



1  
00:00:03,300 --> 00:00:09,350  
[Music]

2  
00:00:17,740 --> 00:00:14,629  
I I plagiarized this title from the

3  
00:00:21,830 --> 00:00:17,750  
terrific survey the Jaguars own

4  
00:00:26,350 --> 00:00:21,840  
published a few years ago entitled from

5  
00:00:30,519 --> 00:00:26,360  
dawn to decadence 1500 to the present

6  
00:00:33,889 --> 00:00:30,529  
500 years of Western cultural life

7  
00:00:37,970 --> 00:00:33,899  
modern science of course is an integral

8  
00:00:40,100 --> 00:00:37,980  
part of Western cultural life and I

9  
00:00:45,170 --> 00:00:40,110  
suggest that it has gone through the

10  
00:00:50,800 --> 00:00:45,180  
same up and down of from dawn to

11  
00:00:54,500 --> 00:00:50,810  
decadence here's how science has changed

12  
00:00:58,880 --> 00:00:54,510  
it started as an idealistic or at least

13  
00:01:01,610 --> 00:00:58,890

as a disinterested vocation people

14

00:01:05,740 --> 00:01:01,620

simply curious about how the world works

15

00:01:09,260 --> 00:01:05,750

and trying to find out about that to a

16

00:01:11,959 --> 00:01:09,270

self-interested profession and we should

17

00:01:15,469 --> 00:01:11,969

be aware we should remember what George

18

00:01:22,270 --> 00:01:15,479

Bernard Shaw said that all professions

19

00:01:29,870 --> 00:01:25,130

there's no question that there have been

20

00:01:33,490 --> 00:01:29,880

tremendous technological advances but

21

00:01:37,670 --> 00:01:33,500

there has also been a proliferation of

22

00:01:43,310 --> 00:01:37,680

absolutely mediocre so-called research

23

00:01:45,560 --> 00:01:43,320

and one of the discussions of that was

24

00:01:49,910 --> 00:01:45,570

actually written a dozen years ago by

25

00:01:52,999 --> 00:01:49,920

Jane Klein a an immunologist published

26  
00:01:56,300 --> 00:01:53,009  
in a mainstream journal an article

27  
00:01:59,450 --> 00:01:56,310  
entitled the hegemony of mediocrity in

28  
00:02:02,630 --> 00:01:59,460  
contemporary sciences particularly in

29  
00:02:06,200 --> 00:02:02,640  
immunology and that paper is worth

30  
00:02:09,639 --> 00:02:06,210  
reading because it is not an abstract

31  
00:02:13,880 --> 00:02:09,649  
generalized rant he gives specific

32  
00:02:16,610 --> 00:02:13,890  
examples and points out how much of the

33  
00:02:19,640 --> 00:02:16,620  
published so-called research really

34  
00:02:22,880 --> 00:02:19,650  
added nothing to the store of knowledge

35  
00:02:27,260 --> 00:02:22,890  
and the chief criterion was

36  
00:02:30,820 --> 00:02:27,270  
that people needed to pad their Vita not

37  
00:02:34,420 --> 00:02:30,830  
that there were things that needed to be

38  
00:02:39,170 --> 00:02:34,430

communicated there's been a corruption

39

00:02:41,120 --> 00:02:39,180

by conflicts of interest it may not be

40

00:02:44,420 --> 00:02:41,130

true that the love of money is the root

41

00:02:50,870 --> 00:02:44,430

of all evil but it is the root of quite

42

00:02:55,120 --> 00:02:50,880

a lot of evil over all I suggest I

43

00:02:58,760 --> 00:02:55,130

assert that science nowadays is

44

00:03:01,930 --> 00:02:58,770

bureaucratic centralized and there is

45

00:03:06,500 --> 00:03:01,940

politicized control of funding and

46

00:03:09,820 --> 00:03:06,510

publication and that is produced and had

47

00:03:13,970 --> 00:03:09,830

Germany of mainstream dogma and the

48

00:03:16,040 --> 00:03:13,980

suppression of minority views now I

49

