

**EP#090**

**26.04.18**

**BRIAN KEATING & BERNIE TAYLOR**

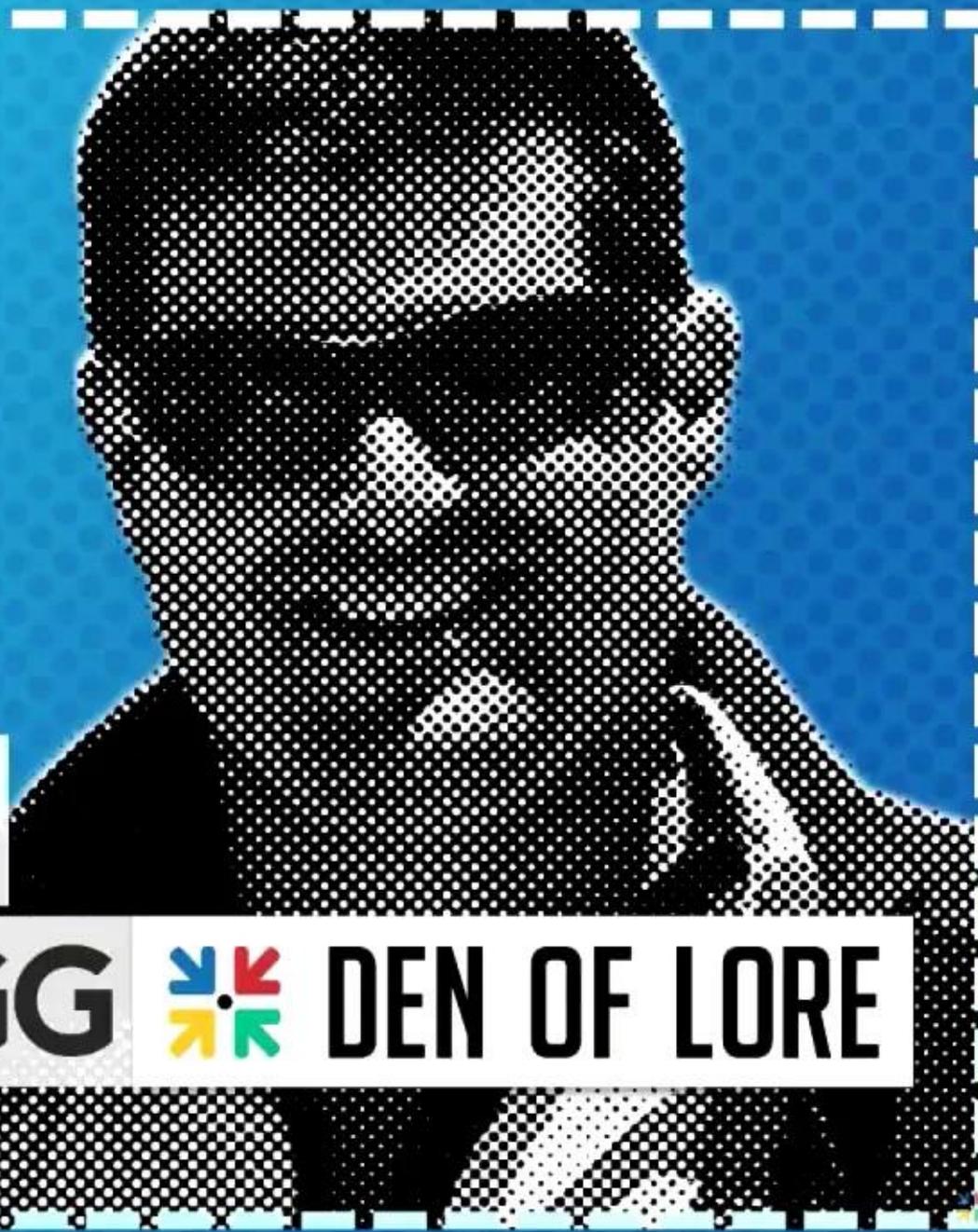
**LOSING THE**

**NOBEL PRIZE &**

**THE COSMIC EGG**



**DEN OF LORE**



1  
00:00:17,210 --> 00:00:14,860

[Music]

