

1
00:00:00,490 --> 00:00:08,529
[Music]

2
00:00:16,089 --> 00:00:24,949
[Music]

3
00:00:22,359 --> 00:00:27,349
so thank you again for the introduction

4
00:00:24,949 --> 00:00:29,899
Brenda it is great to be here I hope to

5
00:00:27,349 --> 00:00:32,480
become a regular face that these

6
00:00:29,899 --> 00:00:34,670
organizations are at these meetings I

7
00:00:32,479 --> 00:00:36,229
came to the last year's meeting is where

8
00:00:34,670 --> 00:00:39,980
I met Brenda she was kind enough to

9
00:00:36,229 --> 00:00:44,209
invite me out to New Jersey which was

10
00:00:39,979 --> 00:00:47,989
just not expected at all so I had a

11
00:00:44,210 --> 00:00:50,420
wonderful opportunity to do that and you

12
00:00:47,990 --> 00:00:53,090
know as great as it is to gather a bunch

13
00:00:50,420 --> 00:00:55,070
of like-minded people together and you

14
00:00:53,090 --> 00:00:57,829
know present all the stuff that we're

15
00:00:55,070 --> 00:01:01,488
interested in for me at least the SSC

16
00:00:57,829 --> 00:01:04,099
has been an opportunity to to receive

17
00:01:01,488 --> 00:01:05,959
you know the kind of tutelage that I

18
00:01:04,099 --> 00:01:09,169
could get literally nowhere else in the

19
00:01:05,959 --> 00:01:12,199
world and to kind of you know to help

20
00:01:09,170 --> 00:01:13,909
get help you know get support as a young

21
00:01:12,200 --> 00:01:17,810
person doing this has been absolutely

22
00:01:13,909 --> 00:01:19,729
invaluable so but now we can start the

23
00:01:17,810 --> 00:01:23,450
presentation I would like to start it

24
00:01:19,728 --> 00:01:26,328
with a very very brief poll mostly for

25
00:01:23,450 --> 00:01:28,579
my curiosity I was gonna go ahead and

26
00:01:26,328 --> 00:01:30,379
assume everyone here knows what a random

27
00:01:28,578 --> 00:01:32,538
event generator is I think we can go

28
00:01:30,379 --> 00:01:35,599
ahead and move past that but I am very

29

00:01:32,539 --> 00:01:39,489
curious how many people here have ever

30
00:01:35,599 --> 00:01:42,968
heard of a pseudo random event generator

31
00:01:39,489 --> 00:01:46,248
okay so even in a audience like this

32
00:01:42,968 --> 00:01:47,208
we're obviously very interested in this

33
00:01:46,248 --> 00:01:50,899
kind of stuff

34
00:01:47,209 --> 00:01:52,849
close followers of the the work done at

35
00:01:50,899 --> 00:01:56,978
pare the percentage of people who have

36
00:01:52,849 --> 00:02:00,709
heard of a pseudo re G is much smaller

37
00:01:56,978 --> 00:02:03,438
it's been kind of a neglected area of

38
00:02:00,709 --> 00:02:06,228
study it's not what people come to think

39
00:02:03,438 --> 00:02:08,780
about when they think about the

40
00:02:06,228 --> 00:02:11,090
achievements of Bob and Brenda and the

41
00:02:08,780 --> 00:02:15,199
pear team but it's something that I

42
00:02:11,090 --> 00:02:16,878
ended up becoming very interested in so

43
00:02:15,199 --> 00:02:19,098

we're gonna do a couple things and talk

44

00:02:16,878 --> 00:02:20,419

about what is a pseudo reg why were they

45

00:02:19,098 --> 00:02:23,359

first studied

46

00:02:20,419 --> 00:02:27,199

what makes them so unique and what did I

47

00:02:23,360 --> 00:02:30,590

do to try and learn about them so first

48

00:02:27,199 --> 00:02:35,209

question is what is a pseudo re G a

49

00:02:30,590 --> 00:02:39,020

pseudo re G is quite simply it is a way

50

00:02:35,209 --> 00:02:41,870

to both mimic and kind of subvert at the

51

00:02:39,020 --> 00:02:44,989

same time a traditional random number

52

00:02:41,870 --> 00:02:49,189

generator the outputs of a pseudo re G

53

00:02:44,989 --> 00:02:51,709

are identical to the outputs of an re G

54

00:02:49,189 --> 00:02:54,409

looking at them you cannot tell the

55

00:02:51,709 --> 00:02:56,870

difference they appear identical when

56

00:02:54,409 --> 00:02:59,389

you are actually operating at a pseudo

57

00:02:56,870 --> 00:03:03,709

re G and you watch the graph go up and

58
00:02:59,389 --> 00:03:05,958
down it's identical to a normal re G so

59
00:03:03,709 --> 00:03:08,810
the output is different but the source

60
00:03:05,959 --> 00:03:12,170
of the randomness where that data is

61
00:03:08,810 --> 00:03:13,459
coming from is different and that's the

62
00:03:12,169 --> 00:03:16,149
key factor and that's what we're going

63
00:03:13,459 --> 00:03:19,159
to explore here so I have a quote

64
00:03:16,150 --> 00:03:21,500
instead of generating bits in real time

65
00:03:19,159 --> 00:03:23,659
by sampling a micro electronic noise

66
00:03:21,500 --> 00:03:26,120
source and converting the output into

67
00:03:23,659 --> 00:03:28,370
ones and zeros a pseudo reg quote

68
00:03:26,120 --> 00:03:31,400
produces a determinate repeating

69
00:03:28,370 --> 00:03:34,069
sequence so that the only remaining non

70
00:03:31,400 --> 00:03:37,069
deterministic aspect of the experiment

71
00:03:34,069 --> 00:03:39,620
is the time of incursion initiated by

72
00:03:37,069 --> 00:03:42,229
the operator and that comes from an 87

73
00:03:39,620 --> 00:03:47,659
paper by the pair team so that's really

74
00:03:42,229 --> 00:03:50,298
key these devices are not random to get

75
00:03:47,659 --> 00:03:53,269