00:03:23,479 --> 00:03:16,050

can't give chapter and verse to all

50

00:03:25,699 --> 00:03:23,489

those assertions in the space of of this

51  
00:03:29,120 --> 00:03:25,709  
talks I'm going to concentrate on just

52  
00:03:32,840 --> 00:03:29,130  
two points to be made and the first one

53  
00:03:36,110 --> 00:03:32,850  
is that since about the middle of the

54  
00:03:38,930 --> 00:03:36,120  
20th century there has been a change in

55  
00:03:41,780 --> 00:03:38,940  
the way research is done that is not a

56  
00:03:45,170 --> 00:03:41,790  
matter of degree but a matter of kind

57  
00:03:49,160 --> 00:03:45,180  
there's been a structural change in how

58  
00:03:52,880 --> 00:03:49,170  
research is carried on and 21st century

59  
00:03:56,780 --> 00:03:52,890  
science is a different thing than early

60  
00:04:01,130 --> 00:03:56,790  
20th century science the second point is

61  
00:04:04,990 --> 00:04:01,140  
that the proper and useful conservatism

62  
00:04:07,280 --> 00:04:05,000  
of science of skepticism toward

63  
00:04:11,509 --> 00:04:07,290

revolutionary claims which has always

64

00:04:16,039 --> 00:04:11,519

existed it's become outright suppression

65

00:04:19,039 --> 00:04:16,049

of any heterodox views exclusion from

66

00:04:23,060 --> 00:04:19,049

funding and publication and active

67

00:04:25,370 --> 00:04:23,070

harassment and personal attacks so I'm

68

00:04:28,460 --> 00:04:25,380

not suggesting there's been a change of

69

00:04:33,890 --> 00:04:28,470

degree in resistance but that it's

70

00:04:37,450 --> 00:04:33,900

really quite different and I'm not the

71

00:04:40,650 --> 00:04:37,460

only person who has made that a

72

00:04:42,999 --> 00:04:40,660

in fact Derek de sóller price a

73

00:04:47,700 --> 00:04:43,009

historian of science with a background

74

00:04:52,210 --> 00:04:47,710

in physics predicted that there would be

75

00:04:56,170 --> 00:04:52,220

crises in scientific activity in the

76

00:05:00,309 --> 00:04:56,180

second half of the 20th century price

77

00:05:04,149 --> 00:05:00,319

had found that since the 17th century by

78

00:05:07,990 --> 00:05:04,159

any measure science had grown at an

79

00:05:11,320 --> 00:05:08,000

exponential rate doubling about every 15

80

00:05:17,950 --> 00:05:11,330

years twice as many journals twice as

81

00:05:21,360 --> 00:05:17,960

many articles and so on John Simon in

82

00:05:25,029 --> 00:05:21,370

his book Prometheus Bound in 1994

83

00:05:28,089 --> 00:05:25,039

pointed out that more and more people

84

00:05:30,580 --> 00:05:28,099

doing research were beholden to patrons

85

00:05:34,120 --> 00:05:30,590

the people who supported the work and

86

00:05:37,290 --> 00:05:34,130

that they were not free agents following

87

00:05:41,649 --> 00:05:37,300

their own inclination to discover things

88

00:05:46,480 --> 00:05:41,659

Richard Linton a climate scientist asked

89

00:05:51,189 --> 00:05:46,490

rhetorically is climate science designed

90

00:05:55,719 --> 00:05:51,199

to answer questions and it isn't Philip

91

00:05:58,659 --> 00:05:55,729

Moravsky is a an economist who has just

92

00:06:03,790 --> 00:05:58,669

published a book called science Mart ma

93

00:06:13,649 --> 00:06:03,800

RT and he describes contemporary science

94

00:06:17,010 --> 00:06:13,659

as a set of Ponzi schemes and the short

95

00:06:22,269 --> 00:06:17,020

description of that that he gave me is

96

00:06:27,570 --> 00:06:22,279