2  
00:00:18,769 --> 00:00:17,220

good afternoon good evening and good

3  
00:00:20,960 --> 00:00:18,779

night ladies and gentlemen I am your

4  
00:00:23,389 --> 00:00:20,970

host of crusade or Jesu gir and you have

5  
00:00:26,659 --> 00:00:23,399

entered the den da floor pull your chair

6  
00:00:27,889 --> 00:00:26,669

up to the fire and grab the glasses of

7  
00:00:30,859 --> 00:00:27,899

scotch because we're gonna learn some

8  
00:00:33,410 --> 00:00:30,869

cool [h\_\_h] tonight courtesy of dr. Bryan

9  
00:00:37,130 --> 00:00:33,420

Keating author of one of the top

10  
00:00:41,810 --> 00:00:37,140

non-fiction books on amazon.com losing

11  
00:00:43,340 --> 00:00:41,820

the Nobel Prize and actually unless you

12  
00:00:44,650 --> 00:00:43,350

know a little bit of a secret this is

13  
00:00:48,259 --> 00:00:44,660

actually a pre-record

14

00:00:53,060 --> 00:00:48,269

the night we were supposed to do this

15

00:00:54,290 --> 00:00:53,070

show I had pretty well every single

16

00:00:57,829 --> 00:00:54,300

piece of equipment

17

00:01:02,259 --> 00:00:57,839

I had the studio go almost up in flames

18

00:01:04,670 --> 00:01:02,269

my preamp went completely digital

19

00:01:13,280 --> 00:01:04,680

can't even use that I guess our complete

20

00:01:13,910 --> 00:01:13,290

fed-up Bram bleep that one out almost up

21

00:01:20,660 --> 00:01:13,920

in flames

22

00:01:22,340 --> 00:01:20,670

my preamp once completed you know I lost

23

00:01:24,620 --> 00:01:22,350

a lot of my equipment and we just

24

00:01:28,550 --> 00:01:24,630

recently updated the studio at the time

25

00:01:29,960 --> 00:01:28,560

and yeah basically I have to go and pull

26

00:01:33,380 --> 00:01:29,970

a bunch of equipment out of closet

27

00:01:35,000 --> 00:01:33,390

together the actual interview going is

28

00:01:36,860 --> 00:01:35,010

supposed to be two hours I think we've

29

00:01:40,550 --> 00:01:36,870

got down to about 45 minutes to an hour

30

00:01:43,220 --> 00:01:40,560

or so and then also we have none other

31

00:01:44,660 --> 00:01:43,230

than Bernie Taylor good friend the show

32

00:01:48,710 --> 00:01:44,670

who joined us in afterwards to get

33

00:01:53,930 --> 00:01:48,720

continue the show with an extra amend 'm

34

00:01:59,750 --> 00:01:53,940

or denim commend them for Dan thank you

35

00:02:03,070 --> 00:01:59,760

talk on the cosmic egg

36

00:02:05,860 --> 00:02:03,080

which is kind of just one of those

37

00:02:09,109 --> 00:02:05,870

interesting theories in philosophy

38

00:02:10,790 --> 00:02:09,119

regards to the Big Bang and you know

39

00:02:13,370 --> 00:02:10,800

Bryan Keating is actually one of the top

40

00:02:15,410 --> 00:02:13,380

astrophysicist on a planet so I felt

41

00:02:17,380 --> 00:02:15,420

absolutely horrible

42

00:02:19,370 --> 00:02:17,390

with regards to this particular

43

00:02:23,570 --> 00:02:19,380

interview considering it was supposed to

44

00:02:26,120 --> 00:02:23,580

be it is one of our biggest shows ever

45

00:02:27,860 --> 00:02:26,130

and I'm very glad and very proud to be

46

00:02:31,490 --> 00:02:27,870

able to present this to you thanking

47

00:02:34,250 --> 00:02:31,500

Bram for the Edit and for Denver for

48

00:02:38,000 --> 00:02:34,260

being a very cool chap in between

49

00:02:41,270 --> 00:02:38,010

recording to lend his big sexy voice to

50

00:02:43,550 --> 00:02:41,280

the intro now Bryan is a professor of

51  
00:02:46,070 --> 00:02:43,560  
physics at the center of astrophysics

52  
00:02:47,930 --> 00:02:46,080  
and space sciences in the Department of

53  
00:02:50,680 --> 00:02:47,940  
Physics at the University of California

54  
00:02:53,420 --> 00:02:50,690  
in San Diego he's a public speaker

55  
00:02:57,230 --> 00:02:53,430  
inventor and an expert in the study of

56  
00:02:58,370 --> 00:02:57,240  
the universe's oldest light the Cosmic

57  
00:03:00,380 --> 00:02:58,380  
Microwave Background

58  
00:03:02,000 --> 00:03:00,390  
which is being used to learn about the

59  
00:03:04,880 --> 00:03:02,010  
origins and evolution of the universe

60  
00:03:06,590 --> 00:03:04,890  
and which i think is actually quite cool

61  
00:03:08,090 --> 00:03:06,600  
and you know we talk all about ancient

62  
00:03:09,500 --> 00:03:08,100  
history on the show you can't get really

63  
00:03:13,790 --> 00:03:09,510

get much more ancient history than the

64

00:03:15,440 --> 00:03:13,800

beginning of time and dr. Keating's is a

65

00:03:16,940 --> 00:03:15,450

pioneer in at the search for the

66

00:03:19,910 --> 00:03:16,950

earliest physical evidence of the

67

00:03:22,160 --> 00:03:19,920

inflationary epoch which is that era

68

00:03:25,010 --> 00:03:22,170

right after the Big Bang when the

69

00:03:26,540 --> 00:03:25,020

universe was expanding very rapidly the

70

00:03:29,360 --> 00:03:26,550

theorized period of expansion in space

71

00:03:33,470 --> 00:03:29,370

in the early universe directly after the

72

00:03:35,600 --> 00:03:33,480

Big Bang physicists excuse me physicists

73

00:03:38,150 --> 00:03:35,610

predict that this evidence will reveal

74

00:03:40,729 --> 00:03:38,160

itself as a particular pattern in the

75

00:03:43,040 --> 00:03:40,739

way the CMB light is polarized and this

76

00:03:46,880 --> 00:03:43,050

pattern is referred to as a beat mode

77

00:03:49,550 --> 00:03:46,890

pattern and this book is actually with

78

00:03:54,190 --> 00:03:49,560

regards to not necessarily the findings

79

00:03:56,530 --> 00:03:54,200

but the story of one of the most

80

00:03:58,540 --> 00:03:56,540

groundbreaking discoveries in

81

00:04:02,120 --> 00:03:58,550

astrophysics and physics in the last

82

00:04:05,479 --> 00:04:02,130

hundred hundred and fifty years and at

83

00:04:09,110 --> 00:04:05,489

one point there was a lot of clamor with

84

00:04:12,290 --> 00:04:09,120

regards to mr. Keating's winning a Nobel

85

00:04:14,260 --> 00:04:12,300

Prize and we'll are asleep

86

00:04:16,789 --> 00:04:14,270

book is called losing the Nobel Prize

87

00:04:19,610 --> 00:04:16,799

it's unfortunate to say he did not get

88

00:04:23,060 --> 00:04:19,620

it but the reason of why is a story of

89

00:04:26,270 --> 00:04:23,070

heartache and triumph and self-discovery

90

00:04:29,480 --> 00:04:26,280

and a heck of a lot of love and I'm

91

00:04:31,190 --> 00:04:29,490

honestly like I'm in love with the book

92

00:04:35,000 --> 00:04:31,200

I read it in about like two three days

93

00:04:37,910 --> 00:04:35,010

after I got it in the mail it it all has

94

00:04:41,090 --> 00:04:37,920

to change my mind as far as what the

95

00:04:43,820 --> 00:04:41,100

significance of the Nobel Prize is what

96

00:04:46,760 --> 00:04:43,830

it holds to scientists and and how that

97

00:04:50,630 --> 00:04:46,770

kind of equates to very large pinnacle

98

00:04:54,170 --> 00:04:50,640

prizes and in other fields and it gave

99

00:04:57,230 --> 00:04:54,180

me a really good perspective on what's

100

00:05:00,590 --> 00:04:57,240

really important and you know I'm very

101  
00:05:02,930 --> 00:05:00,600  
proud no matter what happened with the

102  
00:05:05,840 --> 00:05:02,940  
preparation for this interview to have

103  
00:05:08,780 --> 00:05:05,850  
the pleasure and the honor to have had

104  
00:05:11,810 --> 00:05:08,790  
this interview with dr. Keating and I do

105  
00:05:14,240 --> 00:05:11,820  
honestly hope that you all enjoy it and

106  
00:05:16,130 --> 00:05:14,250  
just in case if the Edit does not

107  
00:05:18,409 --> 00:05:16,140  
actually have it I did want to thank our

108  
00:05:22,100 --> 00:05:18,419  
patrons who ensure that this show can

109  
00:05:24,710 --> 00:05:22,110  
stay 100% sponsor free corporate control

110  
00:05:27,909 --> 00:05:24,720  
free and allows us to say pretty well

111  
00:05:29,800 --> 00:05:27,919  
whatever the bleep we want on air and

112  
00:05:32,270 --> 00:05:29,810  
allows us to be able to bring

113  
00:05:35,420 --> 00:05:32,280

controversial figures or figures of

114

00:05:36,920 --> 00:05:35,430

great note and talk about pretty well

115

00:05:39,170 --> 00:05:36,930

anything that they're interested in

116

00:05:40,610 --> 00:05:39,180

talking about and that would not be

117

00:05:42,170 --> 00:05:40,620

possible without our patrons who ensure

118

00:05:44,110 --> 00:05:42,180

that the lights can stay on the internet

119

00:05:48,050 --> 00:05:44,120

can stay on our web servers are paid for

120

00:05:51,380 --> 00:05:48,060

the programs that help us broadcast the

121

00:05:55,610 --> 00:05:51,390

show weekly are taken care of and ensure

122

00:05:57,860 --> 00:05:55,620

that overall the show just continues on

123

00:06:00,230 --> 00:05:57,870

and I want to thank especially our

124

00:06:02,150 --> 00:06:00,240

illustrious masters Jack from across the

125

00:06:04,909 --> 00:06:02,160

pond and Pat from Brooklyn and to our

126

00:06:06,170 --> 00:06:04,919

masters Jenny Deborah merely Chuck Jared

127

00:06:09,230 --> 00:06:06,180

mrs. Fox

128

00:06:10,640 --> 00:06:09,240

Joshua mark and Ellen as well as to our

129

00:06:14,350 --> 00:06:10,650

patrons Katie

130

00:06:16,310 --> 00:06:14,360

Audrey Mike Eclipse Eric Martin photopic

131

00:06:20,330 --> 00:06:16,320

nick cray

132

00:06:22,120 --> 00:06:20,340

Charles Thiago Michael Dean John Anthony

133

00:06:25,780 --> 00:06:22,130

Atlantic Koosh van

134

00:06:28,360 --> 00:06:25,790

Christopher Robin and hobby courtesy of

135

00:06:31,360 --> 00:06:28,370

denna floor comms PayPal button if you

136

00:06:33,460 --> 00:06:31,370

want to support independent radio and

137

00:06:35,020 --> 00:06:33,470

broadcast including this shown

138

00:06:38,800 --> 00:06:35,030

especially this show I'll go to

139

00:06:41,890 --> 00:06:38,810

patreon.com/scishow to den of Lord calm

140

00:06:44,560 --> 00:06:41,900

and hit the donate button or become a

141

00:06:46,150 --> 00:06:44,570

PayPal and make sure that you give

142

00:06:49,240 --> 00:06:46,160

yourself a name that's really cool like

143

00:06:51,820 --> 00:06:49,250

a kind of cushion Thank You brandman I

144

00:06:53,950 --> 00:06:51,830

thought so as well and you know ensure

145

00:06:56,260 --> 00:06:53,960

that we can stay on the air we're

146

00:06:57,880 --> 00:06:56,270

reaching our hundredth episode which

147

00:07:01,240 --> 00:06:57,890

will be coming up in the middle of June

148

00:07:03,100 --> 00:07:01,250

we have a very special show coming up

149

00:07:04,450 --> 00:07:03,110

for that one and we want to make sure we

150

00:07:06,820 --> 00:07:04,460

can go for another hundred or two

151  
00:07:09,070 --> 00:07:06,830  
hundred or a thousand so if you like the

152  
00:07:12,160 --> 00:07:09,080  
show you like what we do support us and

153  
00:07:17,100 --> 00:07:12,170  
enjoy this episode with dr. Bryan

154  
00:07:22,780 --> 00:07:20,050  
ladies and gentlemen if you are just

155  
00:07:24,160 --> 00:07:22,790  
joining in you missed me

156  
00:07:28,200 --> 00:07:24,170  
tearing apart about three different

157  
00:07:30,250 --> 00:07:28,210  
mixers about 15 different hookups with

158  
00:07:33,400 --> 00:07:30,260  
dr. Keating here looking at the ceiling

159  
00:07:34,870 --> 00:07:33,410  
from my phone and I'm fairly certain

160  
00:07:39,220 --> 00:07:34,880  
that I probably taught you a few

161  
00:07:42,070 --> 00:07:39,230  
Croatian swear words and so yeah so I

162  
00:07:44,830 --> 00:07:42,080  
think things are in good shape now I've

163  
00:07:46,480 --> 00:07:44,840

moved on to other projects still you

164

00:07:48,520 --> 00:07:46,490

know tangentially involved with bicep

165

00:07:50,590 --> 00:07:48,530

but but the day-to-day leadership and

166

00:07:52,260 --> 00:07:50,600

participation that I'm involved with

167

00:07:54,700 --> 00:07:52,270

yeah that project is a an enormous

168

00:07:57,600 --> 00:07:54,710

collaboration of 200 plus scientists

169

00:08:00,340 --> 00:07:57,610

from every continent in the world and

170

00:08:01,840 --> 00:08:00,350

including Antarctica and this project

171

00:08:05,170 --> 00:08:01,850

will be building an array of telescopes

172

00:08:08,920 --> 00:08:05,180

of enormous size in the Atacama Desert

173

00:08:10,570 --> 00:08:08,930

of northern Chile and it's same you know

174

00:08:13,000 --> 00:08:10,580

kind of scientific goals are to study

175

00:08:15,700 --> 00:08:13,010

the universe's origin how the universe

176

00:08:18,060 --> 00:08:15,710

evolved and what the universe is made of

177

00:08:20,740 --> 00:08:18,070

and that's gonna take place beginning

178

00:08:22,780 --> 00:08:20,750

observations in about 18 months and then

179

00:08:26,080 --> 00:08:22,790

lasting for hopefully about a decade now

180

00:08:29,410 --> 00:08:26,090

for this year you're speaking of of the

181

00:08:30,790 --> 00:08:29,420

array telescopes that would let's say if

182

00:08:33,100 --> 00:08:30,800

you've got one North America one in

183

00:08:34,780 --> 00:08:33,110

Africa one in Australia it's it's as

184

00:08:35,710 --> 00:08:34,790

large as the sterno

185

00:08:37,930 --> 00:08:35,720

it's not that that's called

186

00:08:39,970 --> 00:08:37,940

interferometry okay this is a normal

187

00:08:42,640 --> 00:08:39,980

camera like an imaging camera like your

188

00:08:44,680 --> 00:08:42,650

point-and-shoot DSLR except it works

189

00:08:46,480 --> 00:08:44,690

with microwaves so tax heat from the Big

190

00:08:50,320 --> 00:08:46,490

Bang instead of visible light

191

00:08:53,560 --> 00:08:50,330

you know your kids face most people out

192

00:08:56,380 --> 00:08:53,570

there knowing cool or as we say here

193

00:08:58,440 --> 00:08:56,390

cool [h\_\_h] is pretty cool yeah what would

194

00:09:01,390 --> 00:08:58,450

be the importance or significance of

195

00:09:04,270 --> 00:09:01,400

being able to image and understand that

196

00:09:06,400 --> 00:09:04,280

that air a little better well you'd be

197

00:09:09,220 --> 00:09:06,410

able to really understand the origin of

198

00:09:10,810 --> 00:09:09,230

everything so if you think about like if

199

00:09:12,190 --> 00:09:10,820

you see a little baby and you want to

200

00:09:14,350 --> 00:09:12,200

know what that baby's gonna look like in

201  
00:09:17,350 --> 00:09:14,360  
the future there's some software you can

202  
00:09:19,450 --> 00:09:17,360  
use to kind of deconstruct it but but it

203  
00:09:21,430 --> 00:09:19,460  
doesn't really play out to be super

204  
00:09:23,410 --> 00:09:21,440  
accurate so instead what the early

205  
00:09:25,030 --> 00:09:23,420  
universe is simple in one sense that the

206  
00:09:26,560 --> 00:09:25,040  
properties and constituents are

207  
00:09:29,290 --> 00:09:26,570  
well-known and well-understood how the

208  
00:09:30,550 --> 00:09:29,300  
forces and matter interact so if you can

209  
00:09:32,140 --> 00:09:30,560  
measure the earliest parts of the

210  
00:09:33,700 --> 00:09:32,150  
universe you could then predict what the

211  
00:09:35,440 --> 00:09:33,710  
universe would look like deep into the

212  
00:09:40,810 --> 00:09:35,450  
future and that's what we're trying to

213  
00:09:42,190 --> 00:09:40,820

do with these telescopes what are some

214

00:09:45,660 --> 00:09:42,200

of the obstacles especially with what

215

00:09:48,520 --> 00:09:45,670

you've gone through knowing that you've

216

00:09:50,500 --> 00:09:48,530

you know for for this this group this

217

00:09:51,610 --> 00:09:50,510

graven idol and I know you you mentioned

218

00:09:54,100 --> 00:09:51,620

that in one of your one of your

219

00:09:55,690 --> 00:09:54,110

interviews you've basically spent on it

220

00:09:56,980 --> 00:09:55,700

and kind of thrown it to the dogs as it

221

00:10:00,760 --> 00:09:56,990

were and said okay we'll have what you

222

00:10:02,620 --> 00:10:00,770

will and kind of mean it but not

223

00:10:04,420 --> 00:10:02,630

necessarily made it lose its luster but

224

00:10:06,670 --> 00:10:04,430

you you made allowed people to appear

225

00:10:09,400 --> 00:10:06,680

behind the veil to take away some of the