give you a little more introduction okay

76
00:03:50,299 --> 00:03:58,219
it's an algorithm it's a computer

77
00:03:53,269 --> 00:03:59,750
algorithm and it's just a loop of ones

78
00:03:58,219 --> 00:04:02,209
and zeros ones and zeros and ones and

79
00:03:59,750 --> 00:04:05,049
zeros that is fixed that never changes

80
00:04:02,209 --> 00:04:07,699
and that can repeat itself without

81
00:04:05,049 --> 00:04:10,159
without repeating for approximately 60

82
00:04:07,699 --> 00:04:12,379
hours straight so it's always the same

83
00:04:10,159 --> 00:04:15,439
there's nothing random about it it's

84
00:04:12,379 --> 00:04:17,810
just a lot of ones and zeros that run in

85
00:04:15,439 --> 00:04:20,358
a loop so how can you possibly

86

00:04:17,810 --> 00:04:22,370
manipulate that data to prove that your

87
00:04:20,358 --> 00:04:24,319
intention is affecting it well there's

88
00:04:22,370 --> 00:04:28,699
only one way to do it and it's summed up

89
00:04:24,319 --> 00:04:31,339
in this quote so the only random element

90
00:04:28,699 --> 00:04:33,728
is when you dip into the stream okay

91
00:04:31,339 --> 00:04:35,378
that is the important part

92
00:04:33,728 --> 00:04:37,418
you're able to dip into the stream and

93
00:04:35,379 --> 00:04:40,028
intersect it at the right spot you can

94
00:04:37,418 --> 00:04:42,728
get an effect okay so that's key and

95
00:04:40,028 --> 00:04:45,069
that's going to be a theme so why were

96
00:04:42,728 --> 00:04:47,498
these devices originally started what

97
00:04:45,069 --> 00:04:49,330
was the thinking behind what can we

98
00:04:47,499 --> 00:04:50,469
learn from them and I have got one more

99
00:04:49,329 --> 00:04:54,998
quote and then we're done with the

100
00:04:50,468 --> 00:04:57,399

quotes so obviously the team at

101

00:04:54,999 --> 00:05:00,189

Princeton experimented on multiple

102

00:04:57,399 --> 00:05:01,899

different devices it soon became

103

00:05:00,189 --> 00:05:04,620

apparent that these effects that they

104

00:05:01,899 --> 00:05:06,758

were producing were not device specific

105

00:05:04,620 --> 00:05:08,499

everyone knows the random event

106

00:05:06,759 --> 00:05:10,899

generators the electronic coin flippers

107

00:05:08,499 --> 00:05:13,749

but then they also had the the famous

108

00:05:10,899 --> 00:05:15,158

Murphy which is a giant pinball machine

109

00:05:13,749 --> 00:05:17,199

that shoots down a bunch of balls

110

00:05:15,158 --> 00:05:18,938

through an array of pegs and they form a

111

00:05:17,199 --> 00:05:21,069

normal distribution at the end and you

112

00:05:18,939 --> 00:05:23,588

can affect how many balls are falling to

113

00:05:21,069 --> 00:05:26,229

the left or to the right so that's the

114

00:05:23,588 --> 00:05:29,139

same it's a random physical process that

115
00:05:26,228 --> 00:05:31,838
your intention is able to to change the

116
00:05:29,139 --> 00:05:34,478
distribution of so it became apparent

117
00:05:31,838 --> 00:05:36,810
that you can create these effects using

118
00:05:34,478 --> 00:05:39,818
multiple devices okay but they all had

119
00:05:36,810 --> 00:05:42,759
something in common they were all random

120
00:05:39,819 --> 00:05:45,370
they were all chaotic so the question

121
00:05:42,759 --> 00:05:49,060
became well clearly this effect is not

122
00:05:45,370 --> 00:05:52,389
device specific so what's going on is it

123
00:05:49,060 --> 00:05:53,709
even physical at all okay what's

124
00:05:52,389 --> 00:05:56,228
happening when you go and sit by a

125
00:05:53,709 --> 00:05:58,149
random event generator you have this

126
00:05:56,228 --> 00:06:00,818
piece of micro electronic circuitry and

127
00:05:58,149 --> 00:06:02,468
the electrons are flowing through it are

128
00:06:00,819 --> 00:06:04,330
you physically you know nudging an

129
00:06:02,468 --> 00:06:05,889
electron through your one gate or

130
00:06:04,329 --> 00:06:08,199
another are you physically with your

131
00:06:05,889 --> 00:06:10,059
mind you know making a ball bounce to

132
00:06:08,199 --> 00:06:11,829
the left of a peg or to the right what's

133
00:06:10,059 --> 00:06:16,300
going on and that's what these devices

134
00:06:11,829 --> 00:06:18,490
were designed to to test so we can read

135
00:06:16,300 --> 00:06:19,899
the pronoun and the physical behavior of

136
00:06:18,490 --> 00:06:22,749
the electronic noise source being

137
00:06:19,899 --> 00:06:24,478
affected and if so in what way or is the

138
00:06:22,749 --> 00:06:27,039
effect possibly more systemic

139
00:06:24,478 --> 00:06:29,318
manifesting itself in the output data in

140
00:06:27,038 --> 00:06:32,110
an anomalous statistical form without

141
00:06:29,319 --> 00:06:34,149
alteration of any specific physical

142
00:06:32,110 --> 00:06:36,788
process so the bottom line is basically

143

00:06:34,149 --> 00:06:40,389
is the effect we're dealing with is it a

144
00:06:36,788 --> 00:06:42,579
case of mind over matter as are we

145
00:06:40,389 --> 00:06:44,879
manipulating something physical or is it

146
00:06:42,579 --> 00:06:46,629
a case of mind over information

147
00:06:44,879 --> 00:06:49,720
non-physical

148
00:06:46,629 --> 00:06:51,550
the study of these devices tends to

149