it promises more than it can deliver but

97

00:06:30,430 --> 00:06:27,580

it didn't start that way necessarily and

98

00:06:36,339 --> 00:06:30,440

my book that I hope will come out later

99

00:06:40,360 --> 00:06:36,349

this year is on the same theme and an

100

00:06:43,439 --> 00:06:40,370

article I published in 2004 in in JSC

101  
00:06:48,519 --> 00:06:43,449  
called 21st century science knowledge

102  
00:06:50,510 --> 00:06:48,529  
monopolies and research cartels really

103  
00:06:57,320 --> 00:06:50,520  
make some of these points or

104  
00:07:00,680 --> 00:06:57,330  
so the business meeting disturbed me

105  
00:07:04,510 --> 00:07:00,690  
considerably because in 30 years I've

106  
00:07:09,619 --> 00:07:04,520  
never heard such a gloomy prognosis on

107  
00:07:14,180 --> 00:07:09,629  
finances and I think it's obvious that

108  
00:07:17,350 --> 00:07:14,190  
we need to attract new members and I

109  
00:07:20,809 --> 00:07:17,360  
think that the fields in which there is

110  
00:07:23,980 --> 00:07:20,819  
suppression of minority views which I'm

111  
00:07:27,589 --> 00:07:23,990  
gonna run through in a minute represent

112  
00:07:32,689 --> 00:07:27,599  
places where we can look for potential

113  
00:07:35,360 --> 00:07:32,699

recruits bearing in mind however very

114

00:07:39,499 --> 00:07:35,370

much that as we look for recruits from

115

00:07:43,779 --> 00:07:39,509

mainstream areas we pay attention to the

116

00:07:48,709 --> 00:07:43,789

things that John Alexander pointed to

117

00:07:51,469 --> 00:07:48,719

this society started with people from a

118

00:07:53,450 --> 00:07:51,479

variety of disciplines interested in a

119

00:07:56,570 --> 00:07:53,460

variety of subjects with the one

120

00:08:00,070 --> 00:07:56,580

commonality that the subjects we were

121

00:08:03,800 --> 00:08:00,080

interested in were despised by

122

00:08:05,800 --> 00:08:03,810

mainstream science nowadays in an

123

00:08:08,540 --> 00:08:05,810

increasing number of mainstream

124

00:08:12,800 --> 00:08:08,550

disciplines you have people who are

125

00:08:15,580 --> 00:08:12,810

being shoved aside excommunicated simply

126

00:08:19,100 --> 00:08:15,590

because their interpretation of

127

00:08:22,939 --> 00:08:19,110

acknowledged facts differs from the

128

00:08:26,540 --> 00:08:22,949

mainstream dogma and I'll run quickly

129

00:08:29,800 --> 00:08:26,550

through some of these areas you might

130

00:08:33,769 --> 00:08:29,810

think that in pure science so-called

131

00:08:39,560 --> 00:08:33,779

there'd be no reason why there would be

132

00:08:44,569 --> 00:08:39,570

a total suppression of minority views

133

00:08:47,720 --> 00:08:44,579

string theory Lee Smolin in the trouble

134

00:08:51,170 --> 00:08:47,730

with physics and Peter white in not even

135

00:08:53,920 --> 00:08:51,180

wrong a physicist who himself has worked

136

00:08:57,260 --> 00:08:53,930

in string theory and a mathematician

137

00:08:59,449 --> 00:08:57,270

point out that if you do theoretical

138

00:09:02,269 --> 00:08:59,459

physics nowadays and you do not

139

00:09:04,400 --> 00:09:02,279

subscribe to string theory you're going

140

00:09:07,490 --> 00:09:04,410

to have a very hard time getting a

141

00:09:10,160 --> 00:09:07,500

job if you have a job a hard time

142

00:09:13,249 --> 00:09:10,170

getting promoted hard time getting

143

00:09:17,509 --> 00:09:13,259

funding hard time getting published in

144