226

00:10:11,020 --> 00:10:09,410

mystique much pushback you getting with

227

00:10:12,550 --> 00:10:11,030

these new programs knowing that you've

228

00:10:15,910 --> 00:10:12,560

done this knowing that you may have

229

00:10:19,990 --> 00:10:15,920

people who well may curse your name on a

230

00:10:21,970 --> 00:10:20,000

daily basis yeah you have to take a take

231

00:10:24,850 --> 00:10:21,980

a stand and for me the taking of the

232

00:10:26,710 --> 00:10:24,860

stand came down to I'd been confronted

233

00:10:29,110 --> 00:10:26,720

with this with this Idol with this with

234

00:10:31,600 --> 00:10:29,120

this demigod like status of Alfred Nobel

235

00:10:34,210 --> 00:10:31,610

and and these prizes and ice began to

236

00:10:36,880 --> 00:10:34,220

wonder why is it so and why why does

237

00:10:39,370 --> 00:10:36,890

society venerate this prize is given out

238

00:10:42,400 --> 00:10:39,380

by you know five hundred white Swedish

239

00:10:44,350 --> 00:10:42,410

guys every year and they give it out you

240

00:10:46,300 --> 00:10:44,360

know predominantly to their people that

241

00:10:48,100 --> 00:10:46,310

are connected or have power and it

242

00:10:48,610 --> 00:10:48,110

really distorts the playing field you

243

00:10:50,890 --> 00:10:48,620

know so

244

00:10:52,660 --> 00:10:50,900

I did an event a book signing last night

245

00:10:54,520 --> 00:10:52,670

and somebody asked well you know well

246

00:10:56,440 --> 00:10:54,530

isn't it great that competition is

247

00:10:58,450 --> 00:10:56,450

engendered by the Nobel Prize and I said

248

00:11:00,880 --> 00:10:58,460

it can be good but it can also be very

249

00:11:02,230 --> 00:11:00,890

unfair because the rich get richer and

250

00:11:04,450 --> 00:11:02,240

the more funding you have in the more

251  
00:11:06,610 --> 00:11:04,460  
Nobel Prizes are on your staff and the

252  
00:11:08,080 --> 00:11:06,620  
more teammates that you can promote in

253  
00:11:09,490 --> 00:11:08,090  
that way the more money the more

254  
00:11:11,860 --> 00:11:09,500  
researched and more time than we're

255  
00:11:13,600 --> 00:11:11,870  
funding everything comes to you so the

256  
00:11:15,580 --> 00:11:13,610  
playing field becomes very unfair and

257  
00:11:18,040 --> 00:11:15,590  
ultimately the Nobel Prize is

258  
00:11:20,080 --> 00:11:18,050  
essentially a monopoly their prizes were

259  
00:11:22,300 --> 00:11:20,090  
three times as much money as the Nobel

260  
00:11:24,340 --> 00:11:22,310  
Prize that are given to physicists and

261  
00:11:25,630 --> 00:11:24,350  
astronomers and there's many of them

262  
00:11:27,160 --> 00:11:25,640  
there's like two or three that are worth

263  
00:11:30,070 --> 00:11:27,170

twice or three times as mine you'll only

264

00:11:31,780 --> 00:11:30,080

get only in quotes but only get if you

265

00:11:35,020 --> 00:11:31,790

win the whole Nobel Prize by yourself

266

00:11:36,130 --> 00:11:35,030

and nobody has done that in 25 years but

267

00:11:37,930 --> 00:11:36,140

if you do and you don't share it with

268

00:11:40,420 --> 00:11:37,940

two other people you get a million

269

00:11:41,920 --> 00:11:40,430

dollars before taxes and then you come

270

00:11:43,660 --> 00:11:41,930

back to America you get a half a million

271

00:11:46,420 --> 00:11:43,670

dollars because you get taxes taken out

272

00:11:47,350 --> 00:11:46,430

and every which way but loose and then

273

00:11:50,410 --> 00:11:47,360

so you're left with a half a million

274

00:11:51,970 --> 00:11:50,420

dollars and and that's no not chump

275

00:11:54,610 --> 00:11:51,980

change but you can't really do you know

276

00:11:57,010 --> 00:11:54,620

that that would pay for about two a

277

00:11:59,650 --> 00:11:57,020

graduate student and a postdoc working

278

00:12:01,630 --> 00:11:59,660

in your lab for five years so I mean

279

00:12:03,820 --> 00:12:01,640

it's nice but it's it's not it's not

280

00:12:06,100 --> 00:12:03,830

extraordinary in terms of what's

281

00:12:07,870 --> 00:12:06,110

required to do big scientific project

282

00:12:09,760 --> 00:12:07,880

but these same people that win it

283

00:12:11,140 --> 00:12:09,770

they'll say things like well I wouldn't

284

00:12:12,840 --> 00:12:11,150

you know or people that win a prize

285

00:12:15,340 --> 00:12:12,850

that's worth ten times as much as that

286

00:12:17,620 --> 00:12:15,350

will say well I would trade that in a

287

00:12:19,930 --> 00:12:17,630

second for a Nobel Prize I think that

288

00:12:22,540 --> 00:12:19,940

speaks to the you know the lustrous

289

00:12:24,520 --> 00:12:22,550

idolatrous nature of the Nobel Prize and

290

00:12:25,990 --> 00:12:24,530

so yeah I mean I think that there will

291

00:12:27,520 --> 00:12:26,000

be people that will be upset about it

292

00:12:30,370 --> 00:12:27,530

because it's an industry that's very

293

00:12:31,840 --> 00:12:30,380

powerful one in Sweden and Norway and

294

00:12:34,330 --> 00:12:31,850

they take these things very seriously

295

00:12:36,280 --> 00:12:34,340

and they don't like to change until they

296

00:12:37,840 --> 00:12:36,290

have like a sex scandal which is out

297

00:12:40,510 --> 00:12:37,850

breaking in the Nobel Prize in

298

00:12:42,610 --> 00:12:40,520

Literature causing the king of Sweden to

299

00:12:44,890 --> 00:12:42,620

get involved because it's so prestigious

300

00:12:48,010 --> 00:12:44,900

and so important an existential threat

301  
00:12:49,480 --> 00:12:48,020  
to the nation's identity so I don't

302  
00:12:50,980 --> 00:12:49,490  
expect them to react well I have had

303  
00:12:53,140 --> 00:12:50,990  
conversations with members of the

304  
00:12:54,850 --> 00:12:53,150  
Swedish royal academy that choose the

305  
00:12:57,640 --> 00:12:54,860  
Nobel Prize and they say they agree with

306  
00:12:59,230 --> 00:12:57,650  
me you know confidentially and I have

307  
00:13:01,630 --> 00:12:59,240  
had Nobel Prize winners read the book

308  
00:13:03,550 --> 00:13:01,640  
and I haven't heard complaints from the

309  
00:13:05,680 --> 00:13:03,560  
so you know I think people agree with it

310  
00:13:08,170 --> 00:13:05,690  
and I don't think there'll be you know

311  
00:13:10,300 --> 00:13:08,180  
much public kind of disagreement that

312  
00:13:12,910 --> 00:13:10,310  
people will say sour grapes and sore

313  
00:13:14,319 --> 00:13:12,920

loser and I'm used to hearing that but

314

00:13:15,850 --> 00:13:14,329

you know if you if the criterion to

315

00:13:17,650 --> 00:13:15,860

criticize something is that you have to

316

00:13:21,810 --> 00:13:17,660

have won it then nobody should criticize

317

00:13:27,190 --> 00:13:25,750

well well if you've ever watched this

318

00:13:28,329 --> 00:13:27,200

show at least one when we don't have any

319

00:13:29,829 --> 00:13:28,339

technical difficulties you know that

320

00:13:32,319 --> 00:13:29,839

we've done shows on Donald Trump and

321

00:13:35,050 --> 00:13:32,329

there are there there's winning and then

322

00:13:38,079 --> 00:13:35,060

there's cheating to win you can't

323

00:13:40,240 --> 00:13:38,089

necessarily say he won but at the same

324

00:13:41,710 --> 00:13:40,250

time it's like okay we've had 45 other

325

00:13:44,410 --> 00:13:41,720

people who've won it before more people

326

00:13:46,840 --> 00:13:44,420

have won the Nobel Prize still is less

327

00:13:48,790 --> 00:13:46,850

people than I think have been Pope it's

328

00:13:50,259 --> 00:13:48,800

not it's late it's not as good as the

329

00:13:54,069 --> 00:13:50,269

new hotness is you can't win it

330

00:13:56,920 --> 00:13:54,079

posthumously so the duration over which

331

00:13:59,079 --> 00:13:56,930

it did it in an ultra opaque ceremony

332

00:14:01,180 --> 00:13:59,089

and process that I was a part of as I

333

00:14:04,269 --> 00:14:01,190

nominated the winners of the 2016 Nobel

334

00:14:07,689 --> 00:14:04,279

Prize just randomly they asked me to

335

00:14:09,310 --> 00:14:07,699

nominate the winners for 2016 and if you

336

00:14:10,930 --> 00:14:09,320

make it through it all that you know and

337

00:14:14,170 --> 00:14:10,940

you have a lot of luck in perseverance

338

00:14:16,210 --> 00:14:14,180

in good health and evil in your 27 28 30

339

00:14:19,389 --> 00:14:16,220

years old it means you have to live to

340

00:14:21,699 --> 00:14:19,399

at least be 70 and most people don't do

341

00:14:23,139 --> 00:14:21,709

the Nobel work until they're 40 which

342

00:14:24,970 --> 00:14:23,149

means the average age of Nobel you know

343

00:14:26,740 --> 00:14:24,980

just a few months after he would have

344

00:14:29,139 --> 00:14:26,750

been eligible to win the Nobel Prize and

345

00:14:32,680 --> 00:14:29,149

instead his rightful share went to a

346

00:14:35,259 --> 00:14:32,690

third person so so it's very it's very

347

00:14:37,150 --> 00:14:35,269

capricious and so I and it's not that's

348

00:14:39,699 --> 00:14:37,160

in itself as it shows you that it's not

349

00:14:42,189 --> 00:14:39,709

a scientific process if you know if the

350

00:14:44,230 --> 00:14:42,199

discovery is great and and a person dies

351  
00:14:47,230 --> 00:14:44,240  
the day before the escape and they won't

352  
00:14:48,670 --> 00:14:47,240  
get that's not scientific well you also

353  
00:14:49,990 --> 00:14:48,680  
have to look at it we offer from the

354  
00:14:53,699 --> 00:14:50,000  
philosophical sample it's like if you're

355  
00:14:56,800 --> 00:14:53,709  
dead we're gonna do with 33,000 sorry

356  
00:14:57,639 --> 00:14:56,810  
150 or parts I for my maths a little bit

357  
00:14:59,920 --> 00:14:57,649  
off yeah

358  
00:15:01,630 --> 00:14:59,930  
what million dollars or yeah well that's

359  
00:15:03,370 --> 00:15:01,640  
true but but then imagine you know what

360  
00:15:05,860 --> 00:15:03,380  
they're what they say when they win it

361  
00:15:07,240 --> 00:15:05,870  
and how their kids feel about it and you

362  
00:15:09,160 --> 00:15:07,250  
know the kids the parents were away the

363  
00:15:12,069 --> 00:15:09,170

father was away I mean it's mostly men

364

00:15:14,380 --> 00:15:12,079

who win it because no woman has won in

365

00:15:15,350 --> 00:15:14,390

54 years and nobody understands exactly

366

00:15:18,019 --> 00:15:15,360

why that is but

367

00:15:20,210 --> 00:15:18,029

but some have suspicions about it but

368

00:15:22,310 --> 00:15:20,220

you know they let them let their family

369

00:15:24,530 --> 00:15:22,320

you know get get some of the the

370

00:15:27,259 --> 00:15:24,540

accolade that their father you know

371

00:15:28,759 --> 00:15:27,269

their brother their husband earned or

372

00:15:31,130 --> 00:15:28,769

the you know hopefully their wife their

373

00:15:33,319 --> 00:15:31,140

sister their mother and I think that

374

00:15:36,319 --> 00:15:33,329

that's it's you know it's it's not

375

00:15:37,699 --> 00:15:36,329

correct to assume that there's no harm

376

00:15:38,350 --> 00:15:37,709

from doing that because actually the

377

00:15:41,480 --> 00:15:38,360

Nobel Prize

378

00:15:44,990 --> 00:15:41,490

Quorra Nate's physics royalty forever

379

00:15:47,840 --> 00:15:45,000

and it also enshrouds the scientific

380

00:15:50,660 --> 00:15:47,850

discoveries in the Canon of scientific

381

00:15:52,730 --> 00:15:50,670

history so we teach you know science and

382

00:15:54,829 --> 00:15:52,740

we'll point out when a given experiment

383

00:15:57,889 --> 00:15:54,839

won the Nobel Prize in the given field

384

00:16:01,340 --> 00:15:57,899

and that's very common way of certifying

385

00:16:03,470 --> 00:16:01,350

science and accomplishments by these

386

00:16:05,000 --> 00:16:03,480

accolades that are won and so if the

387

00:16:10,639 --> 00:16:05,010

person dies their name is written out of

388

00:16:14,000 --> 00:16:10,649

history that's not fair speaking of

389

00:16:15,259 --> 00:16:14,010

family you know obviously you're you're

390

00:16:16,850 --> 00:16:15,269

a family man you're married you've got

391

00:16:19,579 --> 00:16:16,860

you've got kids you're you've recently

392

00:16:21,800 --> 00:16:19,589

welcomed and you went into the world or

393

00:16:24,620 --> 00:16:21,810

to actually what mistaken that's right

394

00:16:26,569 --> 00:16:24,630

I'm a very respected day it was April 15

395

00:16:29,079 --> 00:16:26,579

that's my birthday actually it's a good

396

00:16:35,660 --> 00:16:32,540

so actually in America oh they will be

397

00:16:37,370 --> 00:16:35,670

fine probably just a tad annoying maybe

398

00:16:38,720 --> 00:16:37,380

a little bit egotistical and and have a

399

00:16:40,300 --> 00:16:38,730

very good taste for scotch but don't

400

00:16:43,130 --> 00:16:40,310

don't worry just go with it

401  
00:16:45,769 --> 00:16:43,140  
I'm a new father myself I have a

402  
00:16:48,439 --> 00:16:45,779  
daughter she's well almost five months

403  
00:16:52,220 --> 00:16:48,449  
old at a point oh my goodness I'm so

404  
00:16:53,569 --> 00:16:52,230  
tired yeah it's my first one and like

405  
00:16:55,030 --> 00:16:53,579  
reading this book and from the message

406  
00:16:57,350 --> 00:16:55,040  
you've been sending there there's

407  
00:16:58,639 --> 00:16:57,360  
honestly a lot of inspiration like I'm

408  
00:16:59,870 --> 00:16:58,649  
this is this is something that I

409  
00:17:01,400 --> 00:16:59,880  
actually want my daughter to read when

410  
00:17:03,110 --> 00:17:01,410  
she's growing up to be able to kind of

411  
00:17:05,120 --> 00:17:03,120  
understand the inner workings of the

412  
00:17:07,610 --> 00:17:05,130  
world and how things work and and and

413  
00:17:08,539 --> 00:17:07,620

know that like yeah there's well people

414

00:17:09,829 --> 00:17:08,549

out there who'd like to be able to keep

415

00:17:11,270 --> 00:17:09,839

things for themselves it shouldn't stop

416

00:17:13,000 --> 00:17:11,280

you from from reaching forward and

417

00:17:14,689 --> 00:17:13,010

actually trying to change something

418

00:17:15,740 --> 00:17:14,699

which is what your trip which is

419

00:17:18,169 --> 00:17:15,750

essentially what you're trying to do

420

00:17:21,049 --> 00:17:18,179

you're trying to light that spark of

421

00:17:22,880 --> 00:17:21,059

inspiration for for positive change for

422

00:17:25,659 --> 00:17:22,890

for the community and the world as a

423

00:17:28,790 --> 00:17:25,669

whole that's right now

424

00:17:30,680 --> 00:17:28,800

sorry go go ahead yeah I mean

425

00:17:33,200 --> 00:17:30,690

exactly so in my and my daughter's I

426

00:17:36,200 --> 00:17:33,210

have two daughters now and in in their

427

00:17:38,930 --> 00:17:36,210

room they have a portrait of Maria Mayer

428

00:17:41,240 --> 00:17:38,940

who is the last female winner of the

429

00:17:44,660 --> 00:17:41,250

Nobel Prize in Physics and I didn't put

430

00:17:46,760 --> 00:17:44,670

up you know Shania Twain or whoever the

431

00:17:49,130 --> 00:17:46,770

music star is over there and and I

432

00:17:51,620 --> 00:17:49,140

didn't put up you know Venus Williams or

433

00:17:53,690 --> 00:17:51,630

some great athlete I wanted to put up a

434

00:17:56,630 --> 00:17:53,700

figure of intellectual merit merit that

435

00:17:59,060 --> 00:17:56,640

was unrivaled in in terms of her

436

00:18:01,490 --> 00:17:59,070

accomplishments but even Maria Mayer

437

00:18:04,340 --> 00:18:01,500

said that winning the prize was in his

438

00:18:09,460 --> 00:18:04,350

fun nearly as doing the work that led to

439

00:18:12,620 --> 00:18:09,470

it you know there there was some guy

440

00:18:16,690 --> 00:18:12,630

Turner exactly who it was but like life

441

00:18:18,920 --> 00:18:16,700

is struggle and it's not it's not the

442

00:18:21,470 --> 00:18:18,930

the pursuit of happiness but it's it's

443

00:18:22,940 --> 00:18:21,480

the constantly trying to improve

444

00:18:24,500 --> 00:18:22,950

yourself so that you can look you're

445

00:18:27,110 --> 00:18:24,510

happy in the actual doing not not in the

446

00:18:28,610 --> 00:18:27,120

actual account that's right mm-hmm