00:06:49,720 --> 00:06:55,210
demonstrate that perhaps it is the

150
00:06:51,550 --> 00:06:59,020
latter okay so bottom line what makes

151
00:06:55,209 --> 00:07:01,989
these devices so different and in my

152
00:06:59,019 --> 00:07:04,829
mind so fascinating every other

153
00:07:01,990 --> 00:07:08,199
experimental device that they utilized

154
00:07:04,829 --> 00:07:10,959
operated on one common principle and

155
00:07:08,199 --> 00:07:14,259
that was your intention exerts an

156
00:07:10,959 --> 00:07:17,709
influence on a random physical process

157
00:07:14,259 --> 00:07:19,569

okay whether it's electrons or balls or

158

00:07:17,709 --> 00:07:21,969

a pendulum you have a random physical

159

00:07:19,569 --> 00:07:23,860

process a chaotic on deterministic

160

00:07:21,970 --> 00:07:26,050

process that you were trying to

161

00:07:23,860 --> 00:07:28,540

manipulate the fascinating thing about

162

00:07:26,050 --> 00:07:31,360

it's too direct is that you are the

163

00:07:28,540 --> 00:07:34,390

random process okay nothing else only

164

00:07:31,360 --> 00:07:36,850

you can supply the randomness and that's

165

00:07:34,389 --> 00:07:40,149

what makes them so in my mind profound

166

00:07:36,850 --> 00:07:41,950

and such a valuable tool both for from a

167

00:07:40,149 --> 00:07:43,979

theoretical perspective and a

168

00:07:41,949 --> 00:07:48,000

philosophical perspective and a way to

169

00:07:43,980 --> 00:07:50,770

to understand this entire class of

170

00:07:48,000 --> 00:07:52,509

experiments in a totally new light and

171

00:07:50,769 --> 00:07:54,969

that was kind of my at least that's what

172
00:07:52,509 --> 00:07:56,939
I came away from after three months of

173
00:07:54,970 --> 00:08:00,570
study and what makes them so interesting

174
00:07:56,939 --> 00:08:02,889
and also unlike a traditional are eg

175
00:08:00,569 --> 00:08:05,649
successful studio rehgat operation

176
00:08:02,889 --> 00:08:12,099
requires knowledge of future states or

177
00:08:05,649 --> 00:08:14,319
precognition because the effect can only

178
00:08:12,100 --> 00:08:17,260
be manifested when you initiate the

179
00:08:14,319 --> 00:08:19,689
trial and as soon as you press start I

180
00:08:17,259 --> 00:08:21,490
mean you should be able to if you had

181
00:08:19,689 --> 00:08:24,310
the algorithm you would know you know

182
00:08:21,490 --> 00:08:27,460
what the ten billionth bit was what the

183
00:08:24,310 --> 00:08:29,740
fifth bit was it's all fixed so you have

184
00:08:27,459 --> 00:08:32,978
to when you're sitting behind one of

185
00:08:29,740 --> 00:08:36,159
these machines you have to know when

186
00:08:32,979 --> 00:08:38,169
this trial ends is that sequence gonna

187
00:08:36,159 --> 00:08:40,659
be above you know are there gonna be

188
00:08:38,168 --> 00:08:42,759
more ones than zeroes or less ones and

189
00:08:40,659 --> 00:08:45,730
zeroes so you have to know what the

190
00:08:42,759 --> 00:08:48,759
state we have to be able to predict what

191
00:08:45,730 --> 00:08:50,649
the you know what the 20,000th bit is or

192
00:08:48,759 --> 00:08:56,309
what that series of bits that's fixed is

193
00:08:50,649 --> 00:08:58,649
so inherent within these devices is

194
00:08:56,309 --> 00:09:02,559
precognition

195
00:08:58,649 --> 00:09:04,750
okay so what began as a way to probe for

196
00:09:02,559 --> 00:09:07,179
the physical mechanism by which the

197
00:09:04,750 --> 00:09:09,789
effect manifests itself has transformed

198
00:09:07,179 --> 00:09:12,609
into an affirmation of the most

199
00:09:09,789 --> 00:09:15,219
important random element after all what

200

00:09:12,610 --> 00:09:16,659
we're really interested in at least what

201
00:09:15,220 --> 00:09:19,330
I'm really interested in you know and

202
00:09:16,659 --> 00:09:20,939
that's people and so for me but the

203
00:09:19,330 --> 00:09:25,420
pseudo reg really became a very

204
00:09:20,940 --> 00:09:30,040
empowering pursuit because you know it's

205
00:09:25,419 --> 00:09:32,649
all about the person you know you are

206
00:09:30,039 --> 00:09:35,230
it's almost like you are a random event

207
00:09:32,649 --> 00:09:37,240
generator you are the randomness and to

208
00:09:35,230 --> 00:09:39,580
me you know that's that's the best part

209
00:09:37,240 --> 00:09:42,009
okay so we've got a couple more things

210
00:09:39,580 --> 00:09:44,710
here and then we can start talking about

211
00:09:42,009 --> 00:09:47,019
my experiment so I have to admit that

212
00:09:44,710 --> 00:09:49,570
when I first started the project I was a

213
00:09:47,019 --> 00:09:51,460
little apprehensive you know I travel

214
00:09:49,570 --> 00:09:53,500

all the way from Denver Colorado to

215

00:09:51,460 --> 00:09:55,780

Princeton New Jersey and I wanted to

216

00:09:53,500 --> 00:09:57,639

play with re G's you know that's what

217

00:09:55,779 --> 00:10:00,220

that's what it was all about that was

218

00:09:57,639 --> 00:10:02,049

you know that's what what they did and

219

00:10:00,220 --> 00:10:04,509

when Brenda told me that well you know

220

00:10:02,049 --> 00:10:06,429

Brennan we have this entire class of

221

00:10:04,509 --> 00:10:08,409

experiments that we never felt like we