00:09:18,740 --> 00:09:17,519

cosmology if you don't subscribe to the

145

00:09:21,319 --> 00:09:18,750

Big Bang Theory

146

00:09:24,579 --> 00:09:21,329

it might happen to you has happened to

147

00:09:28,309 --> 00:09:24,589

Helton app that you stop getting

148

00:09:32,329 --> 00:09:28,319

observation time on telescopes and up

149

00:09:36,230 --> 00:09:32,339

actually emigrated it to Germany to

150

00:09:42,619 --> 00:09:36,240

continue his research dinosaur

151  
00:09:45,619 --> 00:09:42,629  
extinction according to the conventional

152  
00:09:48,350 --> 00:09:45,629  
wisdom everybody knows that the impact

153  
00:09:52,069 --> 00:09:48,360  
of an asteroid caused the extinction of

154  
00:09:54,639 --> 00:09:52,079  
the dinosaurs that everyone who knows

155  
00:09:57,259 --> 00:09:54,649  
that doesn't include a lot of

156  
00:10:00,499 --> 00:09:57,269  
paleontologists whose specialty this is

157  
00:10:04,699 --> 00:10:00,509  
and one of those paleontologists Yui

158  
00:10:08,210 --> 00:10:04,709  
MacLean was told by Louis Alvarez a

159  
00:10:12,410 --> 00:10:08,220  
proponent of the asteroid hypothesis

160  
00:10:16,730 --> 00:10:12,420  
that he would destroy Dewey's career if

161  
00:10:20,389 --> 00:10:16,740  
he didn't stop criticizing and he did in

162  
00:10:26,660 --> 00:10:20,399  
fact try to stop do his promotion to

163  
00:10:29,360 --> 00:10:26,670

full professor there are other fields

164

00:10:34,220 --> 00:10:29,370

where it's not really pure science there

165

00:10:37,550 --> 00:10:34,230

are obvious applications in psychiatry

166

00:10:42,550 --> 00:10:37,560

there is nowadays essentially a dogmatic

167

00:10:46,389 --> 00:10:42,560

adherence to drug centered treatment and

168

00:10:49,850 --> 00:10:46,399

there have been many books published

169

00:10:56,740 --> 00:10:49,860

criticizing that without changing the

170

00:10:59,769 --> 00:10:56,750

fact and if anyone is inclined to regard

171

00:11:03,079 --> 00:10:59,779

Scientology and Dianetics as

172

00:11:07,759 --> 00:11:03,089

pseudoscience I invite them to take a

173

00:11:12,440 --> 00:11:07,769

look at the diagnostic and statistical

174

00:11:19,460 --> 00:11:16,200

it's really extraordinary

175

00:11:23,040 --> 00:11:19,470

I think drug centred medicine is also a

176

00:11:26,670 --> 00:11:23,050

dogma that physicians react against at

177

00:11:30,210 --> 00:11:26,680

their peril the sense of smell

178

00:11:34,140 --> 00:11:30,220

Luca Turin has developed the theory

179

00:11:36,930 --> 00:11:34,150

developed a theory 20 years ago on the

180

00:11:39,800 --> 00:11:36,940

basis of which he has been far more

181

00:11:43,650 --> 00:11:39,810

successful in developing useful

182

00:11:48,780 --> 00:11:43,660

commercial perfumes than people using

183

00:11:52,560 --> 00:11:48,790

the standard paradigm of receptors for

184

00:11:55,650 --> 00:11:52,570

different odors but he's been

185

00:11:58,290 --> 00:11:55,660

excommunicated essentially plate

186

00:12:03,090 --> 00:11:58,300

tectonics there is a whole group of

187

00:12:06,260 --> 00:12:03,100

people new concepts in global tectonics

188

00:12:08,850 --> 00:12:06,270

that has had to start their own

189

00:12:12,980 --> 00:12:08,860

organization in their own publication

190

00:12:15,780 --> 00:12:12,990

because the mainstream will not publish

191

00:12:18,540 --> 00:12:15,790

discussions of the various phenomena

192