447

00:18:30,230 --> 00:18:28,620

because it's during that journey that

448

00:18:33,710 --> 00:18:30,240

people grow that's where the discovery

449

00:18:35,920 --> 00:18:33,720

of well many things happens about

450

00:18:38,810 --> 00:18:35,930

yourself about the subject matter and

451  
00:18:42,820 --> 00:18:38,820  
for yourself considering the sheer

452  
00:18:45,620 --> 00:18:42,830  
amount of some trials or tribulations

453  
00:18:48,230 --> 00:18:45,630  
that you've that you've experienced

454  
00:18:50,510 --> 00:18:48,240  
during this this writing process how

455  
00:18:53,300 --> 00:18:50,520  
have you changed as an individual

456  
00:18:55,580 --> 00:18:53,310  
what's your hero's journey yeah I mean I

457  
00:18:58,910 --> 00:18:55,590  
think for me the journey has been to

458  
00:19:01,460 --> 00:18:58,920  
recognize that these gilded accolades

459  
00:19:03,290 --> 00:19:01,470  
these idols these these you know

460  
00:19:05,960 --> 00:19:03,300  
pinnacles of success it should not

461  
00:19:08,770 --> 00:19:05,970  
define me and actually it's the hero's

462  
00:19:11,810 --> 00:19:08,780  
journey that matters not the gilded

463  
00:19:12,860 --> 00:19:11,820

destination of Stockholm Sweden and I

464

00:19:14,980 --> 00:19:12,870

think that's come in to really

465

00:19:17,510 --> 00:19:14,990

crystalline relief and and really

466

00:19:20,450 --> 00:19:17,520

demonstrate to me what matters in

467

00:19:22,220 --> 00:19:20,460

science and what also matters outside of

468

00:19:24,890 --> 00:19:22,230

science and it's the relationships the

469

00:19:27,380 --> 00:19:24,900

connections the the bonds that are made

470

00:19:30,950 --> 00:19:27,390

between people that are most important

471

00:19:33,260 --> 00:19:30,960

both inside and outside of the lab and

472

00:19:35,240 --> 00:19:33,270

how was the relationship with flight

473

00:19:37,580 --> 00:19:35,250

let's say your students or you know your

474

00:19:41,750 --> 00:19:37,590

immediate colleagues changed have they

475

00:19:42,409 --> 00:19:41,760

seen you in a different lights well I

476

00:19:44,149 --> 00:19:42,419

mean the book

477

00:19:47,899 --> 00:19:44,159

thankfully has been extremely well

478

00:19:49,940 --> 00:19:47,909

received it's gotten the reviews as one

479

00:19:52,519 --> 00:19:49,950

of the top 10 best books of the month on

480

00:19:54,680 --> 00:19:52,529

Amazon out of you know tens of thousands

481

00:19:56,869 --> 00:19:54,690

that come out each month and it was also

482

00:19:58,729 --> 00:19:56,879

selected as one of the six best books of

483

00:20:00,379 --> 00:19:58,739

the season by nature magazine

484

00:20:02,590 --> 00:20:00,389

you know she's arguably one of the most

485

00:20:05,840 --> 00:20:02,600

prestigious magazines and all of science

486

00:20:08,810 --> 00:20:05,850

got fantastic reviews in science and and

487

00:20:11,989 --> 00:20:08,820

in science news and just just very

488

00:20:14,419 --> 00:20:11,999

thrilled overall to the reception from

489

00:20:16,580 --> 00:20:14,429

my writing and I think you know the

490

00:20:18,259 --> 00:20:16,590

clarity of the presentation that I'm

491

00:20:21,919 --> 00:20:18,269

being told that I that I have provided

492

00:20:24,320 --> 00:20:21,929

is really you know is really speaking

493

00:20:25,820 --> 00:20:24,330

volumes to people and so you know that's

494

00:20:27,919 --> 00:20:25,830

whatever you author wants is to have

495

00:20:31,129 --> 00:20:27,929

people read it of course you know I

496

00:20:33,649 --> 00:20:31,139

trade I trade you know 100 readers today

497

00:20:36,080 --> 00:20:33,659

for one read or a hundred years from now

498

00:20:37,700 --> 00:20:36,090

and and I hope they the themes and and

499

00:20:39,979 --> 00:20:37,710

the lessons of the book won't just be

500

00:20:42,830 --> 00:20:39,989

taken away oh the Nobel Prizes bad or

501  
00:20:45,470 --> 00:20:42,840  
oak cosmology is so confusing or

502  
00:20:47,810 --> 00:20:45,480  
whatever but that really it's the it's

503  
00:20:50,690 --> 00:20:47,820  
the kind of stoic approach to to

504  
00:20:52,190 --> 00:20:50,700  
handling setbacks adversity etc I say

505  
00:20:54,080 --> 00:20:52,200  
you know the book is written for anyone

506  
00:20:55,340 --> 00:20:54,090  
who didn't win a Nobel Prize but it's

507  
00:20:58,669 --> 00:20:55,350  
also written for anyone who didn't win

508  
00:21:00,950 --> 00:20:58,679  
an Oscar or a high school senior class

509  
00:21:03,229 --> 00:21:00,960  
presidency because you have to be

510  
00:21:05,060 --> 00:21:03,239  
comfortable with who you are and not to

511  
00:21:08,509 --> 00:21:05,070  
find yourself by how are you know

512  
00:21:12,139 --> 00:21:08,519  
external arbitrary capricious rules and

513  
00:21:14,509 --> 00:21:12,149

these deem your worthy and you know in

514

00:21:17,149 --> 00:21:14,519

my early career I was I'm not ashamed to

515

00:21:19,940 --> 00:21:17,159

say I did succumb to that fallacy but

516

00:21:22,249 --> 00:21:19,950

not never again and I do feel like I'm

517

00:21:24,769 --> 00:21:22,259

gonna communicate that message both to

518

00:21:26,570 --> 00:21:24,779

my biological children but also to my

519

00:21:30,970 --> 00:21:26,580

ideological children those that are

520

00:21:38,989 --> 00:21:37,700

and like understanding that that idea

521

00:21:41,149 --> 00:21:38,999

those are those are those trappings that

522

00:21:42,769 --> 00:21:41,159

like I've written in the advertising

523

00:21:46,009 --> 00:21:42,779

world you know if you can call it a

524

00:21:47,599 --> 00:21:46,019

science it's more of an art I just like

525

00:21:47,930 --> 00:21:47,609

to make pretty pictures and get paid for

526

00:21:49,940 --> 00:21:47,940

me

527

00:21:53,029 --> 00:21:49,950

well what whenever went through college

528

00:21:55,670 --> 00:21:53,039

we always had the aspiration to be like

529

00:21:57,380 --> 00:21:55,680

Don Draper where you know you you have

530

00:21:59,360 --> 00:21:57,390

the corner office and like the bar at

531

00:21:59,840 --> 00:21:59,370

work what you consider will do don't get

532

00:22:01,760 --> 00:21:59,850

me wrong

533

00:22:05,450 --> 00:22:01,770

yeah that at some point you kind of

534

00:22:06,770 --> 00:22:05,460

become bitter and changed and to a

535

00:22:08,870 --> 00:22:06,780

certain I see you realize that it's

536

00:22:10,850 --> 00:22:08,880

whatever it's portrayed in media and

537

00:22:13,700 --> 00:22:10,860

whatever it's been put on this pedestal

538

00:22:15,580 --> 00:22:13,710

to be isn't actually it and then you

539

00:22:18,260 --> 00:22:15,590

realize you don't want that anymore and

540

00:22:20,420 --> 00:22:18,270

that discovery you know can either break

541

00:22:22,430 --> 00:22:20,430

people or it can challenge them to be

542

00:22:24,380 --> 00:22:22,440

you know to be better and for you you've

543

00:22:26,690 --> 00:22:24,390

you've written this you know this is

544

00:22:29,180 --> 00:22:26,700

this work which you know has been

545

00:22:33,830 --> 00:22:29,190

probably more I'll receive than any

546

00:22:36,350 --> 00:22:33,840

science slash memoir I've I think ever

547

00:22:39,110 --> 00:22:36,360

I've ever seen you know I think it was

548

00:22:45,590 --> 00:22:39,120

also an astronomy magazine which is an

549

00:22:47,390 --> 00:22:45,600

amazing publication like are are you

550

00:22:48,800 --> 00:22:47,400

afraid and yeah this is more this is

551  
00:22:51,740 --> 00:22:48,810  
more of a personal question on this but

552  
00:22:53,570 --> 00:22:51,750  
still ties into the main like are you

553  
00:22:55,520 --> 00:22:53,580  
afraid that the idea or the trappings of

554  
00:22:57,680 --> 00:22:55,530  
the success from the book may still lead

555  
00:22:59,840 --> 00:22:57,690  
you to that you know to that same that

556  
00:23:02,810 --> 00:22:59,850  
same itch or yeah you somebody that's

557  
00:23:05,270 --> 00:23:02,820  
very they're very good yeah I mean one

558  
00:23:07,790 --> 00:23:05,280  
of my friends who is uh she's she's kind

559  
00:23:10,760 --> 00:23:07,800  
of a social media maven that I know and

560  
00:23:12,590 --> 00:23:10,770  
she's been keeping track and posting all

561  
00:23:15,200 --> 00:23:12,600  
my stuff on Twitter cuz I just I don't

562  
00:23:17,480 --> 00:23:15,210  
have the time for it and it's just such

563  
00:23:18,890 --> 00:23:17,490

a such a wonderful person but she said

564

00:23:21,080 --> 00:23:18,900

you know with like all these accolades

565

00:23:24,110 --> 00:23:21,090

coming in from nature science science

566

00:23:25,280 --> 00:23:24,120

news and Forbes everywhere you know

567

00:23:26,810 --> 00:23:25,290

she's like you're gonna have to add

568

00:23:29,540 --> 00:23:26,820

another accolade to your title

569

00:23:30,920 --> 00:23:29,550

best-selling author and I said you know

570

00:23:32,900 --> 00:23:30,930

and that's exactly what you're asked and

571

00:23:35,510 --> 00:23:32,910

I think you know I said to her you know

572

00:23:37,130 --> 00:23:35,520

what that that's you know nice of you to

573

00:23:39,650 --> 00:23:37,140

say but I think that's another idol I

574

00:23:42,020 --> 00:23:39,660

think that literally would be so

575

00:23:44,270 --> 00:23:42,030

hypocritical for me to say I just want

576

00:23:45,830 --> 00:23:44,280

to be a best-selling author and have

577

00:23:48,680 --> 00:23:45,840

that on my you know if that was all it

578

00:23:50,960 --> 00:23:48,690

was about you know I looked back at you

579

00:23:52,700 --> 00:23:50,970

know an author like me who got a tiny

580

00:23:55,040 --> 00:23:52,710

advance you know from their publisher

581

00:23:56,810 --> 00:23:55,050

but it really wasn't about the money it

582

00:23:59,090 --> 00:23:56,820

was about you know kind of taking on the

583

00:24:00,830 --> 00:23:59,100

sacred cow and telling the story that's

584

00:24:02,690 --> 00:24:00,840

so fascinating about how he came to

585

00:24:04,700 --> 00:24:02,700

understand our place in the universe and

586

00:24:08,780 --> 00:24:04,710

how we succumb to the same kind of

587

00:24:11,270 --> 00:24:08,790

biases and forces that that that

588

00:24:13,940 --> 00:24:11,280

you know even made people like Galileo

589

00:24:16,100 --> 00:24:13,950

make mistakes so I want that to be the

590

00:24:18,440 --> 00:24:16,110

takeaway not not you know oh this is how

591

00:24:21,920 --> 00:24:18,450

it performed or this is you know that

592

00:24:25,760 --> 00:24:21,930

the metrics for success don't lie in you

593

00:24:26,680 --> 00:24:25,770

know sales pitches or a rule or even the

594

00:24:29,270 --> 00:24:26,690

Nobel Prize

595

00:24:30,590 --> 00:24:29,280

have you considered either public

596

00:24:32,450 --> 00:24:30,600

speaking or motivational speaking

597

00:24:34,970 --> 00:24:32,460

because I know that that is it's it's a

598

00:24:39,020 --> 00:24:34,980

very big industry and you do have a very

599

00:24:42,590 --> 00:24:39,030

good basis for at least being able to

600

00:24:44,870 --> 00:24:42,600

teach people and your best way to put it

601  
00:24:46,280 --> 00:24:44,880  
you're walking talking demonstration of

602  
00:24:50,150 --> 00:24:46,290  
how to be able to overcome adversity and

603  
00:24:51,770 --> 00:24:50,160  
and and you know grow from it in a

604  
00:24:54,220 --> 00:24:51,780  
positive light and not just kind of

605  
00:24:57,080 --> 00:24:54,230  
wither away and let let let setbacks

606  
00:24:58,940 --> 00:24:57,090  
you'll end them as it were yeah it's

607  
00:25:01,580 --> 00:24:58,950  
very kind of you to say you know I think

608  
00:25:03,970 --> 00:25:01,590  
I'll be interested to see how the you

609  
00:25:06,110 --> 00:25:03,980  
know how the public you know does

610  
00:25:08,780 --> 00:25:06,120  
integrate the messages that I'm

611  
00:25:10,790 --> 00:25:08,790  
providing in the book it's it's not it's

612  
00:25:12,380 --> 00:25:10,800  
not you know every day that people like

613  
00:25:15,050 --> 00:25:12,390

to have cosmologists you know come and

614

00:25:17,870 --> 00:25:15,060

give a give a talk to a bunch of you

615

00:25:20,240 --> 00:25:17,880

know people and a self-help for what I

616

00:25:21,800 --> 00:25:20,250

know I'm certainly open to it I think

617

00:25:23,750 --> 00:25:21,810

personal growth is one the most

618

00:25:27,350 --> 00:25:23,760

challenging but important things that

619

00:25:29,150 --> 00:25:27,360

people can do and not a lot of I always

620

00:25:30,230 --> 00:25:29,160

forget if I'm right brain or left I

621

00:25:32,030 --> 00:25:30,240

don't know I don't remember which one

622

00:25:34,280 --> 00:25:32,040

was which but but a lot of the technical

623

00:25:36,380 --> 00:25:34,290

ones not the artistic spiritual one I

624

00:25:39,110 --> 00:25:36,390

think they are not in touched but

625

00:25:41,060 --> 00:25:39,120

they're the greatness of their you know

626

00:25:43,490 --> 00:25:41,070

personal character but also their

627

00:25:45,560 --> 00:25:43,500

weaknesses and foibles and so if I could

628

00:25:48,230 --> 00:25:45,570

speak to people like that and kind of

629

00:25:51,110 --> 00:25:48,240

encourage them along the path to you

630

00:25:53,390 --> 00:25:51,120

know to acceptance of their limitations

631

00:25:55,460 --> 00:25:53,400

but also you know kind of striving for

632

00:25:57,560 --> 00:25:55,470

the proper proper Amish prints and

633

00:25:58,970 --> 00:25:57,570

dealing with adversity as you say that

634

00:26:00,500 --> 00:25:58,980

would be a great accomplishment you know

635

00:26:02,690 --> 00:26:00,510

I've given one of these TEDx talks

636

00:26:06,440 --> 00:26:02,700

before or and I I have a video on

637

00:26:08,330 --> 00:26:06,450

YouTube now online university called

638

00:26:11,600 --> 00:26:08,340

Prager University that got a million

639

00:26:13,700 --> 00:26:11,610

hits in three days so you know I'm very

640

00:26:15,890 --> 00:26:13,710

interested yeah I'm very interested in

641

00:26:18,440 --> 00:26:15,900

in reaching and communicating to the

642

00:26:21,080 --> 00:26:18,450

public the ideas that I've been bouncing

643

00:26:22,460 --> 00:26:21,090

around my brain for the last twenty

644

00:26:26,180 --> 00:26:22,470

years or so

645

00:26:28,730 --> 00:26:26,190

and if you're looking at the next 20

646

00:26:31,850 --> 00:26:28,740

years where do you see the the it's kind

647

00:26:32,630 --> 00:26:31,860

of it's like what it's like asking so

648

00:26:35,030 --> 00:26:32,640

what do you think they're gonna discover

649

00:26:38,740 --> 00:26:35,040

in 20 years like we already be able to

650

00:26:40,880 --> 00:26:38,750

move through dimensions or you know

651  
00:26:42,590 --> 00:26:40,890  
there's a lot that's happening in

652  
00:26:44,540 --> 00:26:42,600  
physics you know it's exponentially

653  
00:26:46,190 --> 00:26:44,550  
growing and it's hard to predict what's

654  
00:26:47,780 --> 00:26:46,200  
gonna happen in five years little over

655  
00:26:51,710 --> 00:26:47,790  
20 years I would say we're gonna

656  
00:26:54,290 --> 00:26:51,720  
understand and map out and and and and

657  
00:26:56,660 --> 00:26:54,300  
and explore the universe the solar

658  
00:26:58,700 --> 00:26:56,670  
system much more than we can comprehend

659  
00:27:00,430 --> 00:26:58,710  
right now I hope that people don't fall

660  
00:27:02,960 --> 00:27:00,440  
into the trap of you know kind of

661  
00:27:05,150 --> 00:27:02,970  
accepting science only if it leads to

662  
00:27:08,230 --> 00:27:05,160  
technology I think there's there's a

663  
00:27:12,920 --> 00:27:08,240

virtue in pure science just for its own

664

00:27:14,360 --> 00:27:12,930

purpose without regard do you know

665

00:27:17,840 --> 00:27:14,370

whether or not it can produce a better

666

00:27:21,020 --> 00:27:17,850

phone or or a microwave oven or sound

667

00:27:21,790 --> 00:27:21,030

mixer it's it's about learning some cool

668

00:27:25,610 --> 00:27:21,800

[h\_\_\h]