222

00:10:06,429 --> 00:10:09,639

got a lot of closure on and that you

223

00:10:08,409 --> 00:10:10,659

know maybe there was some room here for

224

00:10:09,639 --> 00:10:14,350

you to make an original contribution

225

00:10:10,659 --> 00:10:16,449

there called pseudo re G's and they're

226

00:10:14,350 --> 00:10:17,710

like the cool re G's except you know

227

00:10:16,450 --> 00:10:20,040

they're not at all random and they don't

228

00:10:17,710 --> 00:10:25,150

use the cool you know quantum tunneling

229
00:10:20,039 --> 00:10:27,909
there's no quantum element but after

230
00:10:25,149 --> 00:10:30,279
after a while I became to be quite fond

231
00:10:27,909 --> 00:10:32,500
of them and also the fact that you know

232
00:10:30,279 --> 00:10:36,009
there isn't a lot of resolution and

233
00:10:32,500 --> 00:10:37,629
they're kind of ignored even by you know

234
00:10:36,009 --> 00:10:39,279
Bob and Brenda I think if I may say so

235
00:10:37,629 --> 00:10:42,309
it's always been kind of a an

236
00:10:39,279 --> 00:10:44,319
afterthought margins of reality their

237
00:10:42,309 --> 00:10:47,799
first book has a chapter devoted to

238
00:10:44,320 --> 00:10:51,490
pseudo reg it's two pages long you know

239
00:10:47,799 --> 00:10:52,959
it's not much there there's the suit of

240
00:10:51,490 --> 00:10:55,000
rags are brought up in other scholarly

241
00:10:52,960 --> 00:10:57,580
papers that they've done but it's always

242
00:10:55,000 --> 00:10:59,139
as oh yeah and you can do it with a

243
00:10:57,580 --> 00:11:00,550
pseudo reg too or you can't do with the

244
00:10:59,139 --> 00:11:01,720
suit of Victor now let's get back on to

245
00:11:00,549 --> 00:11:03,279
you know what we're really interested in

246
00:11:01,720 --> 00:11:05,050
here it's always been kind of an

247
00:11:03,279 --> 00:11:08,049
afterthought and that's kind of been my

248
00:11:05,049 --> 00:11:10,209
quest I guess what turned into my quest

249
00:11:08,049 --> 00:11:11,278
is to you know to rehabilitate the

250
00:11:10,210 --> 00:11:13,980
pseudo reg

251
00:11:11,278 --> 00:11:16,409
to to you know to show that these things

252
00:11:13,980 --> 00:11:18,539
are actually you know interesting and

253
00:11:16,409 --> 00:11:20,610
profound and should be you know

254
00:11:18,539 --> 00:11:21,438
respected and for what they for what

255
00:11:20,610 --> 00:11:24,749
they are

256
00:11:21,438 --> 00:11:27,419
okay so my experiment my experiment

257

00:11:24,749 --> 00:11:30,149
utilizes three separate experimental

258
00:11:27,419 --> 00:11:33,498
conditions I came to be most interested

259
00:11:30,149 --> 00:11:35,519
in a couple things first off what is

260
00:11:33,499 --> 00:11:37,680
whether it is the source of the

261
00:11:35,519 --> 00:11:40,230
randomness which matters most or the

262
00:11:37,679 --> 00:11:42,419
belief and expectations of the operator

263
00:11:40,230 --> 00:11:43,949
regarding said source or put another way

264
00:11:42,419 --> 00:11:47,698
what are the most important

265
00:11:43,948 --> 00:11:49,558
psychological you know what's the most

266
00:11:47,698 --> 00:11:52,558
what's the important psychological mix

267
00:11:49,558 --> 00:11:55,980
that you have to bring to the table for

268
00:11:52,558 --> 00:11:58,019
a successful operation and also to get a

269
00:11:55,980 --> 00:12:00,360
little bit more into the nitty-gritty

270
00:11:58,019 --> 00:12:04,948
mechanics of it you know how does it

271
00:12:00,360 --> 00:12:06,480

work how can we be how can we manipulate

272

00:12:04,948 --> 00:12:11,338

what we know about it in order to

273

00:12:06,480 --> 00:12:12,569

produce the largest effects so the three

274

00:12:11,339 --> 00:12:15,389

conditions we'll talk about him a little

275

00:12:12,568 --> 00:12:19,679

bit more in brief now condition one is a

276

00:12:15,389 --> 00:12:22,409

entire database built using exclusively

277

00:12:19,679 --> 00:12:24,778

the pseudo are eg but the operator me I

278

00:12:22,409 --> 00:12:27,990

was the only operator for this entire

279

00:12:24,778 --> 00:12:32,269

experiment believes that it is a real

280

00:12:27,990 --> 00:12:35,639

are eg he is operating ok so I built

281

00:12:32,269 --> 00:12:40,558

accidentally I built an entire database

282

00:12:35,639 --> 00:12:42,778

of pseudo are eg you know work where I

283

00:12:40,558 --> 00:12:45,750

thought I was operating a real are eg I

284

00:12:42,778 --> 00:12:48,870

hadn't familiarized myself with the with

285

00:12:45,750 --> 00:12:51,360

the style around software yet so it was

286
00:12:48,870 --> 00:12:53,639
quite a shock to me after looking at

287
00:12:51,360 --> 00:12:56,399
this database and seeing that yes I did

288
00:12:53,639 --> 00:12:59,600
have a pretty good effect I was like wow

289
00:12:56,399 --> 00:13:01,970
this is working this is great and then I

290
00:12:59,600 --> 00:13:04,470
started looking more carefully and I

291
00:13:01,970 --> 00:13:06,928
realized I'd overlooked something I was

292
00:13:04,470 --> 00:13:10,678
like wait I just did all that with a

293
00:13:06,928 --> 00:13:12,568
pseudo reg and it was after that that

294
00:13:10,678 --> 00:13:14,220