00:12:23,280 --> 00:12:18,550

that cannot be explained under the

193

00:12:27,750 --> 00:12:23,290

conventional paradigm and the two

194

00:12:32,220 --> 00:12:27,760

Biggie's are hiv/aids and global warming

195

00:12:35,570 --> 00:12:32,230

if you say that you do not believe that

196

00:12:39,510 --> 00:12:35,580

HIV causes AIDS you are called an AIDS

197

00:12:41,640 --> 00:12:39,520

denialist and you are equated with

198

00:12:47,100 --> 00:12:41,650

people who deny that the Holocaust

199

00:12:51,840 --> 00:12:47,110

happened if you claim that global

200

00:12:55,500 --> 00:12:51,850

warming is not to any extent caused by

201  
00:12:57,060 --> 00:12:55,510  
human activities you called a global

202  
00:13:01,940 --> 00:12:57,070  
warming denialist

203  
00:13:06,530 --> 00:13:01,950  
and similarly despised and refused

204  
00:13:10,110 --> 00:13:06,540  
publication on both of those there are

205  
00:13:14,190 --> 00:13:10,120  
thousands of qualified people who

206  
00:13:17,600 --> 00:13:14,200  
express the minority view and it is

207  
00:13:21,950 --> 00:13:17,610  
actually the case that there is no

208  
00:13:26,340 --> 00:13:21,960  
credible evidence that HIV causes AIDS

209  
00:13:29,880 --> 00:13:26,350  
there is no credible evidence that human

210  
00:13:33,750 --> 00:13:29,890  
activities significantly increase the

211  
00:13:37,440 --> 00:13:33,760  
rate of global warming I have had time

212  
00:13:40,320 --> 00:13:37,450  
only to provoke a little bit with these

213  
00:13:43,950 --> 00:13:40,330

assertions I'm hoping that later this

214

00:13:47,430 --> 00:13:43,960

year this book will appear in which I

215

00:13:51,920 --> 00:13:47,440

document these things and try to offer a

216

00:13:59,660 --> 00:13:51,930

discussion of how we got here thank you

217

00:14:10,650 --> 00:14:06,590

first line Thank You Henry great talk

218

00:14:12,750 --> 00:14:10,660

how do you relate the issues that you're

219

00:14:14,670 --> 00:14:12,760

raising to the crisis in science

220

00:14:16,140 --> 00:14:14,680

education then losing you so much media

221

00:14:18,180 --> 00:14:16,150

we need to have more science education

222

00:14:20,430 --> 00:14:18,190

we need more better educated public

223

00:14:23,250 --> 00:14:20,440

around science what do you see the

224

00:14:25,350 --> 00:14:23,260

relationship is to that I think the

225

00:14:28,140 --> 00:14:25,360

fundamental problem is that there's too

226

00:14:31,020 --> 00:14:28,150

much so-called science being done and

227

00:14:32,970 --> 00:14:31,030

there's I mean there's it's a general

228

00:14:36,900 --> 00:14:32,980

rule that as you increase quality

229

00:14:39,810 --> 00:14:36,910

quantity the quality tends to go down we

230

00:14:42,480 --> 00:14:39,820

have a situation now where there are far

231

00:14:44,940 --> 00:14:42,490

more people wanting to do research and

232

00:14:48,270 --> 00:14:44,950

asking for funding than is available and

233

00:14:53,970 --> 00:14:48,280

they have been side effects of that like

234

00:14:57,720 --> 00:14:53,980

the tremendous increase in open fraud

235

00:15:01,650 --> 00:14:57,730

and dishonesty in science which was very

236

00:15:04,530 --> 00:15:01,660

rare up to about 1980 and it's now

237

00:15:08,100 --> 00:15:04,540

common enough that there are actually

238

00:15:11,360 --> 00:15:08,110

research units on ethics in science and

239

00:15:14,280 --> 00:15:11,370