669

00:27:29,600 --> 00:27:25,620

I've my favorite thing is small either

670

00:27:31,310 --> 00:27:29,610

listening to like just science podcasts

671

00:27:35,420 --> 00:27:31,320

or lectures I've listened to a few of

672

00:27:37,190 --> 00:27:35,430

yours before the dealing with

673

00:27:39,440 --> 00:27:37,200

astrophysics can be a very daunting

674

00:27:41,660 --> 00:27:39,450

subject people will think that it's

675

00:27:44,240 --> 00:27:41,670

astronomy astrology and a little bit of

676  
00:27:48,950 --> 00:27:44,250  
you know physics mixed in there because

677  
00:27:50,990 --> 00:27:48,960  
it has that word right there is the

678  
00:27:53,480 --> 00:27:51,000  
standard definition to you to you what

679  
00:27:56,680 --> 00:27:53,490  
is it that you do like how do you see

680  
00:28:00,230 --> 00:27:56,690  
your work in the most abstract

681  
00:28:02,960 --> 00:28:00,240  
high-minded way possible yeah I mean

682  
00:28:05,810 --> 00:28:02,970  
what I'm trying to do is to illustrate

683  
00:28:09,080 --> 00:28:05,820  
how we build the instruments that come

684  
00:28:10,880 --> 00:28:09,090  
to give us the interpretations that we

685  
00:28:13,400 --> 00:28:10,890  
now have about the universe so in other

686  
00:28:15,380 --> 00:28:13,410  
words you know what are the tools that

687  
00:28:17,450 --> 00:28:15,390  
astronomers used from the time of

688  
00:28:20,840 --> 00:28:17,460

Galileo it's really the first person to

689

00:28:24,100 --> 00:28:20,850

use a tool to see the heavens and and

690

00:28:27,740 --> 00:28:24,110

how those advances in technology in

691

00:28:30,350 --> 00:28:27,750

computation in and then allied with

692

00:28:32,630 --> 00:28:30,360

theoretical progress how that can really

693

00:28:34,220 --> 00:28:32,640

take us to the BET to the to the you

694

00:28:36,260 --> 00:28:34,230

know the promised land of really going

695

00:28:38,210 --> 00:28:36,270

back as far as you can

696

00:28:40,370 --> 00:28:38,220

and hopefully someday answering the

697

00:28:42,530 --> 00:28:40,380

question that I would like to ask you

698

00:28:44,930 --> 00:28:42,540

know God or you know other nature which

699

00:28:47,150 --> 00:28:44,940

is what happened 15 minutes before the

700

00:28:49,190 --> 00:28:47,160

Big Bang I don't think that that

701  
00:28:51,590 --> 00:28:49,200  
question is really understood right now

702  
00:28:53,360 --> 00:28:51,600  
I think it is a well posed question

703  
00:28:55,490 --> 00:28:53,370  
despite what the late great Stephen

704  
00:28:57,560 --> 00:28:55,500  
Hawking said and I think that there's a

705  
00:28:59,330 --> 00:28:57,570  
chance we can understand what did happen

706  
00:29:00,890 --> 00:28:59,340  
for really the first time in human

707  
00:29:02,810 --> 00:29:00,900  
history and I think that's an exciting

708  
00:29:07,040 --> 00:29:02,820  
exciting time to be alive

709  
00:29:09,020 --> 00:29:07,050  
I'm a very big I'm not even for a big

710  
00:29:14,270 --> 00:29:09,030  
proponent I believe that most likely

711  
00:29:16,040 --> 00:29:14,280  
that we're probably a 3d hologram on the

712  
00:29:19,160 --> 00:29:16,050  
surface of 40 black hole that's kind of

713  
00:29:20,480 --> 00:29:19,170

my maya standpoint and we're 15 minutes

714

00:29:22,280 --> 00:29:20,490

ago I think we're just like belched out

715

00:29:24,470 --> 00:29:22,290

into this universe from you know

716

00:29:28,910 --> 00:29:24,480

wherever we came from I could get way

717

00:29:31,100 --> 00:29:28,920

wrong but it seems the most logical with

718

00:29:33,890 --> 00:29:31,110

with a limited amount of inter and train

719

00:29:37,180 --> 00:29:33,900

that I have what's your take on it well

720

00:29:39,919 --> 00:29:37,190

it's kind of your you know crazy a hub

721

00:29:43,040 --> 00:29:39,929

my pictures are alternatives to the

722

00:29:46,190 --> 00:29:43,050

inflationary model that posit that there

723

00:29:48,500 --> 00:29:46,200

was not indeed just just nothingness

724

00:29:50,660 --> 00:29:48,510

before the Big Bang but instead there

725

00:29:53,390 --> 00:29:50,670

was another universe that existed before

726

00:29:55,900 --> 00:29:53,400

that collapse upon itself and that the

727

00:29:59,090 --> 00:29:55,910

fiery death throes of that universe

728

00:30:00,980 --> 00:29:59,100

provided the raw materials the the iron

729

00:30:03,680 --> 00:30:00,990

and the coke and everything else that

730

00:30:06,620 --> 00:30:03,690

was needed to produce the universe that

731

00:30:07,940 --> 00:30:06,630

we inhabit today and there's some

732

00:30:10,669 --> 00:30:07,950

compelling reasons to think that might

733

00:30:12,740 --> 00:30:10,679

be true and the tools and technology

734

00:30:14,419 --> 00:30:12,750

that we're working on may indeed answer

735

00:30:16,549 --> 00:30:14,429

that question you know in my

736

00:30:18,950 --> 00:30:16,559

professional lifetime and I'm working to

737

00:30:23,419 --> 00:30:18,960

be you know leaving the team that will

738

00:30:25,100 --> 00:30:23,429

accomplish that and with your new

739

00:30:28,180 --> 00:30:25,110

experiments and works that are going to

740

00:30:31,640 --> 00:30:28,190

be coming up in the next couple of years

741

00:30:33,770 --> 00:30:31,650

how can people learn more about it so we

742

00:30:35,780 --> 00:30:33,780

have we've constructed a telescope

743

00:30:37,160 --> 00:30:35,790

called the Simon's Observatory or we've

744

00:30:39,110 --> 00:30:37,170

constructed a collaboration called

745

00:30:42,380 --> 00:30:39,120

Simon's Observatory and you can go to

746

00:30:44,540 --> 00:30:42,390

Simon's Observatory org in order to

747

00:30:46,909 --> 00:30:44,550

follow what we're doing there my own

748

00:30:49,490 --> 00:30:46,919

personal work is is that my website

749

00:30:51,530 --> 00:30:49,500

Bryan Keating com

750

00:30:54,800 --> 00:30:51,540

and we've also set up a community called

751  
00:30:57,260 --> 00:30:54,810  
losing the Nobel Prize org for people to

752  
00:30:59,710 --> 00:30:57,270  
advocate for change and Reformation of

753  
00:31:03,320 --> 00:30:59,720  
the Nobel Prize so that it can someday

754  
00:31:06,350 --> 00:31:03,330  
represent the the noble institution I

755  
00:31:10,910 --> 00:31:06,360  
think that Alfred Nobel desired for the

756  
00:31:12,170 --> 00:31:10,920  
benefit of all mankind and I like that I

757  
00:31:14,900 --> 00:31:12,180  
don't know that everyone else out there

758  
00:31:16,280 --> 00:31:14,910  
like that yeah and I know that you've

759  
00:31:17,570 --> 00:31:16,290  
been extremely patient with our

760  
00:31:19,220 --> 00:31:17,580  
technical difficulties you have to

761  
00:31:21,020 --> 00:31:19,230  
overcome adversity and we still have to

762  
00:31:23,120 --> 00:31:21,030  
make it happen that's right I will edit

763  
00:31:26,510 --> 00:31:23,130

this down I'll make sure you get a nice

764

00:31:30,560 --> 00:31:26,520

succinct twenty thirty minutes okay

765

00:31:32,660 --> 00:31:30,570

interview from this and I know you but

766

00:31:35,270 --> 00:31:32,670

everything you say at least to me is

767

00:31:37,700 --> 00:31:35,280

gold because we we have had very few

768

00:31:39,740 --> 00:31:37,710

actual scientists on the show nine and

769

00:31:42,830 --> 00:31:39,750

you would be the first astrophysicists

770

00:31:46,640 --> 00:31:42,840

we've had and for my own personal views

771

00:31:48,350 --> 00:31:46,650

is like this is cool okay I very much

772

00:31:51,620 --> 00:31:48,360

enjoy talking with you Chris and I'm

773

00:31:53,540 --> 00:31:51,630

gonna continue to support you and look

774

00:31:56,360 --> 00:31:53,550

forward to maybe another interview

775

00:31:58,850 --> 00:31:56,370

someday as well let me let me iron out

776

00:32:01,700 --> 00:31:58,860

the the new preamp and the compressor

777

00:32:04,280 --> 00:32:01,710

and the because the connections are the

778

00:32:05,630 --> 00:32:04,290

same it's just you know think things

779

00:32:08,930 --> 00:32:05,640

happen and just have to roll with the

780

00:32:10,460 --> 00:32:08,940

punches as it were absolutely oh all

781

00:32:12,380 --> 00:32:10,470

right let you go I know you've got a

782

00:32:15,980 --> 00:32:12,390

long night ahead of you and yeah thank

783

00:32:17,560 --> 00:32:15,990

you very much thanks Chris oh talking to

784

00:32:25,060 --> 00:32:17,570

you and have a wonderful night Musil

785

00:32:31,580 --> 00:32:29,560

ladies and gentlemen we are back revived

786

00:32:34,280 --> 00:32:31,590

and you're probably wondering what the

787

00:32:40,250 --> 00:32:34,290

heck has been going on well I said well

788

00:32:43,250 --> 00:32:40,260

well I can tell you we have a dedication

789

00:32:45,020 --> 00:32:43,260

to try and improve the show and there

790

00:32:49,870 --> 00:32:45,030

has been some I'm gonna say some major

791

00:32:51,740 --> 00:32:49,880

investments in you know some equipment

792

00:32:55,070 --> 00:32:51,750

that are supposed to be able to bring us

793

00:32:57,380 --> 00:32:55,080

more of a professional sound and

794

00:33:01,160 --> 00:32:57,390

unfortunately it seems that all of the

795

00:33:02,810 --> 00:33:01,170

last 30 hours of non-stop work that I've

796

00:33:05,450 --> 00:33:02,820

put into the new studio and testing and

797

00:33:06,950 --> 00:33:05,460

apparently did not work so now I'm

798

00:33:08,870 --> 00:33:06,960

actually just back onto the old mixer

799

00:33:10,340 --> 00:33:08,880

I'm actually recording the century the

800

00:33:13,730 --> 00:33:10,350

same way we did when we first started

801  
00:33:16,250 --> 00:33:13,740  
the show so there you go and what better

802  
00:33:18,370 --> 00:33:16,260  
person able to kind of invite back on is

803  
00:33:21,640 --> 00:33:18,380  
the second part of our little program

804  
00:33:23,750 --> 00:33:21,650  
one of our favorite and biggest guests

805  
00:33:25,550 --> 00:33:23,760  
and a good friend of the show and

806  
00:33:28,700 --> 00:33:25,560  
somebody that I just love talking to

807  
00:33:31,220 --> 00:33:28,710  
because he's awesome mr. Bernie Taylor

808  
00:33:34,570 --> 00:33:31,230  
Bernie how you doing I'm doing great

809  
00:33:36,920 --> 00:33:34,580  
Chris thanks for having me on the show

810  
00:33:38,630 --> 00:33:36,930  
everybody should know Brian I was

811  
00:33:40,730 --> 00:33:38,640  
supposed to be back-to-back on the same

812  
00:33:43,460 --> 00:33:40,740  
show together I'm in synchrony and do

813  
00:33:46,070 --> 00:33:43,470

some dialogue he is a great book loser

814

00:33:47,780 --> 00:33:46,080

Nobel I preach I really appreciate his

815

00:33:50,210 --> 00:33:47,790

work that the effort he put into it and

816

00:33:53,270 --> 00:33:50,220

we're gonna pick up on some of those

817

00:33:56,420 --> 00:33:53,280

themes from a different perspective as

818

00:33:59,300 --> 00:33:56,430

we go forward today and I think I

819

00:34:00,710 --> 00:33:59,310

figured out what the echo problem was so

820

00:34:04,310 --> 00:34:00,720

I think you should are you hearing echo

821

00:34:05,630 --> 00:34:04,320

on my side sort of okay well I'm not

822

00:34:07,670 --> 00:34:05,640

getting the clipping that I was before

823

00:34:09,980 --> 00:34:07,680

on the line so I haven't actually used

824

00:34:12,200 --> 00:34:09,990

this mixer for about a year and a half

825

00:34:13,790 --> 00:34:12,210

and it's kind of like going you know

826

00:34:15,620 --> 00:34:13,800

like it when you move back in to your

827

00:34:17,480 --> 00:34:15,630

parents house or you go to visit your

828

00:34:19,010 --> 00:34:17,490

you see your old room and nothing's

829

00:34:22,340 --> 00:34:19,020

changed but you don't remember where

830

00:34:25,220 --> 00:34:22,350

anything is but you - well you sort of

831

00:34:27,320 --> 00:34:25,230

have a higher higher pitch version of

832

00:34:31,610 --> 00:34:27,330

Darth Vader at the moment I'm okay with

833

00:34:34,639 --> 00:34:31,620

it well I I will attempt to not invite

834

00:34:36,290 --> 00:34:34,649

people over to the dark side but I hope

835

00:34:37,550 --> 00:34:36,300

that everyone does enjoy

836

00:34:39,530 --> 00:34:37,560

the presentation because I know that you

837

00:34:41,000 --> 00:34:39,540

have mentioned the cosmic egg and I

838

00:34:41,599 --> 00:34:41,010

think we kind of mentioned it on the

839

00:34:46,820 --> 00:34:41,609

show

840

00:34:48,889 --> 00:34:46,830

I like Brian's very good at explaining

841

00:34:52,579 --> 00:34:48,899

things obviously as a professor you have

842

00:34:54,349 --> 00:34:52,589

to you have to be her or he probably

843

00:34:58,280 --> 00:34:54,359

wouldn't have been able to get to the

844

00:35:01,070 --> 00:34:58,290

level he is at I can understand the core

845

00:35:02,930 --> 00:35:01,080

concepts you know the beginning and

846

00:35:04,250 --> 00:35:02,940

where it came from which is why I wanted

847

00:35:07,370 --> 00:35:04,260

to be able to talk to you about it

848

00:35:09,440 --> 00:35:07,380

because it's interesting as hell to me

849

00:35:11,300 --> 00:35:09,450

what why don't you kind of roll us into

850

00:35:13,700 --> 00:35:11,310

it and we can we can you know take

851  
00:35:14,589 --> 00:35:13,710  
things to get things going take things

852  
00:35:16,790 --> 00:35:14,599  
off

853  
00:35:17,990 --> 00:35:16,800  
absolutely Brian's brilliant so this is

854  
00:35:20,089 --> 00:35:18,000  
a tough act to follow

855  
00:35:22,670 --> 00:35:20,099  
um we're gonna we're gonna jump into the

856  
00:35:24,710 --> 00:35:22,680  
cosmic gag as a singularity and the big

857  
00:35:26,390 --> 00:35:24,720  
bet we talk about the Big Bang which

858  
00:35:29,030 --> 00:35:26,400  
everything came from something and

859  
00:35:33,140 --> 00:35:29,040  
there's that striking of the match of

860  
00:35:35,810 --> 00:35:33,150  
what Brian was seeking to explore but

861  
00:35:38,000 --> 00:35:35,820  
from before we had science as we know

862  
00:35:39,950 --> 00:35:38,010  
today we've had that singularity that

863  
00:35:42,859 --> 00:35:39,960

big explosion and we call it the cosmic

864

00:35:45,440 --> 00:35:42,869

egg and people around the world have

865

00:35:47,720 --> 00:35:45,450

this myth this myth of singularity and

866

00:35:50,030 --> 00:35:47,730

the Dogon of Africa the people have the

867

00:35:53,900 --> 00:35:50,040

cirrus be the people Norse people the

868

00:35:56,300 --> 00:35:53,910

Vedic people who are in now on India the

869

00:35:58,849 --> 00:35:56,310

Orphic Greek the Chinese Egyptians and

870

00:36:02,089 --> 00:35:58,859

the Chinese this is an image from

871

00:36:04,670 --> 00:36:02,099

ancient Chinese that's Penghu and Pangu

872

00:36:06,530 --> 00:36:04,680

breaks through from the cosmic egg to

873

00:36:08,120 --> 00:36:06,540

create order and you can see kind of the

874

00:36:11,050 --> 00:36:08,130

yin and yang in that image and that is

875

00:36:17,089 --> 00:36:11,060

the origin of the Chinese yin and yang

876

00:36:21,890 --> 00:36:17,099

so it's a it's a universal myth but it's

877

00:36:23,270 --> 00:36:21,900

also a universal image and this is I

878

00:36:25,849 --> 00:36:23,280

would suggest that this is one of the

879

00:36:27,530 --> 00:36:25,859

earliest cosmic eggs in South Africa

880

00:36:29,570 --> 00:36:27,540

there are ostrich shells dating to about

881

00:36:31,490 --> 00:36:29,580

60,000 years ago it's a few things

882

00:36:32,990 --> 00:36:31,500

unique about these ostrich shells one is

883

00:36:35,690 --> 00:36:33,000

they have some of the oldest patterns

884

00:36:40,190 --> 00:36:35,700

that we've that humans have made and

885

00:36:42,770 --> 00:36:40,200

these patterns are decorated shells 25

886

00:36:45,109 --> 00:36:42,780

shells they were broken and then they

887

00:36:47,420 --> 00:36:45,119

were thrown into the flames and that's

888

00:36:49,849 --> 00:36:47,430

why we have the different discoloration

889

00:36:53,660 --> 00:36:49,859

on the same shells

890

00:36:55,880 --> 00:36:53,670

so it's possible that this could be one

891

00:36:59,630 --> 00:36:55,890

of the symbols for that original cosmic

892

00:37:02,329 --> 00:36:59,640

egg you had me on the show a few weeks

893

00:37:06,140 --> 00:37:02,339

ago a few months ago and we had this

894

00:37:08,180 --> 00:37:06,150

masked man here this masked cosmic man

895

00:37:11,239 --> 00:37:08,190

and in his right hand he holds the

896

00:37:14,150 --> 00:37:11,249

cosmic egg and his left hand is against

897

00:37:19,609 --> 00:37:14,160

the wall and he's the mask is of an

898

00:37:21,170 --> 00:37:19,619

eagle on one side and a the eye of a man

899

00:37:23,449 --> 00:37:21,180

and the other you can see his chip you

900

00:37:25,339 --> 00:37:23,459

can see his chin and his left leg is

901  
00:37:27,380 --> 00:37:25,349  
raised and that left hand that's against

902  
00:37:29,150 --> 00:37:27,390  
the wall has the appearance of a

903  
00:37:32,479 --> 00:37:29,160  
feathered bird which is quite

904  
00:37:34,309 --> 00:37:32,489  
interesting and we're going to go

905  
00:37:39,469 --> 00:37:34,319  
forwards so we're going to go jump

906  
00:37:42,410 --> 00:37:39,479  
forwards now to the origin of the Big

907  
00:37:44,299 --> 00:37:42,420  
Bang what started as the hypothesis of

908  
00:37:46,880 --> 00:37:44,309  
the primeval atom and Brian talks about

909  
00:37:49,180 --> 00:37:46,890  
that illumise blood on his book by the

910  
00:37:54,410 --> 00:37:49,190  
belgian priests priests father

911  
00:37:56,989 --> 00:37:54,420  
georges the Mantor lament er was a pure

912  
00:38:00,140 --> 00:37:56,999  
physicist and mathematician physicist

913  
00:38:04,809 --> 00:38:00,150

and astronomer he of course was a devout

914

00:38:07,999 --> 00:38:04,819

Catholic but he didn't seek to prove

915

00:38:10,519 --> 00:38:08,009

religion through science and he came out

916

00:38:12,469 --> 00:38:10,529

with the idea of the of this this

917

00:38:14,539 --> 00:38:12,479

primary atom which was later called the

918

00:38:17,359 --> 00:38:14,549

Big Bang and you can see him here across

919

00:38:19,670 --> 00:38:17,369

with where them Einstein and Einstein

920

00:38:22,029 --> 00:38:19,680

said said that as his um math is

921

00:38:26,180 --> 00:38:22,039

incredible but his physics are atrocious

922

00:38:27,859 --> 00:38:26,190

and Pope Pius the 12th came out with

923

00:38:31,160 --> 00:38:27,869

this at the same time as the primeval

924

00:38:32,870 --> 00:38:31,170

atom and he said this is now proof that

925

00:38:35,390 --> 00:38:32,880

there was a creation therefore there

926  
00:38:37,939 --> 00:38:35,400  
must be a creator and the mantle came

927  
00:38:39,859 --> 00:38:37,949  
out against that and said I'm not trying

928  
00:38:41,509 --> 00:38:39,869  
to prove a creator and he's trying to

929  
00:38:44,859 --> 00:38:41,519  
distance himself from the Pope I'm

930  
00:38:47,299 --> 00:38:44,869  
trying to take us forward in science

931  
00:38:49,430 --> 00:38:47,309  
which is it's just fascinating you know

932  
00:38:51,170 --> 00:38:49,440  
people you know moping Rome about the

933  
00:38:53,329 --> 00:38:51,180  
story of Galileo and the Catholic the

934  
00:38:55,519 --> 00:38:53,339  
Pope and all that sort of stuff 'la

935  
00:38:59,599 --> 00:38:55,529  
mansion made up for it in spades because

936  
00:39:02,160 --> 00:38:59,609  
he created the this modern idea of the

937  
00:39:06,120 --> 00:39:02,170  
cosmic egg I'm sorry of the the big

938  
00:39:08,970 --> 00:39:06,130

however this big bang that he came up

939

00:39:12,839 --> 00:39:08,980

that the idea itself came from the

940

00:39:15,539 --> 00:39:12,849