was kind of the proof-of-concept moment

295
00:13:12,568 --> 00:13:16,409
for me it was after that where I was

296
00:13:14,220 --> 00:13:19,439
like ok I can get excited about this I I

297
00:13:16,409 --> 00:13:21,600
can I can do this because you know I

298
00:13:19,438 --> 00:13:24,759
just did it I didn't even know it so

299
00:13:21,600 --> 00:13:29,529
that was kind of provided a very

300
00:13:24,759 --> 00:13:31,480
Niek piece a set of data you know it's

301
00:13:29,529 --> 00:13:33,490
not often that you can trick yourself

302
00:13:31,480 --> 00:13:35,409
you know without even knowing it and

303
00:13:33,490 --> 00:13:38,139
then use that data later it's a very

304
00:13:35,409 --> 00:13:41,799
unique piece of data that I I wanted to

305
00:13:38,139 --> 00:13:44,019
make use of so that's that addresses the

306
00:13:41,799 --> 00:13:46,949
first question whether it's the source

307
00:13:44,019 --> 00:13:49,870
of the randomness that matters or the

308
00:13:46,950 --> 00:13:52,330
Dupree stated expectations and beliefs

309
00:13:49,870 --> 00:13:53,919
of the operator all the beliefs all the

310
00:13:52,330 --> 00:13:57,430
expectations that you that you bring to

311
00:13:53,919 --> 00:14:00,759
the table as a participant what's really

312
00:13:57,429 --> 00:14:03,219
more important and then we have two

313
00:14:00,759 --> 00:14:05,769
other conditions second condition is

314

00:14:03,220 --> 00:14:10,210
identical to the first condition except

315
00:14:05,769 --> 00:14:13,360
now I I know what I'm really working on

316
00:14:10,210 --> 00:14:16,540
so that's kind of control and the third

317
00:14:13,360 --> 00:14:18,250
condition is also the same but one thing

318
00:14:16,539 --> 00:14:22,620
is different and that is the run length

319
00:14:18,250 --> 00:14:25,059
has been decreased so what that means is

320
00:14:22,620 --> 00:14:28,210
most of you probably haven't actually

321
00:14:25,059 --> 00:14:31,449
operated an AR eg yourself maybe maybe

322
00:14:28,210 --> 00:14:35,560
you have but when you sit down to do an

323
00:14:31,450 --> 00:14:37,930
AR AG experiment you when you initiate a

324
00:14:35,559 --> 00:14:41,529
trial when you go high you can either

325
00:14:37,929 --> 00:14:44,439
collect you know the number of bits that

326
00:14:41,529 --> 00:14:47,470
you collect at a time it's called a run

327
00:14:44,440 --> 00:14:49,480
length so I can style I can stop after a

328
00:14:47,470 --> 00:14:53,560

thousand bits I can stop after ten

329

00:14:49,480 --> 00:14:56,289

thousand bits you can vary it but if the

330

00:14:53,559 --> 00:14:59,769

effect is only manifested at the

331

00:14:56,289 --> 00:15:02,829

initiation of the trial if you can chop

332

00:14:59,769 --> 00:15:06,100

that data into smaller pieces and use

333

00:15:02,830 --> 00:15:09,750

smaller run lengths then you have more

334

00:15:06,100 --> 00:15:12,340

opportunities to initiate trials and

335

00:15:09,750 --> 00:15:15,429

theoretically theoretically you would

336

00:15:12,340 --> 00:15:19,930

expect that you can produce a larger

337

00:15:15,429 --> 00:15:22,299

effect that way okay so if you if you're

338

00:15:19,929 --> 00:15:24,789

taking data you a million trials at a

339

00:15:22,299 --> 00:15:27,519

time you know for all of that data

340

00:15:24,789 --> 00:15:31,179

you only have one initiation point only

341

00:15:27,519 --> 00:15:32,649

one chance to start the sequence makes

342

00:15:31,179 --> 00:15:34,689

it a lot you would think a lot more

343
00:15:32,649 --> 00:15:36,879
difficult but if you're taking in tiny

344
00:15:34,690 --> 00:15:38,320
tiny tiny chunks you can start it and

345
00:15:36,879 --> 00:15:41,110
then restart it and

346
00:15:38,320 --> 00:15:43,240
and started and again and perhaps build

347
00:15:41,110 --> 00:15:48,100
a larger effect and that was what that

348
00:15:43,240 --> 00:15:52,659
was meant to to look at so this is

349
00:15:48,100 --> 00:15:54,850
condition one 21,000 trials you as you

350
00:15:52,659 --> 00:15:57,969
can see we achieved a statistically

351
00:15:54,850 --> 00:16:02,080
significant effect in one direction in

352
00:15:57,970 --> 00:16:05,769
the high direction terminal z-score of I

353
00:16:02,080 --> 00:16:08,460
believe two point four which is pretty

354
00:16:05,769 --> 00:16:11,889
good and then you also see this is a

355
00:16:08,460 --> 00:16:14,730
pattern that will which will come up

356
00:16:11,889 --> 00:16:16,870
multiple times is the

357

00:16:14,730 --> 00:16:23,649

indistinguishability between the

358

00:16:16,870 --> 00:16:27,490

baseline and the low okay and this is

359

00:16:23,649 --> 00:16:30,459

condition2 again you see that we have

360

00:16:27,490 --> 00:16:32,740

reached a significant effect but this

361

00:16:30,460 --> 00:16:36,970

time it's been flipped over the

362

00:16:32,740 --> 00:16:39,159

horizontal axis and now the low has

363

00:16:36,970 --> 00:16:42,730

reached a significant threshold at the

364

00:16:39,159 --> 00:16:45,459

0.05 cutoff the terminal z-score of one

365

00:16:42,730 --> 00:16:48,580

point six four and nine over the one

366

00:16:45,460 --> 00:16:51,430

foot which is like point O four over the