so on when I started in science you know

240

00:15:18,720 --> 00:15:14,290

what it takes what does that have to do

241

00:15:23,010 --> 00:15:18,730

with science but there's a serious lack

242

00:15:24,810 --> 00:15:23,020

of reality in science education we're

243

00:15:28,850 --> 00:15:24,820

still teaching people that there's a

244

00:15:31,590 --> 00:15:28,860

scientific method you learn it delivers

245

00:15:34,500 --> 00:15:31,600

reliable results the fact of the matter

246

00:15:38,520 --> 00:15:34,510

is that science is done by human beings

247

00:15:39,660 --> 00:15:38,530

who have to judge the results of

248

00:15:44,150 --> 00:15:39,670

experiments

249

00:15:47,550 --> 00:15:44,160

so Henry my experience in academia

250

00:15:50,670 --> 00:15:47,560

repeatedly echoes what you've said and

251  
00:15:52,850 --> 00:15:50,680  
and and so there's there's no question

252  
00:15:57,180 --> 00:15:52,860  
to all of us that you're right

253  
00:16:01,440 --> 00:15:57,190  
still I wonder if there if one can be an

254  
00:16:03,810 --> 00:16:01,450  
optimist here be and so how might one be

255  
00:16:06,480 --> 00:16:03,820  
an optimist I suppose one way might be

256  
00:16:08,880 --> 00:16:06,490  
to say it's always been bad and still

257  
00:16:11,430 --> 00:16:08,890  
think good things leak through and it

258  
00:16:13,710 --> 00:16:11,440  
will happen again another perhaps is

259  
00:16:15,690 --> 00:16:13,720  
that this this current paradigm is just

260  
00:16:17,990 --> 00:16:15,700  
gonna burn itself out and there will be

261  
00:16:20,670 --> 00:16:18,000  
a change because there has to be I

262  
00:16:22,560 --> 00:16:20,680  
realize you've been particularly burned

263  
00:16:25,170 --> 00:16:22,570

recently with your stance on aids and

264

00:16:29,460 --> 00:16:25,180

HIV and so you're suffering from it but

265

00:16:32,940 --> 00:16:29,470

do you see some positive movements I

266

00:16:35,730 --> 00:16:32,950

don't know where the positive change is

267

00:16:37,110 --> 00:16:35,740

going to come from but it has to come at

268

00:16:39,570 --> 00:16:37,120

some time

269

00:16:42,720 --> 00:16:39,580

I haven't incidentally I haven't been

270

00:16:46,890 --> 00:16:42,730

heard by my stances because I've been

271

00:16:52,020 --> 00:16:46,900

happily retired for ten years but sooner

272

00:16:55,920 --> 00:16:52,030

or later reality has to catch up and in

273

00:16:59,070 --> 00:16:55,930

the case of hiv/aids I think it's going

274

00:17:01,890 --> 00:16:59,080

to happen when eventually it's

275

00:17:05,310 --> 00:17:01,900

discovered that the people who are told

276

00:17:09,090 --> 00:17:05,320

they're HIV positive and who are being

277

00:17:11,880 --> 00:17:09,100

given drugs will be found to be dying at

278

00:17:14,940 --> 00:17:11,890

a greater rate than they should be under

279

00:17:19,290 --> 00:17:14,950

the paradigm the trouble is that that

280

00:17:23,510 --> 00:17:19,300

these issues are all systemic what do

281

00:17:28,710 --> 00:17:23,520

you do to make the evaluation of

282

00:17:33,090 --> 00:17:28,720

people's work not based on getting

283

00:17:37,140 --> 00:17:33,100

grants I mean how do you accomplish that

284

00:17:40,470 --> 00:17:37,150

I mean Peter Peter Duesberg at Berkeley

285

00:17:43,850 --> 00:17:40,480

is is refused access to graduate

286

00:17:47,070 --> 00:17:43,860

students because his department had said

287

00:17:50,100 --> 00:17:47,080