cosmic egg so it goes back to that

941

00:39:18,210 --> 00:39:15,549

eternal question what happened first the

942

00:39:20,279 --> 00:39:18,220

chicken or the egg that's we're asking

943

00:39:23,789 --> 00:39:20,289

you know before the big was there

944

00:39:26,370 --> 00:39:23,799

something before the Big Bang and in the

945

00:39:28,319 --> 00:39:26,380

so called and the approach that Brian's

946

00:39:30,420 --> 00:39:28,329

taken in court and no matter is that

947

00:39:33,089 --> 00:39:30,430

there was a singularity that that

948

00:39:35,309 --> 00:39:33,099

everything came from but that's the same

949

00:39:37,650 --> 00:39:35,319

question that we have you know was the

950

00:39:40,230 --> 00:39:37,660

egg was the chicken and the egg or is

951  
00:39:43,079 --> 00:39:40,240  
the egg and the chicken it's a and so

952  
00:39:44,910 --> 00:39:43,089  
when people or people from our distant

953  
00:39:47,490 --> 00:39:44,920  
past and ancients when they sought to

954  
00:39:52,859 --> 00:39:47,500  
resolve this question of the chicken and

955  
00:39:55,950 --> 00:39:52,869  
the egg they also took that to what came

956  
00:39:57,660 --> 00:39:55,960  
first man or the universe or man's

957  
00:39:59,220 --> 00:39:57,670  
person could be a universe if we don't

958  
00:40:01,769 --> 00:39:59,230  
perceive it or a universe for us at

959  
00:40:03,809 --> 00:40:01,779  
least the answer is of course they can

960  
00:40:07,380 --> 00:40:03,819  
be universe without us but they ask

961  
00:40:09,390 --> 00:40:07,390  
these questions and we have this we have

962  
00:40:11,069 --> 00:40:09,400  
this man he rides the horse we saw that

963  
00:40:12,210 --> 00:40:11,079

one late earlier we're gonna jump

964

00:40:14,970 --> 00:40:12,220

through some of these slides the

965

00:40:18,329 --> 00:40:14,980

transformation again we have this man

966

00:40:20,400 --> 00:40:18,339

with the cosmic egg in one arm is his

967

00:40:23,370 --> 00:40:20,410

front right arm he holds the egg and the

968

00:40:25,799 --> 00:40:23,380

back rear arm he has that that is

969

00:40:29,490 --> 00:40:25,809

feathered and if we go back go back to

970

00:40:32,220 --> 00:40:29,500

the cosmic man we saw earlier the same

971

00:40:34,650 --> 00:40:32,230

feather rear left hand his feathered

972

00:40:38,490 --> 00:40:34,660

which is against the wall and he holds

973

00:40:39,990 --> 00:40:38,500

he holds the egg in his right hand but

974

00:40:42,660 --> 00:40:40,000

it's a different right hand than we just

975

00:40:44,160 --> 00:40:42,670

saw this man of the transformation so

976

00:40:45,569 --> 00:40:44,170

we'll take a look back at that so we

977

00:40:48,120 --> 00:40:45,579

have this we have a story of a man who's

978

00:40:52,079 --> 00:40:48,130

carrying the egg well there's this

979

00:40:53,460 --> 00:40:52,089

cosmic egg and we're gonna jump jack

980

00:40:58,109 --> 00:40:53,470

we're gonna jump down here to another

981

00:41:02,339 --> 00:40:58,119

one and well on the same panel we have a

982

00:41:04,859 --> 00:41:02,349

great awk a great awk is a now extinct

983

00:41:08,009 --> 00:41:04,869

flightless bird something like a penguin

984

00:41:10,049 --> 00:41:08,019

but it's not a penguin and it's the only

985

00:41:12,480 --> 00:41:10,059

bird or other than the man who becomes

986

00:41:16,530 --> 00:41:12,490

an eagle and also an eagle itself he's

987

00:41:18,870 --> 00:41:16,540

the only bird on this panel

988

00:41:20,280 --> 00:41:18,880

and that the size of the the man was

989

00:41:22,590 --> 00:41:20,290

holding the cosmic egg in his right hand

990

00:41:24,810 --> 00:41:22,600

if you look to base fundamentally the

991

00:41:27,570 --> 00:41:24,820

size of his hands about five inches well

992

00:41:29,580 --> 00:41:27,580

the the the egg of the Great Auk was

993

00:41:33,510 --> 00:41:29,590

also about five inches so there's a

994

00:41:38,310 --> 00:41:33,520

commonality between the two this this

995

00:41:40,110 --> 00:41:38,320

Great Auk is has a cosmological

996

00:41:42,330 --> 00:41:40,120

significance as well which we're gonna

997

00:41:44,280 --> 00:41:42,340

we're gonna get onto we're just run

998

00:41:45,390 --> 00:41:44,290

through some of these slides that so we

999

00:41:48,870 --> 00:41:45,400

can get in perspective we have the

1000

00:41:51,030 --> 00:41:48,880

dolphin spinning dolphin we have the

1001  
00:41:52,980 --> 00:41:51,040  
theory on trip was the that man we saw

1002  
00:41:54,690 --> 00:41:52,990  
earlier with the cosmic egg he had picks

1003  
00:41:59,400 --> 00:41:54,700  
up the tail of the dolphin of the

1004  
00:42:02,220 --> 00:41:59,410  
dolphin we have the monk seal mentoring

1005  
00:42:05,100 --> 00:42:02,230  
monk seal we have the swimmer going

1006  
00:42:06,900 --> 00:42:05,110  
across the panel we have the red haired

1007  
00:42:09,570 --> 00:42:06,910  
man at one end which is the southern end

1008  
00:42:11,660 --> 00:42:09,580  
and the horse we saw earlier was on the

1009  
00:42:14,910 --> 00:42:11,670  
on the northern end of the panel and

1010  
00:42:17,100 --> 00:42:14,920  
this if anybody's catching we did this

1011  
00:42:18,990 --> 00:42:17,110  
present these part these slides in the

1012  
00:42:20,460 --> 00:42:19,000  
presentation a few months ago people go

1013  
00:42:22,230 --> 00:42:20,470

back to review them and see where we

1014

00:42:25,680 --> 00:42:22,240

were but it was over an over an hour

1015

00:42:28,400 --> 00:42:25,690

long and we have the man he's being

1016

00:42:30,120 --> 00:42:28,410

lifted by the dolphin really cool image

1017

00:42:32,780 --> 00:42:30,130

reminiscent of something you might see

1018

00:42:35,550 --> 00:42:32,790

in cartoons today or SeaWorld and

1019

00:42:37,830 --> 00:42:35,560

there's the giraffe on this on the

1020

00:42:41,940 --> 00:42:37,840

southern end of the panel we have the

1021

00:42:43,170 --> 00:42:41,950

Barbary ape fascinating image we have

1022

00:42:45,990 --> 00:42:43,180

the Lions and we actually have the

1023

00:42:50,490 --> 00:42:46,000

lioness looking up to the lion we have

1024

00:42:56,160 --> 00:42:50,500

the Bears the mother and her two cubs we

1025

00:42:59,910 --> 00:42:56,170

have the reptile the lizard we have the

1026

00:43:04,020 --> 00:42:59,920

woman with a distressed face or

1027

00:43:05,760 --> 00:43:04,030

appearance now let's jump to that big

1028

00:43:07,410 --> 00:43:05,770

slide that sly be surely this one's

1029

00:43:10,050 --> 00:43:07,420

important and this ties back into our

1030

00:43:13,080 --> 00:43:10,060

our concept of the Big Bang and a cosmic

1031

00:43:14,460 --> 00:43:13,090

egg and and so forth at the top of the

1032

00:43:18,570 --> 00:43:14,470

panel we have that man with the mask

1033

00:43:23,310 --> 00:43:18,580

he's a and he's Hercules B is Agia the

1034

00:43:26,550 --> 00:43:23,320

eagle see is Lacerta the lizard D is

1035

00:43:30,060 --> 00:43:26,560

Pegasus the horse E is Pisces which

1036

00:43:33,990 --> 00:43:30,070

became that the dolphin F is C does

1037

00:43:39,950 --> 00:43:34,000

this which the ancient Greeks saw as a

1038

00:43:42,960 --> 00:43:39,960

sea monster but we see it now as a

1039

00:43:45,120 --> 00:43:42,970

that's what we see as a seal or the pale

1040

00:43:49,140 --> 00:43:45,130

ethic record their service seal she is

1041

00:43:50,880 --> 00:43:49,150

Perseus which is the body of the

1042

00:43:54,900 --> 00:43:50,890

elephant which we showed in the previous

1043

00:43:58,200 --> 00:43:54,910

presentation I'm H is a ruger which is

1044

00:43:59,700 --> 00:43:58,210

the head of the elephant and I is the

1045

00:44:01,770 --> 00:43:59,710

trunk which becomes Taurus

1046

00:44:04,170 --> 00:44:01,780

Jay is the Lynx which also could be

1047

00:44:08,820 --> 00:44:04,180

another trunk the elephant K is Ursa

1048

00:44:11,430 --> 00:44:08,830

Major L is Leo the Lion

1049

00:44:13,620 --> 00:44:11,440

M is Gemini which is either the lioness

1050

00:44:16,500 --> 00:44:13,630

that's licking up to the lion or the

1051  
00:44:18,450 --> 00:44:16,510  
Barbary ape or Endor Barbary ape and n

1052  
00:44:21,660 --> 00:44:18,460  
is Orion at the bottom of the panel and

1053  
00:44:22,860 --> 00:44:21,670  
we go from north to south on this and so

1054  
00:44:26,790 --> 00:44:22,870  
it's a fascinating it's a fascinating

1055  
00:44:29,430 --> 00:44:26,800  
image and it tells us a lot about paths

1056  
00:44:30,990 --> 00:44:29,440  
that the earth and sky are one as in the

1057  
00:44:33,720 --> 00:44:31,000  
Hermetic tradition and you've probably

1058  
00:44:34,950 --> 00:44:33,730  
got chromatic people esoterics on the

1059  
00:44:39,060 --> 00:44:34,960  
show and they've talked about this

1060  
00:44:41,100 --> 00:44:39,070  
concept of the reflection but this we

1061  
00:44:43,280 --> 00:44:41,110  
can see now where it comes from there's

1062  
00:44:46,470 --> 00:44:43,290  
a few other slides in there as well

1063  
00:44:49,920 --> 00:44:46,480

Aquarius is that therianthrope it's in

1064

00:44:54,510 --> 00:44:49,930

the same place in the panel and Cygnus

1065

00:44:57,960 --> 00:44:54,520

so the arc is Cygnus he's in the right

1066

00:45:00,690 --> 00:44:57,970

place in the panel the the reptile is

1067

00:45:06,030 --> 00:45:00,700

just below him I'm Hercules above him

1068

00:45:07,560 --> 00:45:06,040

and Pegasus Pegasus is to his right so

1069

00:45:09,930 --> 00:45:07,570

we have all the characters as the Greeks

1070

00:45:14,700 --> 00:45:09,940

saw them except the bird isn't a swan or

1071

00:45:20,550 --> 00:45:14,710

a goose it's a great hawk which which

1072

00:45:22,620 --> 00:45:20,560

laid the cosmic egg and and this is a

1073

00:45:26,580 --> 00:45:22,630

slide we didn't have in the last last

1074

00:45:27,870 --> 00:45:26,590

one is the constellations as we know

1075

00:45:29,820 --> 00:45:27,880

them today today are most of the

1076

00:45:31,920 --> 00:45:29,830

characters and constellations came from

1077

00:45:33,300 --> 00:45:31,930

Ptolemy about eighteen hundred years ago

1078

00:45:35,970 --> 00:45:33,310

and he's considered to be the greatest

1079

00:45:38,610 --> 00:45:35,980

astronomy of antiquity and a few of the

1080

00:45:40,710 --> 00:45:38,620

common commonalities that he had between

1081

00:45:43,920 --> 00:45:40,720

the pallid ethic record and the

1082

00:45:44,490 --> 00:45:43,930

constellations he made was that the

1083

00:45:46,980 --> 00:45:44,500

constantly

1084

00:45:48,750 --> 00:45:46,990

overlapped each other and that their

1085

00:45:52,080 --> 00:45:48,760

imaginary their imaginary pictures

1086

00:45:53,910 --> 00:45:52,090

Without Borders which is not how we do

1087

00:45:56,370 --> 00:45:53,920

today because modern astronomy we've

1088

00:45:57,810 --> 00:45:56,380

created boundaries and the

1089

00:45:59,670 --> 00:45:57,820

constellations that are on the panel

1090

00:46:02,780 --> 00:45:59,680

ethic record that are common with what

1091

00:46:04,590 --> 00:46:02,790

potami found were Aquarius Agia

1092

00:46:05,190 --> 00:46:04,600

Capricornus which we don't have in this

1093

00:46:07,650 --> 00:46:05,200

presentation

1094

00:46:11,730 --> 00:46:07,660

see this Cygnus Gemini Hercules Leo

1095

00:46:16,590 --> 00:46:11,740

Orion Pegasus Pisces and Ursa Major and

1096

00:46:19,620 --> 00:46:16,600

that's a so Ptolemy had a source a

1097

00:46:22,740 --> 00:46:19,630

source that didn't come from his sight

1098

00:46:24,870 --> 00:46:22,750

alone but he had looked into some record

1099

00:46:28,290 --> 00:46:24,880

whether it be this cave another cave or

1100

00:46:32,670 --> 00:46:28,300

perhaps someone else had written it down

1101  
00:46:35,550 --> 00:46:32,680  
somewhere and astronomers I'm so

1102  
00:46:36,330 --> 00:46:35,560  
reluctant astronomer but they there was

1103  
00:46:38,750 --> 00:46:36,340  
a book called

1104  
00:46:42,020 --> 00:46:38,760  
titled the crime of Claudius Ptolemy

1105  
00:46:47,430 --> 00:46:42,030  
written by Robert Newton unrelated to

1106  
00:46:49,590 --> 00:46:47,440  
Isaac Newton and Newton said that Tommy

1107  
00:46:51,510 --> 00:46:49,600  
is not the greatest astronomer of

1108  
00:46:53,610 --> 00:46:51,520  
antiquity but he is something still more

1109  
00:46:56,790 --> 00:46:53,620  
unusual he is the most successful fraud

1110  
00:46:59,040 --> 00:46:56,800  
in the history of science and how Newton

1111  
00:47:01,170 --> 00:46:59,050  
came to that conclusion was that Ptolemy

1112  
00:47:03,360 --> 00:47:01,180  
could see constellations of her recorded

1113  
00:47:05,070 --> 00:47:03,370

constellations that he couldn't see with

1114

00:47:08,550 --> 00:47:05,080

his own eyes that they were they were

1115

00:47:10,980 --> 00:47:08,560

further south so Tommy must have had a

1116

00:47:15,570 --> 00:47:10,990

record they suggested or astronomer

1117

00:47:18,570 --> 00:47:15,580

suggests from a different place but I

1118

00:47:20,910 --> 00:47:18,580

would suggest that it wasn't a different

1119

00:47:22,290 --> 00:47:20,920

place per se it was a different time it

1120

00:47:26,700 --> 00:47:22,300

was a different time in the Paleolithic

1121

00:47:29,750 --> 00:47:26,710

record and there were other people that

1122

00:47:32,100 --> 00:47:29,760

had somehow dived into it one of those

1123

00:47:34,740 --> 00:47:32,110

johannes hevelius the Polish astronomer

1124

00:47:36,600 --> 00:47:34,750

and he had seven new northern

1125

00:47:38,280 --> 00:47:36,610

constellations in there he has Lacerta

1126

00:47:42,270 --> 00:47:38,290

the lizard

1127

00:47:44,010 --> 00:47:42,280

he has Leo minor and my suggestion is he

1128

00:47:45,810 --> 00:47:44,020

didn't see this but he had a myth

1129

00:47:48,420 --> 00:47:45,820

because Leo minor would be the the

1130

00:47:52,680 --> 00:47:48,430

lioness who's on the other side of Leo

1131

00:47:56,430 --> 00:47:52,690

from the Greek perspective so the in

1132

00:47:58,309 --> 00:47:56,440

this Paleolithic perspective in the pale

1133

00:48:01,159 --> 00:47:58,319

actually in the pale of perspective

1134

00:48:05,150 --> 00:48:01,169

we have this lioness looking out to the

1135

00:48:07,699 --> 00:48:05,160

lion but in Honus is inter petition

1136

00:48:09,859 --> 00:48:07,709

reputation Leo minor is on the other

1137

00:48:13,669 --> 00:48:09,869

side of the line and of course we have

1138

00:48:18,199 --> 00:48:13,679

the Lynx would you be able to move the

1139

00:48:23,650 --> 00:48:18,209

Skype pop-up off screen if possible one

1140

00:48:26,689 --> 00:48:23,660

that's currently blocking johannes yeah

1141

00:48:29,659 --> 00:48:26,699

Mary oh thank you so that's Johannes so

1142

00:48:31,159 --> 00:48:29,669

my suggestion is that your Hannes hadn't

1143

00:48:33,499 --> 00:48:31,169

visited the cave and he hadn't seen this

1144

00:48:35,539 --> 00:48:33,509

but he he had some sort of a record

1145

00:48:39,019 --> 00:48:35,549

whether it being myth or a globe or

1146

00:48:40,969 --> 00:48:39,029

something that people had recorded this

1147

00:48:42,979 --> 00:48:40,979

from an earlier time and not in this

1148

00:48:45,890 --> 00:48:42,989

presentation but there's um there's dogs

1149

00:48:48,199 --> 00:48:45,900

and foxes and other animals in there and

1150

00:48:51,559 --> 00:48:48,209

so people were not that they were

1151  
00:48:55,549 --> 00:48:51,569  
reinventing things from the past and how

1152  
00:48:57,769 --> 00:48:55,559  
does this tie into the big bang so we

1153  
00:48:59,659 --> 00:48:57,779  
have in these constellations we have

1154  
00:49:02,299 --> 00:48:59,669  
these archetypal characters we have the

1155  
00:49:04,339 --> 00:49:02,309  
lion that sits at the top we have the

1156  
00:49:09,079 --> 00:49:04,349  
hero which is the man who was was being

1157  
00:49:11,659 --> 00:49:09,089  
lifted by the the bottlenose dolphin we

1158  
00:49:16,009 --> 00:49:11,669  
have the Hercules character wearing the

1159  
00:49:19,069 --> 00:49:16,019  
mask that transforms himself well the

1160  
00:49:22,009 --> 00:49:19,079  
big bang goes back to oh this concept of

1161  
00:49:23,929 --> 00:49:22,019  
the cosmic egg goes back to a deep time

1162  
00:49:25,969 --> 00:49:23,939  
and the cosmic egg is an archetype of

1163  
00:49:27,679 --> 00:49:25,979

character just as these animal

1164

00:49:30,559 --> 00:49:27,689

characters or the teacher and the

1165

00:49:33,979 --> 00:49:30,569

apprentice and the cosmic mountain or

1166

00:49:35,929 --> 00:49:33,989

the river of transformation so whether

1167

00:49:38,359 --> 00:49:35,939

or not I can't say that there is a big

1168

00:49:42,499 --> 00:49:38,369

bang or than many other theories of the

1169

00:49:45,380 --> 00:49:42,509

cosmos but what I can say is that we

1170

00:49:48,679 --> 00:49:45,390

came to the conclusion to go down the

1171

00:49:51,109 --> 00:49:48,689

road of the Big Bang because of these

1172

00:49:52,849 --> 00:49:51,119

archetypal characters that are deep

1173

00:49:55,130 --> 00:49:52,859

within us and we can't escape them and

1174

00:49:58,729 --> 00:49:55,140

we were comfortable with this idea of

1175

00:50:01,390 --> 00:49:58,739

the Big Bang because it ties into things

1176

00:50:07,939 --> 00:50:01,400

that we recognize from a deeper time

1177

00:50:10,599 --> 00:50:07,949

period and go to the next slide and we

1178

00:50:11,690 --> 00:50:10,609

had we didn't do this in the previous

1179

00:50:13,310 --> 00:50:11,700

presentation

1180

00:50:15,200 --> 00:50:13,320

we have the Ryan character who's being

1181

00:50:17,960 --> 00:50:15,210

lifted by the bottomless dolphin and

1182

00:50:19,730 --> 00:50:17,970

that was time to thirty thirty four

1183

00:50:22,640 --> 00:50:19,740

thousand years ago that image that we

1184

00:50:25,579 --> 00:50:22,650

just had with showing the the poletik

1185

00:50:28,550 --> 00:50:25,589

record versus the astronomy we can look

1186

00:50:29,839 --> 00:50:28,560

if this is actually possible and down at

1187

00:50:32,000 --> 00:50:29,849

the southern tip of the iberian

1188

00:50:34,520 --> 00:50:32,010

peninsula during that time period the

1189

00:50:37,819 --> 00:50:34,530

most the highest that Orion was above

1190

00:50:39,829 --> 00:50:37,829

the cut was above the horizon we can

1191

00:50:43,700 --> 00:50:39,839

compare so the other image we showed was

1192

00:50:44,900 --> 00:50:43,710

thirty was thirty 2000 BCE so thirty was

1193

00:50:47,120 --> 00:50:44,910

that was thirty two four thousand years

1194

00:50:48,859 --> 00:50:47,130

ago we can go deeper in time to thirty

1195

00:50:52,370 --> 00:50:48,869

four thousand and we can still see

1196

00:50:54,290 --> 00:50:52,380

horizon or Ryan above the horizon then

1197

00:50:55,910 --> 00:50:54,300

we go deeper thirty six we can't see him

1198

00:50:58,310 --> 00:50:55,920

at its highest point and thirty eight we

1199

00:51:01,280 --> 00:50:58,320

can't see it and so it's it's either

1200

00:51:04,490 --> 00:51:01,290

between the thirty-two and the 34 or

1201  
00:51:07,690 --> 00:51:04,500  
sometime after the forty thousand and

1202  
00:51:10,640 --> 00:51:07,700  
the the dating of the gallery disk was

1203  
00:51:12,589 --> 00:51:10,650  
through some of those red discs and they

1204  
00:51:17,059 --> 00:51:12,599  
came up with about thirty four thousand

1205  
00:51:21,589 --> 00:51:17,069  
years ago so the the astronomical record

1206  
00:51:26,150 --> 00:51:21,599  
matches the chemical dating of the image

1207  
00:51:30,470 --> 00:51:26,160  
itself so we can test we can test this

1208  
00:51:31,910 --> 00:51:30,480  
image through precession and this is

1209  
00:51:33,859 --> 00:51:31,920  