367

00:16:48,580 --> 00:16:55,090

the cutoff for significant at the 0.05

368

00:16:51,429 --> 00:16:57,729

level and the highs are error nothing

369

00:16:55,090 --> 00:17:00,580

but again you have the near

370

00:16:57,730 --> 00:17:03,480

indistinguishability of the baselines

371

00:17:00,580 --> 00:17:03,480
and lows

372
00:17:06,828 --> 00:17:10,849
okay so both conditions achieved

373
00:17:08,929 --> 00:17:13,069
significant at the 0.05 level but in

374
00:17:10,849 --> 00:17:15,678
different directions as tells us that

375
00:17:13,068 --> 00:17:20,838
expectations and beliefs of the operator

376
00:17:15,679 --> 00:17:22,788
are not exact not in or not we cannot

377
00:17:20,838 --> 00:17:26,389
say that they are necessarily an all

378
00:17:22,788 --> 00:17:30,140
important factor in proper and

379
00:17:26,390 --> 00:17:33,919
successful pseudo our eg operation one

380
00:17:30,140 --> 00:17:36,019
important topic to to breach here is you

381
00:17:33,919 --> 00:17:39,649
know what would have happened if I had

382
00:17:36,019 --> 00:17:43,339
flipped the order of the two you know

383
00:17:39,648 --> 00:17:45,109
that first set of data where I you know

384
00:17:43,339 --> 00:17:49,069
was enthusiastic when I thought I was

385
00:17:45,109 --> 00:17:52,579

using an R eg but I wasn't and I kind of

386

00:17:49,069 --> 00:17:54,888

served as a proof of concept and let me

387

00:17:52,579 --> 00:17:59,019

know psychologically that yes it's

388

00:17:54,888 --> 00:18:02,629

possible after all if that had come last

389

00:17:59,019 --> 00:18:06,558

then it could have totally changed the

390

00:18:02,630 --> 00:18:09,320

entire psychological set of the

391

00:18:06,558 --> 00:18:13,038

experiment and could have led to

392

00:18:09,319 --> 00:18:17,298

drastically different results and then

393

00:18:13,038 --> 00:18:19,879

here is the third condition so this was

394

00:18:17,298 --> 00:18:22,519

a condition that was supposed to you

395

00:18:19,880 --> 00:18:25,220

know look at shorter run lengths more

396

00:18:22,519 --> 00:18:28,630

incursions into the data set should mean

397

00:18:25,220 --> 00:18:31,339

a larger effect it was a very reasonable

398

00:18:28,630 --> 00:18:33,559

hypothesis we discussed it quite a lot

399

00:18:31,339 --> 00:18:37,699

with both Bob and Brenda it seemed to

400
00:18:33,558 --> 00:18:42,769
make a lot of intuitive sense but we got

401
00:18:37,700 --> 00:18:47,350
nothing it was the the only database

402
00:18:42,769 --> 00:18:52,069
where we achieved no significance at all

403
00:18:47,349 --> 00:18:53,869
so what went wrong well I think this is

404
00:18:52,069 --> 00:18:56,869
an important reminder that when it comes

405
00:18:53,869 --> 00:19:00,888
to you know consciousness related

406
00:18:56,869 --> 00:19:04,428
research simple questions rarely have

407
00:19:00,888 --> 00:19:06,829
simple answers I kind of reached the

408
00:19:04,429 --> 00:19:09,649
limits of what it means to have a

409
00:19:06,829 --> 00:19:12,288
hypothesis at all you know you can go

410
00:19:09,648 --> 00:19:14,268
into a chemistry experiment and you can

411
00:19:12,288 --> 00:19:16,460
know all the variables and you should be

412
00:19:14,269 --> 00:19:18,710
able to predict how your two molecules

413
00:19:16,460 --> 00:19:19,940
you'll react you know everything there

414
00:19:18,710 --> 00:19:23,240
is no so you should be

415
00:19:19,940 --> 00:19:27,679
to make simple predictions but these

416
00:19:23,240 --> 00:19:29,839
classes of experiments are a whole

417
00:19:27,679 --> 00:19:34,220
different animal than that and no matter

418
00:19:29,839 --> 00:19:36,220
how much sense it makes going in you

419
00:19:34,220 --> 00:19:38,179
know you can there's that that

420
00:19:36,220 --> 00:19:40,700
subjective the x-factor

421
00:19:38,179 --> 00:19:42,590
that you can never account for it and

422
00:19:40,700 --> 00:19:45,288
you know what's very humbling and it's

423
00:19:42,589 --> 00:19:48,888
something that you know instead of you

424
00:19:45,288 --> 00:19:51,048
know frustrating you know the potential

425
00:19:48,888 --> 00:19:53,240
SCI researcher you have to get in the

426
00:19:51,048 --> 00:19:55,190
mindset that this is something that you

427
00:19:53,240 --> 00:19:58,399
can learn from and this is something

428

00:19:55,190 --> 00:20:02,058
important there's also the possibility

429
00:19:58,398 --> 00:20:04,849
something that I entertained that maybe

430
00:20:02,058 --> 00:20:06,470
the effect you know becomes more erratic

431
00:20:04,849 --> 00:20:09,230
and harder to control as run length

432
00:20:06,470 --> 00:20:11,538
decreases this is an area that I would

433
00:20:09,230 --> 00:20:15,319
love to explore more and makes a bit of

434
00:20:11,538 --> 00:20:17,450
intuitive sense to me and as far as the

435
00:20:15,319 --> 00:20:19,460
precognitive component you know these

436
00:20:17,450 --> 00:20:21,649
results tend to demonstrate that it's

437
00:20:19,460 --> 00:20:25,009
easier to see you know ten minutes into

438
00:20:21,648 --> 00:20:27,258
the future with a longer run length than

439
00:20:25,009 --> 00:20:29,798
it is to see one minute into the future

