 --> 01:10:50,960

because this is a great time to get back

1989

01:10:54,390 --> 01:10:52,800

in the game man get back back in the

1990

01:10:56,310 --> 01:10:54,400

game yeah i'm getting a little too old

1991

01:10:57,990 --> 01:10:56,320

for that now but uh

1992

01:11:00,149 --> 01:10:58,000

it's a great time for that but you're

1993

01:11:01,510 --> 01:11:00,159

shaping the game too and i think there's

1994

01:11:03,830 --> 01:11:01,520

an interesting

1995

01:11:05,510 --> 01:11:03,840

kind of convergence between

1996

01:11:08,470 --> 01:11:05,520

you shaping the game with younger

1997

01:11:10,310 --> 01:11:08,480

entrepreneurs and merging with this kind

1998

01:11:11,590 --> 01:11:10,320

of expanded world view that you're

1999

01:11:13,590 --> 01:11:11,600

bringing to it

2000

01:11:14,870 --> 01:11:13,600

there's again as we talked about there's

2001

01:11:17,030 --> 01:11:14,880

where these things can kind of come

2002

01:11:19,189 --> 01:11:17,040

together naturally you know because as

2003

01:11:20,870 --> 01:11:19,199

more people push that envelope they're

2004

01:11:23,270 --> 01:11:20,880

more receptive to

2005

01:11:25,110 --> 01:11:23,280

these deeper big picture things that

2006

01:11:27,030 --> 01:11:25,120

you're talking about right

2007

01:11:29,110 --> 01:11:27,040

yeah absolutely and today there's a lot

2008

01:11:30,950 --> 01:11:29,120

of chatter in silicon valley and beyond

2009

01:11:32,790 --> 01:11:30,960

about the metaverse and you know what is

2010

01:11:35,189 --> 01:11:32,800

the metaverse it's a virtual 3d

2011

01:11:37,990 --> 01:11:35,199

environment where we can all interact

2012

01:11:40,470 --> 01:11:38,000

with one another but we can also have

2013

01:11:42,950 --> 01:11:40,480

you know ownership of assets and move

2014

01:11:44,790 --> 01:11:42,960

things around well as that becomes a

2015

01:11:47,510 --> 01:11:44,800

reality we're seeing a science fiction

2016

01:11:49,750 --> 01:11:47,520

concept turn into physical reality but

2017

01:11:51,669 --> 01:11:49,760

that ties very much to my idea of

2018

01:11:53,669 --> 01:11:51,679

reaching the simulation point which is

2019

01:11:55,990 --> 01:11:53,679

that if we can create something that we

2020

01:11:57,510 --> 01:11:56,000

get so immersed in that we forget about

2021

01:11:59,189 --> 01:11:57,520

the physical world

2022

01:12:00,950 --> 01:11:59,199

it's probably already happened and

2023

01:12:02,870 --> 01:12:00,960

that's what ties to all the broader

2024

01:12:05,189 --> 01:12:02,880

discussions we had here about the

2025

01:12:07,270 --> 01:12:05,199

spiritual side of things as well

2026

01:12:09,990 --> 01:12:07,280

great awesome way to wrap it up the kind

2027

01:12:11,750 --> 01:12:10,000

of the turing test on super steroids

2028

01:12:15,030 --> 01:12:11,760

kind of uh when we get to that

2029

01:12:16,870 --> 01:12:15,040

simulation point fantastic ris verk has

2030

01:12:18,310 --> 01:12:16,880

been our guest again ris thank you so

2031

01:12:20,390 --> 01:12:18,320

much

2032

01:12:22,470 --> 01:12:20,400

thanks for having me on again

2033

01:12:24,310 --> 01:12:22,480

thanks again to rizwerk for joining me

2034

01:12:26,149 --> 01:12:24,320

today on skeptico

2035

01:12:27,350 --> 01:12:26,159

the one question i'd have to tear from

2036

01:12:28,709 --> 01:12:27,360

this interview

2037

01:12:31,189 --> 01:12:28,719

what do you think about the simulated

2038

01:12:32,630 --> 01:12:31,199

multiverse metaphor

2039

01:12:35,350 --> 01:12:32,640

we talk quite a bit about it it's

2040

01:12:38,470 --> 01:12:35,360

connection to science hard science also

2041

01:12:40,870 --> 01:12:38,480

its connection to potentially extended

2042

01:12:43,430 --> 01:12:40,880

consciousness as we understand it and

2043

01:12:45,590 --> 01:12:43,440

thirdly its connection to

2044

01:12:46,950 --> 01:12:45,600

spirituality which we all understand we

2045

01:12:48,709 --> 01:12:46,960

don't understand

2046

01:12:51,030 --> 01:12:48,719

so let me know your thoughts on that

2047

01:12:53,750 --> 01:12:51,040

question and you know while you're at it

2048

01:12:56,790 --> 01:12:53,760

i would really like to grow the skeptico

2049

01:12:59,510 --> 01:12:56,800

community i would like other people to

2050

01:13:00,950 --> 01:12:59,520

hear this interview share these ideas

2051

01:13:02,229 --> 01:13:00,960

you know the show is totally free

2052

01:13:04,070 --> 01:13:02,239

there's no paywall there's no

2053

01:13:06,229 --> 01:13:04,080

advertisements all the past shows are

2054

01:13:07,590 --> 01:13:06,239

free i'm never trying to sell anything

2055

01:13:09,669 --> 01:13:07,600

other than

2056

01:13:12,950 --> 01:13:09,679

the ideas of the people who come on the

2057

01:13:15,590 --> 01:13:12,960

show and i'd like those ideas to reach

2058

01:13:17,510 --> 01:13:15,600

as many people as possible so

2059

01:13:18,470 --> 01:13:17,520

if you can if you think that's a good

2060

01:13:20,310 --> 01:13:18,480

idea

2061

01:13:23,750 --> 01:13:20,320

something you can get behind

2062

01:13:26,950 --> 01:13:23,760

please do it in any way you see fit and

2063

01:13:29,189 --> 01:13:26,960

if you need some extra ideas then email

2064

01:13:30,550 --> 01:13:29,199

me and we'll figure it out together but

2065

01:13:32,709 --> 01:13:30,560

i think it would be fun to grow this

2066

01:13:35,669 --> 01:13:32,719

community i also think it'd be fun to

2067

01:13:36,709 --> 01:13:35,679

grow the skeptical forum community come

2068

01:13:39,669 --> 01:13:36,719

on over

2069

01:13:43,189 --> 01:13:39,679

love people that have really really

2070

01:13:46,550 --> 01:13:43,199

smart thinking and are willing to share

2071

01:13:47,990 --> 01:13:46,560

research and ideas not just opinions so

2072

01:13:49,990 --> 01:13:48,000

that's really what the skeptical forum

2073

01:13:51,669 --> 01:13:50,000

is about and if you want to come over

2074

01:13:52,630 --> 01:13:51,679

and join us i'd love to have you over

2075

01:13:55,590 --> 01:13:52,640

there

2076

01:13:59,760 --> 01:13:55,600

that's gonna do it for today until next

2077

01:14:04,229 --> 01:13:59,770

time take care bye for now

2078

01:14:06,280 --> 01:14:04,239

[Music]