from the southern tip of that Berrian

1210  
00:51:37,609 --> 00:51:33,869  
Peninsula and I don't believe that's

1211  
00:51:39,470 --> 00:51:37,619  
ever been done before we can we build

1212  
00:51:42,349 --> 00:51:39,480  
computer models go back in time and the

1213  
00:51:45,829 --> 00:51:42,359

ancient Greeks hypothesized that there

1214

00:51:48,589 --> 00:51:45,839

is precession based on points that were

1215

00:51:51,890 --> 00:51:48,599

in a record from a not so distant time

1216

00:51:54,800 --> 00:51:51,900

but to actually test something this far

1217

00:51:57,920 --> 00:51:54,810

back of time is absolutely amazing and

1218

00:52:00,319 --> 00:51:57,930

of course the program comes from starry

1219

00:52:03,890 --> 00:52:00,329

night Pro seven which is generated by

1220

00:52:06,589 --> 00:52:03,900

the Jet Propulsion Laboratory people and

1221

00:52:09,170 --> 00:52:06,599

that idea precession is that the the

1222

00:52:12,170 --> 00:52:09,180

world or the the world spins around like

1223

00:52:15,290 --> 00:52:12,180

a top on a twenty five thousand seven

1224

00:52:17,450 --> 00:52:15,300

hundred year cycle and what we see below

1225

00:52:20,059 --> 00:52:17,460

the horizon today will be different than

1226  
00:52:22,100 --> 00:52:20,069  
it was seen ten thousand years ago so

1227  
00:52:24,380 --> 00:52:22,110  
our view of the stars shifts

1228  
00:52:26,090 --> 00:52:24,390  
and that's why I Ryan from the

1229  
00:52:29,840 --> 00:52:26,100  
perspective of the strip southern

1230  
00:52:32,210 --> 00:52:29,850  
triplets tip the strategy vaulter he

1231  
00:52:36,320 --> 00:52:32,220  
appears to go up and down it has to do

1232  
00:52:39,560 --> 00:52:36,330  
this wobbling of the earth so did you

1233  
00:52:42,620 --> 00:52:39,570  
say shifts or it's the shifts shift oh

1234  
00:52:45,230 --> 00:52:42,630  
yeah okay to make sure here's the shift

1235  
00:52:46,700 --> 00:52:45,240  
he appears the chef I'm on an RCA

1236  
00:52:48,290 --> 00:52:46,710  
connection so it's and it's not as clear

1237  
00:52:53,420 --> 00:52:48,300  
as it should be so I have to make sure

1238  
00:52:55,340 --> 00:52:53,430

that's right and as this course goes

1239

00:52:58,250 --> 00:52:55,350

back to the work of Joseph Campbell and

1240

00:53:00,860 --> 00:52:58,260

the mythology and so on and we're not

1241

00:53:02,360 --> 00:53:00,870

going to do that again and in the

1242

00:53:03,830 --> 00:53:02,370

earlier presentation that I had done we

1243

00:53:04,940 --> 00:53:03,840

talked about myths being passed through

1244

00:53:07,640 --> 00:53:04,950

the seasons of the night skies

1245

00:53:10,100 --> 00:53:07,650

constellations and stars projected man's

1246

00:53:11,930 --> 00:53:10,110

psyche into the cosmos these characters

1247

00:53:13,640 --> 00:53:11,940

that are light-years from Earth but

1248

00:53:16,310 --> 00:53:13,650

still within the grasp of the human

1249

00:53:19,070 --> 00:53:16,320

imagination we're telling the same story

1250

00:53:21,830 --> 00:53:19,080

and what I appreciate about Brian's book

1251

00:53:24,850 --> 00:53:21,840

was that he's telling a story of

1252

00:53:28,490 --> 00:53:24,860

struggle he's telling the story of

1253

00:53:30,710 --> 00:53:28,500

jealousy and peer rivalry and everybody

1254

00:53:35,240 --> 00:53:30,720

striving for the goal that you know the

1255

00:53:37,670 --> 00:53:35,250

goal the gold itself and in the end it

1256

00:53:39,500 --> 00:53:37,680

all falls apart and Brian emerges to

1257

00:53:42,680 --> 00:53:39,510

recognize that it's not about the prize

1258

00:53:45,140 --> 00:53:42,690

itself but rather the journey of what he

1259

00:53:49,190 --> 00:53:45,150

learned on the way and his book itself

1260

00:53:52,190 --> 00:53:49,200

is sharing his hero's journey of his

1261

00:53:54,050 --> 00:53:52,200

experiences and his life story which was

1262

00:53:56,000 --> 00:53:54,060

not just a professional life but his

1263

00:53:58,550 --> 00:53:56,010

family life as well and I really

1264

00:54:02,750 --> 00:53:58,560

appreciate how he he tied all those

1265

00:54:05,630 --> 00:54:02,760

together and this we talked going back

1266

00:54:08,030 --> 00:54:05,640

to the Big Bang and the this Great Auk

1267

00:54:10,160 --> 00:54:08,040

and so is it really the chicken and the

1268

00:54:13,700 --> 00:54:10,170

egg or is it the Great Auk or the egg

1269

00:54:17,180 --> 00:54:13,710

that came first and then this a more

1270

00:54:22,880 --> 00:54:17,190

important concept is that is this myth

1271

00:54:26,440 --> 00:54:22,890

of the cosmic egg one of a singularity

1272

00:54:30,100 --> 00:54:26,450

in creation or of yearly renewal renewal

1273

00:54:33,470 --> 00:54:30,110

the the the Great Auk laid its egg

1274

00:54:35,210 --> 00:54:33,480

late-may early-june which ties into the

1275

00:54:38,059 --> 00:54:35,220

biology of the other animals

1276  
00:54:40,370 --> 00:54:38,069  
on the panel and at the same time Kurt I

1277  
00:54:43,880 --> 00:54:40,380  
actually just predates them by a few

1278  
00:54:48,230 --> 00:54:43,890  
weeks my suggestion is that the panel is

1279  
00:54:51,050 --> 00:54:48,240  
a story of yearly it's a year cycle of

1280  
00:54:52,460 --> 00:54:51,060  
the year as the constellations travel

1281  
00:54:56,059 --> 00:54:52,470  
for the year and tell this story and

1282  
00:54:59,270 --> 00:54:56,069  
that at each point in the journey of the

1283  
00:55:01,250 --> 00:54:59,280  
hero when he swims across the Strait of

1284  
00:55:04,220 --> 00:55:01,260  
Gibraltar and he's raised by the

1285  
00:55:07,640 --> 00:55:04,230  
Dolphins and he's assisted by these

1286  
00:55:11,089 --> 00:55:07,650  
animal beings he's counted them on the

1287  
00:55:14,859 --> 00:55:11,099  
earth and in the sky and that the

1288  
00:55:17,599 --> 00:55:14,869

stories told every year in the same way

1289

00:55:19,579 --> 00:55:17,609

just like so like Christmas we watched a

1290

00:55:21,650 --> 00:55:19,589

little drummer boy and other similar

1291

00:55:26,740 --> 00:55:21,660

types of programs that we don't watch in

1292

00:55:29,930 --> 00:55:26,750

July and my my sense is that the this

1293

00:55:34,309 --> 00:55:29,940

Great Auk was a character that they

1294

00:55:38,300 --> 00:55:34,319

recognized in early June as dropping the

1295

00:55:44,900 --> 00:55:38,310

cosmic egg and so that even though

1296

00:55:47,150 --> 00:55:44,910

Lamont er brought the cosmic egg to

1297

00:55:50,630 --> 00:55:47,160

create his hypothesis which we now call

1298

00:55:54,230 --> 00:55:50,640

the Big Bang the myth before the myth

1299

00:55:56,780 --> 00:55:54,240

was really of yearly renewal in the same

1300

00:55:59,630 --> 00:55:56,790

way that we have Easter eggs rather than

1301

00:56:02,210 --> 00:55:59,640

a cosmic egg in itself and that later

1302

00:56:05,140 --> 00:56:02,220

later the ancients whether the Chinese

1303

00:56:08,240 --> 00:56:05,150

the veneks a dog on and so forth they

1304

00:56:12,890 --> 00:56:08,250

they changed the story to make it an

1305

00:56:17,480 --> 00:56:12,900

actual singular start of time when the

1306

00:56:19,730 --> 00:56:17,490

Paladin lithic version was a yearly

1307

00:56:21,620 --> 00:56:19,740

cycle that would give the impression

1308

00:56:24,349 --> 00:56:21,630

that everything was create at one time

1309

00:56:27,200 --> 00:56:24,359

but in fact it's a yearly cycle of the

1310

00:56:30,970 --> 00:56:27,210

constellations which is kind of a slight

1311

00:56:34,040 --> 00:56:30,980

twist to the cosmic end big story I

1312

00:56:38,180 --> 00:56:34,050

mentioned this in the interview with

1313

00:56:42,730 --> 00:56:38,190

Brian that I'm you know cosmic egg I'm

1314

00:56:44,680 --> 00:56:42,740

kind of a proponent of the whole were

1315

00:56:47,530 --> 00:56:44,690

this

1316

00:56:49,120 --> 00:56:47,540

we were kind of like [h\_\_h] out by fourth

1317

00:56:51,240 --> 00:56:49,130

dimension and where we are a

1318

00:56:53,710 --> 00:56:51,250

three-dimensional hologram in a

1319

00:56:57,820 --> 00:56:53,720

three-dimensional black hole or a

1320

00:57:00,070 --> 00:56:57,830

four-dimensional black hole as what

1321

00:57:05,890 --> 00:57:00,080

Leonard Susskind he state or at least he

1322

00:57:08,740 --> 00:57:05,900

theorizes that the idea of 3d

1323

00:57:10,630 --> 00:57:08,750

information being converted from voxels

1324

00:57:12,280 --> 00:57:10,640

to pixels in a black hole the

1325

00:57:14,920 --> 00:57:12,290

information is still there but the

1326

00:57:17,740 --> 00:57:14,930

overall mass is kind of gone so same

1327

00:57:19,450 --> 00:57:17,750

concept I could be way off but that's

1328

00:57:22,000 --> 00:57:19,460

kind of the same thing I think to a

1329

00:57:25,450 --> 00:57:22,010

certain extent well that's an

1330

00:57:30,270 --> 00:57:25,460

interesting idea I believe that there

1331

00:57:35,500 --> 00:57:30,280

are very few new ideas and you know

1332

00:57:37,810 --> 00:57:35,510

Brian's a straw a Development Jew and I

1333

00:57:39,760 --> 00:57:37,820

believe this ties back into his as well

1334

00:57:42,100 --> 00:57:39,770

ecclesiastes a credit of course to

1335

00:57:43,660 --> 00:57:42,110

Solomon and what has been been will be

1336

00:57:45,720 --> 00:57:43,670

again what has been done will be done

1337

00:57:50,500 --> 00:57:45,730

again there's nothing new Under the Sun

1338

00:57:52,360 --> 00:57:50,510

and it's we can build microchips and

1339

00:57:55,840 --> 00:57:52,370

spaceships noise these things which are

1340

00:57:57,700 --> 00:57:55,850

new in our time but the foundations of

1341

00:57:59,260 --> 00:57:57,710

the basic knowledge of what we think and

1342

00:58:02,170 --> 00:57:59,270

what we believe and what we feel

1343

00:58:04,210 --> 00:58:02,180

I believe they go back for a very long

1344

00:58:06,400 --> 00:58:04,220

time that there are now psyche min these

1345

00:58:09,160 --> 00:58:06,410

archetypal characters and to break away

1346

00:58:13,930 --> 00:58:09,170

from the archetypal characters is so

1347

00:58:17,080 --> 00:58:13,940

difficult to do that we it's amazing

1348

00:58:21,310 --> 00:58:17,090

that that the cosmic or the big bang was

1349

00:58:23,950 --> 00:58:21,320

taken on so quickly when it was when I

1350

00:58:24,370 --> 00:58:23,960

first was a well the manager came out

1351  
00:58:26,680 --> 00:58:24,380  
with it

1352  
00:58:27,790 --> 00:58:26,690  
people just flirt was nuts and they just

1353  
00:58:30,430 --> 00:58:27,800  
said well it's just you know that the

1354  
00:58:32,380 --> 00:58:30,440  
Catholics trying to reap itch

1355  
00:58:34,690 --> 00:58:32,390  
creationism and its so-called scientists

1356  
00:58:35,860 --> 00:58:34,700  
at the time said no no no no

1357  
00:58:37,540 --> 00:58:35,870  
well they said no we're not going to

1358  
00:58:41,310 --> 00:58:37,550  
deal with this thing and only to later

1359  
00:58:45,700 --> 00:58:41,320  
that they adopted partly when Einstein

1360  
00:58:48,540 --> 00:58:45,710  
jumped on board but the and other and

1361  
00:58:50,830 --> 00:58:48,550  
Hubble and Hubble also observe the

1362  
00:58:54,040 --> 00:58:50,840  
expansion of the universe through the

1363  
00:58:56,410 --> 00:58:54,050

telescope which validated the

1364

00:58:57,940 --> 00:58:56,420

mathematical equations that the Manta

1365

00:59:01,420 --> 00:58:57,950

had come up with

1366

00:59:03,700 --> 00:59:01,430

so so it goes back to your point was can

1367

00:59:07,000 --> 00:59:03,710

we really create theoretically create

1368

00:59:08,890 --> 00:59:07,010

something new or we still tied to these

1369

00:59:12,880 --> 00:59:08,900

archetypes in the past that are still

1370

00:59:17,500 --> 00:59:12,890

within us and I don't think we can

1371

00:59:18,640 --> 00:59:17,510

change well essentially like we're doing

1372

00:59:20,350 --> 00:59:18,650

is just regurgitating the same

1373

00:59:22,510 --> 00:59:20,360

information in different ways or in

1374

00:59:26,230 --> 00:59:22,520

different sayings if I if I say

1375

00:59:32,710 --> 00:59:26,240

fourth-dimensional you know whatever you

1376

00:59:34,360 --> 00:59:32,720

say cosmic egg did you know by

1377

00:59:38,800 --> 00:59:34,370

biological entity growing off of a

1378

00:59:39,910 --> 00:59:38,810

grapevine versus apple same or orange I

1379

00:59:42,480 --> 00:59:39,920

would say that that would probably the

1380

00:59:45,880 --> 00:59:42,490

best metaphor um

1381

00:59:47,020 --> 00:59:45,890

who knows did what John Ward said it

1382

00:59:48,610 --> 00:59:47,030

best I've said it a couple of times and

1383

00:59:50,800 --> 00:59:48,620

it actually is kind of a good thing we

1384

00:59:52,090 --> 00:59:50,810

don't know we weren't there and if we

1385

00:59:56,170 --> 00:59:52,100

were but probably would have been blown

1386

00:59:59,140 --> 00:59:56,180

to bits or correct the the smallest bits

1387

01:00:00,520 --> 00:59:59,150

humanly imaginable the closest we can

1388

01:00:03,010 --> 01:00:00,530

get is like moments before the Big Bang

1389

01:00:06,040 --> 01:00:03,020

and obviously if new imaging

1390

01:00:09,250 --> 01:00:06,050

techniques are successful we may get a

1391

01:00:13,240 --> 01:00:09,260

closer idea of exactly what the heck

1392

01:00:16,540 --> 01:00:13,250

where we come from and you'll have

1393

01:00:17,770 --> 01:00:16,550

religious people that will states

1394

01:00:19,930 --> 01:00:17,780

okay well it's it's definitely the work

1395

01:00:23,080 --> 01:00:19,940

of God you'll have scientists who are

1396

01:00:26,890 --> 01:00:23,090

hard science who believe in hard science

1397

01:00:28,900 --> 01:00:26,900

who will state no it's you know this is

1398

01:00:32,620 --> 01:00:28,910

something that was born of physics or it

1399

01:00:33,820 --> 01:00:32,630

was came from singularity like at the at

1400

01:00:35,920 --> 01:00:33,830

the end of the day we're trying to

1401

01:00:38,170 --> 01:00:35,930

define something that's so much larger

1402

01:00:41,140 --> 01:00:38,180

and so much older than us that we can't

1403

01:00:45,850 --> 01:00:41,150

conceive it beyond a few ideas and

1404

01:00:47,200 --> 01:00:45,860

concepts and metaphors like he were we

1405

01:00:48,700 --> 01:00:47,210

can build those microchips and those

1406

01:00:53,070 --> 01:00:48,710

spaceships at the end of the day where

1407

01:00:55,990 --> 01:00:53,080

we're a species as dumb as [h\_\_\h] like we

1408

01:00:59,470 --> 01:00:56,000

collectively the most powerful country

1409

01:01:02,530 --> 01:00:59,480

on the planet elected a guy who this

1410

01:01:03,850 --> 01:01:02,540

morning went on a TV show and you know

1411

01:01:05,080 --> 01:01:03,860

God is lawyer into trouble and probably

1412

01:01:06,640 --> 01:01:05,090

a time got himself into legal trouble

1413

01:01:08,440 --> 01:01:06,650

and he's running the free world like

1414

01:01:10,150 --> 01:01:08,450

this is this is the the reality we live

1415

01:01:11,040 --> 01:01:10,160

in and yet we can do all these great

1416

01:01:13,050 --> 01:01:11,050

wonders

1417

01:01:17,370 --> 01:01:13,060

and yet we're trying to be able to put

1418

01:01:20,040 --> 01:01:17,380

define what creation is and the most we

1419

01:01:21,660 --> 01:01:20,050

can get to is an abstract idea that's

1420

01:01:23,180 --> 01:01:21,670

the most we can really hope for until we

1421

01:01:29,270 --> 01:01:23,190

can actually get certifiable

1422

01:01:33,450 --> 01:01:29,280

quantifiable proof of what it is and I'm

1423

01:01:37,980 --> 01:01:33,460

the idea of trying to recreate the wheel

1424

01:01:40,530 --> 01:01:37,990

as it were or nothing's like nothing has

1425

01:01:43,050 --> 01:01:40,540

ever Anu no it's just different

1426

01:01:45,210 --> 01:01:43,060

iterations at infinite and that's what

1427

01:01:47,420 --> 01:01:45,220

the universe is it's it's constantly

1428

01:01:50,010 --> 01:01:47,430

multiplying we're constantly growing and

1429

01:01:53,790 --> 01:01:50,020

some of its can look the same some of it

1430

01:01:59,070 --> 01:01:53,800

can be really [h\_\_\h] weird and how do

1431

01:02:00,480 --> 01:01:59,080

we know that one wolf or none of the

1432

01:02:06,150 --> 01:02:00,490

explanations that have been provided to

1433

01:02:08,730 --> 01:02:06,160

date are true we don't correct well

1434

01:02:10,020 --> 01:02:08,740

guess what they they're there we can't

1435

01:02:12,540 --> 01:02:10,030

say that they're the truth of what

1436

01:02:14,730 --> 01:02:12,550

happened back then we can say that the

1437

01:02:16,640 --> 01:02:14,740

truth to ourselves we're all seeking

1438

01:02:18,560 --> 01:02:16,650

answers to where we came from

1439

01:02:20,520 --> 01:02:18,570

that's what the search for the

1440

01:02:22,440 --> 01:02:20,530

explanation of story the meant that a

1441

01:02:24,510 --> 01:02:22,450

cosmic egg is as well as the search to

1442

01:02:26,910 --> 01:02:24,520

find the Big Bang it's where do we come

1443

01:02:29,610 --> 01:02:26,920

from and what are we doing here then

1444

01:02:32,520 --> 01:02:29,620

where do we go from here and I believe

1445

01:02:35,730 --> 01:02:32,530

that there is a that's where the the

1446

01:02:37,770 --> 01:02:35,740

lines of spirituality and science cross

1447

01:02:40,050 --> 01:02:37,780

although people on both sides might not

1448

01:02:44,610 --> 01:02:40,060

agree with that but it just really is

1449

01:02:46,170 --> 01:02:44,620

someone asked me recently of all this

1450

01:02:47,700 --> 01:02:46,180

work we do and all these ideas that we

1451  
01:02:49,170 --> 01:02:47,710  
have and all these things that we move

1452  
01:02:50,820 --> 01:02:49,180  
forward and and looking back into the

1453  
01:02:52,620 --> 01:02:50,830  
pale of the record we now see that we

1454  
01:02:55,440 --> 01:02:52,630  
haven't really changed that much of fact

1455  
01:02:57,990 --> 01:02:55,450  
we borrowed the myths from cavemen

1456  
01:03:01,890 --> 01:02:58,000  
thirty four thousand years ago via the

1457  
01:03:04,860 --> 01:03:01,900  
Greeks and Egyptians and others and this

1458  
01:03:09,150 --> 01:03:04,870  
is how kind of a metaphor as I can see

1459  
01:03:11,580 --> 01:03:09,160  
it is that all this everything that

1460  
01:03:13,320 --> 01:03:11,590  
happens is a stream and all these these

1461  
01:03:14,850 --> 01:03:13,330  
archetypes needs metaphors and these

1462  
01:03:18,950 --> 01:03:14,860  
mats are just being carried by the

1463  
01:03:22,250 --> 01:03:18,960

stream and they determine who we are and

1464

01:03:24,600 --> 01:03:22,260

you know you and I we can have this

1465

01:03:28,500 --> 01:03:24,610

fascinating discussion as well

1466

01:03:31,260 --> 01:03:28,510

Brian and in the end we're just putting

1467

01:03:32,970 --> 01:03:31,270

out hand in the stream for a moment and

1468

01:03:35,250 --> 01:03:32,980

maybe we could throw a few rocks and Dam

1469

01:03:37,830 --> 01:03:35,260

it up and we can hold we can hold back

1470

01:03:39,630 --> 01:03:37,840

the flow but in the end the flow is

1471

01:03:41,610 --> 01:03:39,640

gonna carry through and all this

1472

01:03:44,490 --> 01:03:41,620

information from the past will continue

1473

01:03:46,110 --> 01:03:44,500

on and the information that we have

1474

01:03:48,480 --> 01:03:46,120

today will someday be buried in the

1475

01:03:50,460 --> 01:03:48,490

stands sands or destroyed in an

1476

01:03:53,640 --> 01:03:50,470

earthquake or some sort of cosmic

1477

01:03:57,120 --> 01:03:53,650

explosion and that we really can't

1478

01:03:59,520 --> 01:03:57,130

change the flow of the stream we can

1479

01:04:04,620 --> 01:03:59,530