440
00:20:27,259 --> 00:20:33,019
with the shorter run length and that

441
00:20:29,798 --> 00:20:37,908
doesn't make a ton of sense but is also

442
00:20:33,019 --> 00:20:41,450

interesting so this is a combined graph

443

00:20:37,909 --> 00:20:42,528
of all three trials again significance

444

00:20:41,450 --> 00:20:44,298
in the high direction and

445

00:20:42,528 --> 00:20:46,849
indistinguishability of the baselines

446

00:20:44,298 --> 00:20:49,369
and lows so we also have some signature

447

00:20:46,849 --> 00:20:51,278
effects replicated on the pseudo re G

448

00:20:49,369 --> 00:20:54,589
which is noteworthy

449

00:20:51,278 --> 00:20:56,929
so in conclusion our best hypothesis

450

00:20:54,589 --> 00:21:00,408
relating operator success to run length

451

00:20:56,929 --> 00:21:04,909
is at best incomplete perhaps totally

452

00:21:00,409 --> 00:21:06,679
wrong I don't really know and but the

453

00:21:04,909 --> 00:21:10,070
proof of concept is there you know

454

00:21:06,679 --> 00:21:12,590
pseudo regs can be operated you know

455

00:21:10,069 --> 00:21:15,398
just like any other class of device and

456

00:21:12,589 --> 00:21:18,918
perhaps we need to expand our existing

457
00:21:15,398 --> 00:21:25,819
theoretical models to accommodate such a

458
00:21:18,919 --> 00:21:27,679
new type of of interaction here you know

459
00:21:25,819 --> 00:21:29,868
a pseudo reg after all it's not really a

460
00:21:27,679 --> 00:21:33,620
physical thing you know it's pure

461
00:21:29,868 --> 00:21:35,359
information so how does this effect

462
00:21:33,619 --> 00:21:38,058
some of our existing theoretical models

463
00:21:35,359 --> 00:21:42,009
developed a you know pair and IC RL etc

464
00:21:38,058 --> 00:21:44,660
you know if if the if resonance between

465
00:21:42,009 --> 00:21:46,670
you know the operator and the device is

466
00:21:44,660 --> 00:21:50,330
so important you know then what are you

467
00:21:46,670 --> 00:21:53,990
resonant with when you operate a pseudo

468
00:21:50,329 --> 00:21:56,210
re G I'm not sure and it really I think

469
00:21:53,990 --> 00:21:59,180
speaks pretty profoundly to the to the

470
00:21:56,210 --> 00:22:02,990
role of uncertainty to the role of you

471
00:21:59,180 --> 00:22:05,000
know randomness you know I've I think

472
00:22:02,990 --> 00:22:07,250
I've shown that you don't need a random

473
00:22:05,000 --> 00:22:09,289
physical process you can have a totally

474
00:22:07,250 --> 00:22:10,460
deterministic one and still create

475
00:22:09,289 --> 00:22:18,230
comparable effects

476
00:22:10,460 --> 00:22:19,340
thank you Brennan we have time for

477
00:22:18,230 --> 00:22:26,750
questions

478
00:22:19,339 --> 00:22:29,359
York let me first say this is very

479
00:22:26,750 --> 00:22:30,950
interesting work but I I do wish

480
00:22:29,359 --> 00:22:34,069
somebody had told me what you were

481
00:22:30,950 --> 00:22:37,390
planting planning to work on I'd have

482
00:22:34,069 --> 00:22:37,389
been happy to send you some information

483
00:22:37,539 --> 00:22:45,740
among other things on your concept that

484
00:22:41,359 --> 00:22:47,750
precognition is necessary for pseudo re

485

00:22:45,740 --> 00:22:53,630
G where it isn't for physical random

486
00:22:47,750 --> 00:22:55,339
devices this is something that maybe SSE

487
00:22:53,630 --> 00:22:58,880
members aren't as much aware of because

488
00:22:55,339 --> 00:23:03,019
I've never published it in JSC it's in

489
00:22:58,880 --> 00:23:09,850
buried in my symposium reports for Dan

490
00:23:03,019 --> 00:23:15,440
sheehan's retro causation symposia the

491
00:23:09,849 --> 00:23:19,250
effect in our remote re G is actually

492
00:23:15,440 --> 00:23:23,269
completely driven by the off time re G

493
00:23:19,250 --> 00:23:30,549
trials the contemporaneous remote re G

494
00:23:23,269 --> 00:23:30,549
shows nothing any other questions

495
00:23:39,410 --> 00:23:44,550
thank you for a very interesting

496
00:23:40,950 --> 00:23:47,400
presentation since the pseudo-random

497
00:23:44,549 --> 00:23:49,049
numbers are known out as far as you want

498
00:23:47,400 --> 00:23:51,840
to know them in theory because it's an

499
00:23:49,049 --> 00:23:53,490

algorithm this just reflects my

500

00:23:51,839 --> 00:23:56,689

ignorance about pseudo-random number

501

00:23:53,490 --> 00:24:01,829

generators is it possible to calculate

502

00:23:56,690 --> 00:24:04,320

say a trillion digits out you know in a

503

00:24:01,829 --> 00:24:08,549

quick algorithm somehow and what would

504

00:24:04,319 --> 00:24:11,730

that look like if you did that well yeah

505

00:24:08,549 --> 00:24:13,470

I recognize that this is a difficult

506

00:24:11,730 --> 00:24:15,289

topic to bring people who've never heard

507

00:24:13,470 --> 00:24:18,240

of it up to speed and so short a time

508

00:24:15,289 --> 00:24:20,970

it's kind of a you know pseudo reg is a

509

00:24:18,240 --> 00:24:22,319

bit of esoteric you know when you say a

510

00:24:20,970 --> 00:24:24,390

random event in or you can usually get

511

00:24:22,319 --> 00:24:27,210

people on board pretty quick it's not

512

00:24:24,390 --> 00:24:29,850

really the case with this but you're I

513