in order to support graduate students we

288

00:17:52,350 --> 00:17:50,110

guarantee them support for four years

289

00:17:54,990 --> 00:17:52,360

the department can only do it for

290

00:17:57,480 --> 00:17:55,000

one year if you don't have grant funds

291

00:18:00,480 --> 00:17:57,490

equal to a quarter of a million dollars

292

00:18:04,140 --> 00:18:00,490

a year we're not going to let you take a

293

00:18:06,660 --> 00:18:04,150

grade your students now you know I'd

294

00:18:12,060 --> 00:18:06,670

like to be optimistic but how do you

295

00:18:16,950 --> 00:18:12,070

change the system away from that I think

296

00:18:21,000 --> 00:18:18,000

great stuff

297

00:18:23,490 --> 00:18:21,010

I really agree with you but one of the

298

00:18:26,010 --> 00:18:23,500

things that seems to have crossed my

299

00:18:28,650 --> 00:18:26,020

mind recently is that more and more

300

00:18:31,409 --> 00:18:28,660

through maybe even the last 10 or 15

301

00:18:33,690 --> 00:18:31,419

years that a good bit of the public

302

00:18:36,299 --> 00:18:33,700

policy decision decisions that affect

303

00:18:39,960 --> 00:18:36,309

our lives are not made on real science

304

00:18:41,850 --> 00:18:39,970

but are made on political people wanting

305

00:18:44,730 --> 00:18:41,860

to gain power or control or something

306

00:18:47,610 --> 00:18:44,740

else and that most of what happens to us

307

00:18:49,169 --> 00:18:47,620

now is based on lies and I think that's

308

00:18:51,930 --> 00:18:49,179

that and I don't know how we overcome

309

00:18:54,870 --> 00:18:51,940

that right I mean this is the crucial

310

00:18:59,030 --> 00:18:54,880

issue how is public policy gonna be

311

00:19:03,000 --> 00:18:59,040

based on evidence when the mainstream

312

00:19:06,630 --> 00:19:03,010

advice from the scientific community is

313

00:19:10,280 --> 00:19:06,640

not based on that and things are so

314

00:19:13,770 --> 00:19:10,290

politicized that if you question

315

00:19:16,770 --> 00:19:13,780

hiv/aids or global warming you are

316

00:19:19,530 --> 00:19:16,780

referred to not only as a denialist but

317

00:19:22,100 --> 00:19:19,540

as a right-wing kook because it happens

318

00:19:26,490 --> 00:19:22,110

that some very conservative

319

00:19:29,250 --> 00:19:26,500

organizations have taken the stance that

320

00:19:37,919 --> 00:19:29,260

global warming is you know as a liberal

321

00:19:41,159 --> 00:19:37,929

conspiracy unfortunately I need to add

322

00:19:44,039 --> 00:19:41,169

to your list of separation one physicist

323

00:19:47,130 --> 00:19:44,049

from England Stephen Phillips if you

324

00:19:48,930 --> 00:19:47,140

heard about him he wrote a book ESP or

325

00:19:52,260 --> 00:19:48,940

quarks in superstrings

326

00:19:55,049 --> 00:19:52,270

and in my opinion this book really

327

00:19:57,360 --> 00:19:55,059

opened some new horizons for our physics

328

00:19:59,970 --> 00:19:57,370

but it's completely ignored and I would

329

00:20:03,110 --> 00:19:59,980

recommend everybody who is interested in

330

00:20:05,789 --> 00:20:03,120

this part of science look at this book

331

00:20:08,519 --> 00:20:05,799

as too

332

00:20:13,310 --> 00:20:08,529

how to fight with this situation I think

333

00:20:16,710 --> 00:20:13,320

that organized societies like ours and

334

00:20:19,249 --> 00:20:16,720

create if you wish our own civilization

335

00:20:23,369 --> 00:20:19,259

main science