only put out hands and promote it and

1480

01:04:08,100 --> 01:04:04,630

watch it go around us but it's timeless

1481

01:04:09,270 --> 01:04:08,110

and I believe that the you know I really

1482

01:04:11,030 --> 01:04:09,280

appreciate the work of Brian his

1483

01:04:14,160 --> 01:04:11,040

colleagues and the book that he wrote

1484

01:04:16,410 --> 01:04:14,170

that he he's going deeper to explore

1485

01:04:20,250 --> 01:04:16,420

questions that most of us don't have the

1486

01:04:23,610 --> 01:04:20,260

capacity to even consider and he's

1487

01:04:28,320 --> 01:04:23,620

thinking of novel ways to prove his

1488

01:04:29,550 --> 01:04:28,330

theories and I it's you know it's great

1489

01:04:33,530 --> 01:04:29,560

to have people like Brian in out

1490

01:04:36,750 --> 01:04:33,540

presence and to connect with them I'm

1491

01:04:39,510 --> 01:04:36,760

appreciative of his patience you can

1492

01:04:41,010 --> 01:04:39,520

tell he's he's had a few kids and it's

1493

01:04:43,080 --> 01:04:41,020

okay he's been there he's done that he's

1494

01:04:44,880 --> 01:04:43,090

he's taken his lumps and he understands

1495

01:04:47,310 --> 01:04:44,890

what adversity is and he's willing to

1496

01:04:50,010 --> 01:04:47,320

you know be able to face adversity to

1497

01:04:51,960 --> 01:04:50,020

try and find as close to the truth as

1498

01:04:55,170 --> 01:04:51,970

possible or at least the truth to him

1499

01:04:56,400 --> 01:04:55,180

and I've got you know my truth and at

1500

01:04:58,650 --> 01:04:56,410

the end of the day I'm like okay well

1501  
01:04:59,670 --> 01:04:58,660  
you know that was 12 seven billion years

1502  
01:05:01,080 --> 01:04:59,680  
ago I'm not really gonna worry about it

1503  
01:05:03,960 --> 01:05:01,090  
too much but at the same time it's cool

1504  
01:05:06,330 --> 01:05:03,970  
to know what about you are you proponent

1505  
01:05:09,060 --> 01:05:06,340  
of the cosmic egg do you think we were

1506  
01:05:12,870 --> 01:05:09,070  
you know eaten by a dragon not what's

1507  
01:05:15,090 --> 01:05:12,880  
your metaphor what what's your truth so

1508  
01:05:16,770 --> 01:05:15,100  
I don't think there's number of

1509  
01:05:19,620 --> 01:05:16,780  
different cosmic egg stories and they

1510  
01:05:22,890 --> 01:05:19,630  
finally had the same the same true sin

1511  
01:05:28,470 --> 01:05:22,900  
and not just myths but artifacts around

1512  
01:05:30,810 --> 01:05:28,480  
the world so I believe that they're all

1513  
01:05:34,340 --> 01:05:30,820

truths in them and that there is an

1514

01:05:37,500 --> 01:05:34,350

element of truth in all the myths that

1515

01:05:37,980 --> 01:05:37,510

we're truck we're seeking to understand

1516

01:05:40,890 --> 01:05:37,990

our

1517

01:05:43,440 --> 01:05:40,900

existence where we came from where we go

1518

01:05:46,490 --> 01:05:43,450

and people I was listening to a podcast

1519

01:05:50,760 --> 01:05:46,500

the other day about from a skeptic

1520

01:05:53,190 --> 01:05:50,770

atheist and he was you know deciding you

1521

01:05:57,810 --> 01:05:53,200

know should he believe in an afterlife

1522

01:06:00,690 --> 01:05:57,820

or not and he says you know of course we

1523

01:06:04,650 --> 01:06:00,700

want to do the best we are in this world

1524

01:06:07,020 --> 01:06:04,660

that were not gambling or hedging our

1525

01:06:09,120 --> 01:06:07,030

bets for something the future and maybe

1526

01:06:12,000 --> 01:06:09,130

that's a reason itself not to believe in

1527

01:06:14,430 --> 01:06:12,010

an afterlife however but let's look at

1528

01:06:17,750 --> 01:06:14,440

from another perspective whether you

1529

01:06:21,780 --> 01:06:17,760

believe that at the moment of your death

1530

01:06:25,140 --> 01:06:21,790

your your synapses are going for 10

1531

01:06:27,420 --> 01:06:25,150

seconds or eternity because it really is

1532

01:06:30,750 --> 01:06:27,430

the same thing for you what is the last

1533

01:06:32,070 --> 01:06:30,760

thing that you want to see because the

1534

01:06:33,300 --> 01:06:32,080

last thing goes through your mind is

1535

01:06:35,730 --> 01:06:33,310

that last thing that goes to your mind

1536

01:06:42,050 --> 01:06:35,740

is your attorney whether it's 10 seconds

1537

01:06:45,690 --> 01:06:42,060

or some time we can't even imagine it so

1538

01:06:47,520 --> 01:06:45,700

where do you see Chris what do you want

1539

01:06:49,740 --> 01:06:47,530

to see in those lasts that last second

1540

01:06:51,960 --> 01:06:49,750

where's that final thought that you want

1541

01:06:57,980 --> 01:06:51,970

that you're gonna carry to eternity with

1542

01:07:01,470 --> 01:06:57,990

you my wife's warm bountiful bosom I

1543

01:07:05,099 --> 01:07:01,480

love her to death and call me

1544

01:07:10,230 --> 01:07:05,109

old-fashioned being held by her is

1545

01:07:12,570 --> 01:07:10,240

probably the most calming and reassuring

1546

01:07:14,340 --> 01:07:12,580

thing that you can have whether you're

1547

01:07:16,200 --> 01:07:14,350

out at the end of a long day just you

1548

01:07:19,800 --> 01:07:16,210

know just give her you give your partner

1549

01:07:22,140 --> 01:07:19,810

a hug and you know that's like to me

1550

01:07:25,910 --> 01:07:22,150

that that is that's true that's more of

1551

01:07:32,070 --> 01:07:29,970

but for me it's it's that idea of you

1552

01:07:34,560 --> 01:07:32,080

know peace feeling at home feeling that

1553

01:07:40,050 --> 01:07:34,570

you know that that constant reassurance

1554

01:07:41,250 --> 01:07:40,060

of belonging and not even like not even

1555

01:07:47,030 --> 01:07:41,260

the fact that you belong somewhere just

1556

01:07:49,890 --> 01:07:47,040

that you know where you belong like that

1557

01:07:51,810 --> 01:07:49,900

that's your habit pretty well yeah and

1558

01:07:54,720 --> 01:07:51,820

that's that can be the heavy

1559

01:07:56,190 --> 01:07:54,730

of so my Hemet heaven is fairly similar

1560

01:08:01,500 --> 01:07:56,200

to yours but of course it's not your

1561

01:08:02,820 --> 01:08:01,510

wife and I sure as hell know what's

1562

01:08:04,440 --> 01:08:02,830

really the warmth of family that's

1563

01:08:07,530 --> 01:08:04,450

really what it comes down to to being

1564

01:08:10,980 --> 01:08:07,540

surrounded by family and whether or not

1565

01:08:13,890 --> 01:08:10,990

that is you know for ten seconds for an

1566

01:08:18,180 --> 01:08:13,900

attorney it's the same thing it is what

1567

01:08:22,170 --> 01:08:18,190

your final moments are how we carry them

1568

01:08:24,180 --> 01:08:22,180

for us and that's a so you've had you

1569

01:08:28,530 --> 01:08:24,190

know you've had Bryan's you've had

1570

01:08:31,470 --> 01:08:28,540

Bryan's program and his book was of

1571

01:08:34,260 --> 01:08:31,480

course losing the Nobel in - before Ryan

1572

01:08:36,270 --> 01:08:34,270

flying the face of the hero and we take

1573

01:08:39,120 --> 01:08:36,280

many of the same journey before Ryan

1574

01:08:41,430 --> 01:08:39,130

comm Instagram Facebook before Ryan

1575

01:08:45,000 --> 01:08:41,440

Twitter Burnie tail or our YouTube

1576

01:08:46,730 --> 01:08:45,010

before Oh Ryan dot-com and I use hashtag

1577

01:08:51,720 --> 01:08:46,740

before Ryan and just about everything

1578

01:08:52,320 --> 01:08:51,730

and so people can connect it connect

1579

01:08:57,990 --> 01:08:52,330

with those

1580

01:09:01,050 --> 01:08:58,000

so I'm now I've got you I can't see you

1581

01:09:04,500 --> 01:09:01,060

if I hit stop stop shower screen and

1582

01:09:06,300 --> 01:09:04,510

you'll be able to see me yes well I see

1583

01:09:08,670 --> 01:09:06,310

the dinner of Laura logo but that's okay

1584

01:09:10,320 --> 01:09:08,680

Joe I'm seeing the reflection of the the

1585

01:09:13,860 --> 01:09:10,330

light on the wall through through the

1586

01:09:15,570 --> 01:09:13,870

curtain here I've got idea but with with

1587

01:09:18,150 --> 01:09:15,580

the preparation that we had I should say

1588

01:09:21,420 --> 01:09:18,160

I had trying to get on the air where

1589

01:09:24,539 --> 01:09:21,430

we'd actually have sound for you know

1590

01:09:29,099 --> 01:09:24,549

actual sound there's a lot of wires back

1591

01:09:32,010 --> 01:09:29,109

there now I gotta clean it's all it's a

1592

01:09:35,099 --> 01:09:32,020

building process your journey to become

1593

01:09:37,460 --> 01:09:35,109

a podcaster without a separate person

1594

01:09:39,510 --> 01:09:37,470

running the controls is pretty amazing

1595

01:09:41,370 --> 01:09:39,520

you're becoming more teching what are

1596

01:09:43,650 --> 01:09:41,380

your strengths add some hot cast so he's

1597

01:09:46,280 --> 01:09:43,660

actually a graphic design no one has

1598

01:09:49,650 --> 01:09:46,290

better graphic design out there than you

1599

01:09:54,360 --> 01:09:49,660

and it's you know we all appreciate the

1600

01:09:55,650 --> 01:09:54,370

the image that you portray of us well

1601  
01:09:57,270 --> 01:09:55,660  
you know I just try and say okay well

1602  
01:09:58,740 --> 01:09:57,280  
what what looks cool what's gonna get

1603  
01:10:02,520 --> 01:09:58,750  
people's attention what what is going to

1604  
01:10:04,810 --> 01:10:02,530  
inspire individuals and you know the

1605  
01:10:07,209 --> 01:10:04,820  
especially the viewers at home

1606  
01:10:10,450 --> 01:10:07,219  
they know they know how hard it is to do

1607  
01:10:15,220 --> 01:10:10,460  
this some people they'll have Joe

1608  
01:10:17,319 --> 01:10:15,230  
Rogan's got Jamie who you know he's a

1609  
01:10:21,189 --> 01:10:17,329  
wizard he like during shows he will

1610  
01:10:22,899 --> 01:10:21,199  
upload video that the clips of the show

1611  
01:10:25,209 --> 01:10:22,909  
that the juror would experience clips as

1612  
01:10:26,530 --> 01:10:25,219  
the shows going on so you will get clips

1613  
01:10:28,629 --> 01:10:26,540

from the beginning of the show for like

1614

01:10:30,819 --> 01:10:28,639

you know 10 15 minutes like this is a

1615

01:10:34,990 --> 01:10:30,829

cool part while the shows you know in

1616

01:10:36,790 --> 01:10:35,000

its second or third hour being able to

1617

01:10:38,589 --> 01:10:36,800

do that while also do research while

1618

01:10:40,120 --> 01:10:38,599

chatting while doing you know holding a

1619

01:10:41,339 --> 01:10:40,130

full conversation with somebody didn't

1620

01:10:44,979 --> 01:10:41,349

try to make sure that it's engaging

1621

01:10:47,350 --> 01:10:44,989

mm-hmm yeah oh man well if anybody lives

1622

01:10:50,379 --> 01:10:47,360

in Ottawa thank you looking for an

1623

01:10:52,419 --> 01:10:50,389

intern Lee or or when Lee gets as

1624

01:10:54,220 --> 01:10:52,429

monitors well we'll finally get some you

1625

01:10:58,209 --> 01:10:54,230

know get crackin but for anybody who's

1626  
01:11:01,270 --> 01:10:58,219  
at home you Mike's new preamp new noise

1627  
01:11:03,189 --> 01:11:01,280  
gate which means getting episode audio

1628  
01:11:06,760 --> 01:11:03,199  
episodes up faster better mastering

1629  
01:11:08,350 --> 01:11:06,770  
on-the-fly mastering as you know quickly

1630  
01:11:11,680 --> 01:11:08,360  
as I can figure out exactly what the

1631  
01:11:13,899 --> 01:11:11,690  
heck went wrong but it's you know like

1632  
01:11:15,729 --> 01:11:13,909  
if you're running an experiment and

1633  
01:11:19,990 --> 01:11:15,739  
things don't turn out the way that they

1634  
01:11:22,479 --> 01:11:20,000  
you expected even though this missus ran

1635  
01:11:24,669 --> 01:11:22,489  
a hundred percent right and then on the

1636  
01:11:26,740 --> 01:11:24,679  
actual lie you know on the test that

1637  
01:11:28,600 --> 01:11:26,750  
it's supposed to be demonstration to

1638  
01:11:30,580 --> 01:11:28,610

your peers everything goes right to [h\_\_h]

1639

01:11:31,839 --> 01:11:30,590

like I know scientists who my sister has

1640

01:11:33,939 --> 01:11:31,849

probably had stuff like that happen

1641

01:11:37,120 --> 01:11:33,949

she's a chemist or was a chemist

1642

01:11:39,760 --> 01:11:37,130

she knows scientists who have had the

1643

01:11:41,410 --> 01:11:39,770

exact same thing happened with them it

1644

01:11:42,819 --> 01:11:41,420

was obviously you know hundreds of

1645

01:11:45,100 --> 01:11:42,829

thousands of dollars of taxpayer have

1646

01:11:49,510 --> 01:11:45,110

been research grants that were kind of

1647

01:11:50,950 --> 01:11:49,520

blown but the ideas is is to be able to

1648

01:11:55,180 --> 01:11:50,960

overcome that adversity and it's the

1649

01:11:56,979 --> 01:11:55,190

same message that that Brian is trying

1650

01:11:58,120 --> 01:11:56,989

to communicate and through through his

1651  
01:11:59,740 --> 01:11:58,130  
book and through his lessons he's trying

1652  
01:12:01,330 --> 01:11:59,750  
to he's trying to change the world and

1653  
01:12:02,379 --> 01:12:01,340  
change the work for better just like

1654  
01:12:06,660 --> 01:12:02,389  
they're trying to change the world for

1655  
01:12:10,240 --> 01:12:06,670  
better by by showing a more positive

1656  
01:12:11,350 --> 01:12:10,250  
aspect or or archetype and I know that

1657  
01:12:13,000 --> 01:12:11,360  
like we've talked about thought on the

1658  
01:12:15,520 --> 01:12:13,010  
last show we've I talked about that with

1659  
01:12:16,800 --> 01:12:15,530  
with Laura who I was a friend of yours

1660  
01:12:20,500 --> 01:12:16,810  
and and

1661  
01:12:30,100 --> 01:12:20,510  
if anything that we talk about usually

1662  
01:12:33,010 --> 01:12:30,110  
was leads back to young and yes they

1663  
01:12:36,070 --> 01:12:33,020

were there are geniuses among us that

1664

01:12:38,140 --> 01:12:36,080

are far beyond what we could imagine or

1665

01:12:40,209 --> 01:12:38,150

geniuses that have been and I believe

1666

01:12:45,610 --> 01:12:40,219

these pelleted artists were phenomenal

1667

01:12:48,550 --> 01:12:45,620

geniuses and we we and as people like

1668

01:12:49,930 --> 01:12:48,560

young as well oh yeah you had you have

1669

01:12:53,340 --> 01:12:49,940

individuals who understand who

1670

01:12:57,340 --> 01:12:53,350

understood the aspects of the psyche and

1671

01:12:58,560 --> 01:12:57,350

I didn't understand the concepts as well

1672

01:13:02,709 --> 01:12:58,570

then as I do now

1673

01:13:05,080 --> 01:13:02,719

mm-hmm but it essentially be that what I

1674

01:13:06,550 --> 01:13:05,090

basically figured out from our entire

1675

01:13:08,280 --> 01:13:06,560

talk as well as from from the many talks

1676

01:13:11,950 --> 01:13:08,290

with that I had with with Laura over

1677

01:13:12,880 --> 01:13:11,960

Laura London over social media it it's

1678

01:13:15,010 --> 01:13:12,890

the understanding of the different

1679

01:13:17,920 --> 01:13:15,020

aspects in this of the psyche of each

1680

01:13:19,959 --> 01:13:17,930

individual and understanding that there

1681

01:13:21,940 --> 01:13:19,969

are there is good on us there's bad in

1682

01:13:24,490 --> 01:13:21,950

us and to be able to recognize that so

1683

01:13:26,350 --> 01:13:24,500

you can actually be that you can have

1684

01:13:27,550 --> 01:13:26,360

something positive to the world that you

1685

01:13:33,190 --> 01:13:27,560

know to the human experience and not

1686

01:13:38,080 --> 01:13:33,200

just take away from it exactly that is a

1687

01:13:40,240 --> 01:13:38,090

good summary of of things we this is a

1688

01:13:43,270 --> 01:13:40,250

great show Chris I'm looking forward to

1689

01:13:45,130 --> 01:13:43,280

that the edited version that you splice

1690

01:13:47,860 --> 01:13:45,140

it all together and put it out there to

1691

01:13:50,500 --> 01:13:47,870

the world until I add like the video

1692

01:13:52,090 --> 01:13:50,510

effects and the flames behind me because

1693

01:13:55,240 --> 01:13:52,100

they learn the Freemason t-shirts so you

1694

01:14:01,030 --> 01:13:55,250

don't go to deep state yo got a go

1695

01:14:02,770 --> 01:14:01,040

represent I'm with you oh my Bernie

1696

01:14:07,000 --> 01:14:02,780

Taylor Illuminati confirmed ladies and

1697

01:14:08,290 --> 01:14:07,010

gentlemen next week on the show you know

1698

01:14:12,570 --> 01:14:08,300

I actually while we were getting this

1699

01:14:14,380 --> 01:14:12,580

show our our guest for next week his

1700

01:14:15,880 --> 01:14:14,390

yesyes he's a friend of mine he's a

1701

01:14:18,450 --> 01:14:15,890

client of mine he's probably one of the

1702

01:14:21,340 --> 01:14:18,460

most positive influences in my life he

1703

01:14:24,610 --> 01:14:21,350

helped me quit smoking and I've been in

1704

01:14:26,469 --> 01:14:24,620

a 20-year smoker and it's thought his

1705

01:14:29,830 --> 01:14:26,479

partner has

1706

01:14:31,719 --> 01:14:29,840

well is is battling an illness and next

1707

01:14:35,890 --> 01:14:31,729

week unfortunately I'm gonna have to

1708

01:14:36,850 --> 01:14:35,900

gonna have to find a new guest so I

1709

01:14:38,890 --> 01:14:36,860

don't know what you're doing on Friday

1710

01:14:40,540 --> 01:14:38,900

but if you want to come in and talk some

1711

01:14:44,379 --> 01:14:40,550

philosophy in a roundtable I might I

1712

01:14:47,830 --> 01:14:44,389

might be able to put that together this

1713

01:14:54,189 --> 01:14:47,840

Friday well not not tomorrow like next

1714

01:14:58,479 --> 01:14:54,199

week next week Friday I will be in a

1715

01:14:58,810 --> 01:14:58,489

very tropical place you lucky son of a

1716

01:15:00,939 --> 01:14:58,820

gun

1717

01:15:02,109 --> 01:15:00,949

you know trust me I don't I would never

1718

01:15:05,140 --> 01:15:02,119

take that away from anybody for the

1719

01:15:08,529 --> 01:15:05,150

world enjoy the presentation on

1720

01:15:10,959 --> 01:15:08,539

astronomy in summer warm in in the

1721

01:15:12,160 --> 01:15:10,969

middle of spring you're you're on the

1722

01:15:15,850 --> 01:15:12,170

west coast so you don't get the same

1723

01:15:17,830 --> 01:15:15,860

winners we had we just reached above two

1724

01:15:21,330 --> 01:15:17,840

digits for the first time this week in

1725

01:15:24,819 --> 01:15:21,340

like six months so go go enjoy yourself

1726

01:15:26,430 --> 01:15:24,829

but for anybody who's out there I'm

1727

01:15:28,540 --> 01:15:26,440

gonna be releasing the new lineup soon

1728

01:15:31,689 --> 01:15:28,550

probably within the next couple of days

1729

01:15:33,430 --> 01:15:31,699

it'll be on patreon and I'm gonna

1730

01:15:34,479 --> 01:15:33,440

hopefully have a new video uploaded for

1731

01:15:36,370 --> 01:15:34,489

tomorrow I've got some work I gotta get

1732

01:15:38,879 --> 01:15:36,380

done tonight and tomorrow but definite

1733

01:15:41,069 --> 01:15:38,889

by the weekend ladies and gents and

1734

01:15:43,299 --> 01:15:41,079

Bernie it's it's always a pleasure

1735

01:15:45,189 --> 01:15:43,309

you've been a big friend of the show

1736

01:15:48,370 --> 01:15:45,199

you've you've helped me learn a lot

1737

01:15:49,629 --> 01:15:48,380

about myself with our talks and I got to

1738

01:15:53,439 --> 01:15:49,639

say thank you for much for inviting me

1739

01:15:55,359 --> 01:15:53,449

and introducing me to to Brian and for

1740

01:15:56,739 --> 01:15:55,369

for your support it you know we would we

1741

01:15:59,439 --> 01:15:56,749

wouldn't be able to exist without fans

1742

01:16:02,350 --> 01:15:59,449

like yourself who also like to learn

1743

01:16:03,939 --> 01:16:02,360

cool [h\_\_h] and teach cool [h\_\_h] thank you

1744

01:16:05,410 --> 01:16:03,949

for having me on again it's always a

1745

01:16:08,890 --> 01:16:05,420

pleasure thank you very much ladies and

1746

01:16:11,229 --> 01:16:08,900

gents have yourself a good night and you