00:24:27,210 --> 00:24:34,140

mean you're absolutely right you know in

514
00:24:29,849 --> 00:24:38,579
in practice I I can't do it I don't have

515
00:24:34,140 --> 00:24:42,000
the the formulas but all the all the

516
00:24:38,579 --> 00:24:44,069
students read is it's just a you know

517
00:24:42,000 --> 00:24:46,109
like a never-ending loop well it's not

518
00:24:44,069 --> 00:24:48,659
never-ending I mean it's a loop so it it

519
00:24:46,109 --> 00:24:50,729
never ends in that way but it's it's

520
00:24:48,660 --> 00:24:53,370
just one you know it's two one zero one

521
00:24:50,730 --> 00:24:57,990
zero one zero one zero and the sequence

522
00:24:53,369 --> 00:25:01,439
goes on the number of bits in the

523
00:24:57,990 --> 00:25:03,870
sequence has been noted in multiple

524
00:25:01,440 --> 00:25:06,930
papers that they did it's a huge number

525
00:25:03,869 --> 00:25:09,209
if you it takes about 60 hours of

526
00:25:06,930 --> 00:25:11,490
continual operation of just letting the

527
00:25:09,210 --> 00:25:13,680
algorithm play out to go back to go

528
00:25:11,490 --> 00:25:18,390
through the entire loop so yeah it is

529
00:25:13,680 --> 00:25:23,460
possible without a doubt to know you

530
00:25:18,390 --> 00:25:27,509
know any any number in the series at any

531
00:25:23,460 --> 00:25:29,100
time that information is there so I want

532
00:25:27,509 --> 00:25:32,369
to stress again you know there's no the

533
00:25:29,099 --> 00:25:35,039
only random element is you this is just

534
00:25:32,369 --> 00:25:36,779
you know just like you could say if you

535
00:25:35,039 --> 00:25:39,450
want to reduce the entire loop you could

536
00:25:36,779 --> 00:25:41,819
reduce it down to five you know numbers

537
00:25:39,450 --> 00:25:43,019
you know zero one zero one zero and then

538
00:25:41,819 --> 00:25:44,700
it would just loop over zero one zero

539
00:25:43,019 --> 00:25:46,859
one zero and just loop stops oops now

540
00:25:44,700 --> 00:25:48,930
just extrapolate that and to you know I

541
00:25:46,859 --> 00:25:51,949
don't know like a trillion it's the same

542

00:25:48,930 --> 00:25:51,950
it's the same principle

543
00:25:52,558 --> 00:25:58,839
thank you I've worked with random noise

544
00:25:56,799 --> 00:26:00,789
generators both on the analog and on the

545
00:25:58,839 --> 00:26:03,279
digital side as you know

546
00:26:00,789 --> 00:26:06,849
analog noise generators preceded the

547
00:26:03,279 --> 00:26:09,399
digital ones by many years my feeling is

548
00:26:06,849 --> 00:26:12,579
that you're making a big thing about the

549
00:26:09,400 --> 00:26:14,440
difference between pseudo random and

550
00:26:12,579 --> 00:26:17,379
random generators which is not justified

551
00:26:14,440 --> 00:26:19,269
if it takes 50 hours of a sequence of

552
00:26:17,380 --> 00:26:21,790
ones and zeros to repeat itself and your

553
00:26:19,269 --> 00:26:25,750
experiment is a few seconds long it

554
00:26:21,789 --> 00:26:28,029
makes no difference and and to say that

555
00:26:25,750 --> 00:26:29,619
you need precognition to to know what's

556
00:26:28,029 --> 00:26:32,440

going to happen an hour from now when

557

00:26:29,619 --> 00:26:36,599

the thing doesn't repeat for 50 hours to

558

00:26:32,440 --> 00:26:39,549

me this is a is meant as a manufactured

559

00:26:36,599 --> 00:26:44,049

conclusion which I only can justify by

560

00:26:39,549 --> 00:26:46,928

the facts okay well I would disagree I

561

00:26:44,049 --> 00:26:52,480

think that there is a large difference

562

00:26:46,929 --> 00:26:55,929

between a pseudo re G and a traditional

563

00:26:52,480 --> 00:26:58,058

re G I think that you know when Bob and

564

00:26:55,929 --> 00:27:03,720

Brenda went out to start and studying

565

00:26:58,058 --> 00:27:06,639

these things they were focused on random

566

00:27:03,720 --> 00:27:10,509

physical processes they wanted to know

567

00:27:06,640 --> 00:27:13,990

how we interact with random physical

568

00:27:10,509 --> 00:27:17,700

processes things we can't predict this

569

00:27:13,990 --> 00:27:20,049

is predictable in the most you know

570

00:27:17,700 --> 00:27:24,250

literal sense of the word there's

571
00:27:20,049 --> 00:27:28,990
nothing random about it and so I think

572
00:27:24,250 --> 00:27:30,819
that it's not to say that you know that

573
00:27:28,990 --> 00:27:32,980
it's because they appear the same that

574
00:27:30,819 --> 00:27:35,710
they are the same to me

575
00:27:32,980 --> 00:27:38,289
you know is unwarranted yes they behave

576
00:27:35,710 --> 00:27:41,890
just like the random number generators

577
00:27:38,289 --> 00:27:45,220
but you know with that if you don't have

578
00:27:41,890 --> 00:27:50,410
that it's I mean it's it's so determined

579
00:27:45,220 --> 00:27:53,490
that you know it where is the the wiggle

580
00:27:50,410 --> 00:27:56,170
room for you know our intention to

581
00:27:53,490 --> 00:27:58,539
operate on something so fixed like that

582
00:27:56,170 --> 00:28:02,539
thank you Brennan thank you

583
00:27:58,539 --> 00:28:08,219
[Applause]

584
00:28:02,539 --> 00:28:08,219
[Music]

585

00:28:08,799 --> 00:28:10,859

you

586

00:28:17,940 --> 00:28:20,000

you