



1
00:00:24,940 --> 00:00:16,080

[Music]

2
00:00:27,339 --> 00:00:24,950
so thank you again for the introduction

3
00:00:29,889 --> 00:00:27,349
Brenda it is great to be here I hope to

4
00:00:32,470 --> 00:00:29,899
become a regular face that these

5
00:00:34,660 --> 00:00:32,480
organizations are at these meetings I

6
00:00:36,220 --> 00:00:34,670
came to the last year's meeting is where

7
00:00:39,970 --> 00:00:36,230
I met Brenda she was kind enough to

8
00:00:44,200 --> 00:00:39,980
invite me out to New Jersey which was

9
00:00:47,980 --> 00:00:44,210
just not expected at all so I had a

10
00:00:50,410 --> 00:00:47,990
wonderful opportunity to do that and you

11
00:00:53,080 --> 00:00:50,420
know as great as it is to gather a bunch

12
00:00:55,060 --> 00:00:53,090
of like-minded people together and you

13
00:00:57,819 --> 00:00:55,070

know present all the stuff that we're

14

00:01:01,479 --> 00:00:57,829

interested in for me at least the SSC

15

00:01:04,090 --> 00:01:01,489

has been an opportunity to to receive

16

00:01:05,950 --> 00:01:04,100

you know the kind of tutelage that I

17

00:01:09,160 --> 00:01:05,960

could get literally nowhere else in the

18

00:01:12,190 --> 00:01:09,170

world and to kind of you know to help

19

00:01:13,899 --> 00:01:12,200

get help you know get support as a young

20

00:01:17,800 --> 00:01:13,909

person doing this has been absolutely

21

00:01:19,719 --> 00:01:17,810

invaluable so but now we can start the

22

00:01:23,440 --> 00:01:19,729

presentation I would like to start it

23

00:01:26,319 --> 00:01:23,450

with a very very brief poll mostly for

24

00:01:28,569 --> 00:01:26,329

my curiosity I was gonna go ahead and

25

00:01:30,370 --> 00:01:28,579

assume everyone here knows what a random

26

00:01:32,529 --> 00:01:30,380

event generator is I think we can go

27

00:01:35,590 --> 00:01:32,539

ahead and move past that but I am very

28

00:01:39,480 --> 00:01:35,600

curious how many people here have ever

29

00:01:42,959 --> 00:01:39,490

heard of a pseudo random event generator

30

00:01:46,239 --> 00:01:42,969

okay so even in a audience like this

31

00:01:47,199 --> 00:01:46,249

we're obviously very interested in this

32

00:01:50,889 --> 00:01:47,209

kind of stuff

33

00:01:52,839 --> 00:01:50,899

close followers of the the work done at

34

00:01:56,969 --> 00:01:52,849

pare the percentage of people who have

35

00:02:00,699 --> 00:01:56,979

heard of a pseudo re G is much smaller

36

00:02:03,429 --> 00:02:00,709

it's been kind of a neglected area of

37

00:02:06,219 --> 00:02:03,439

study it's not what people come to think

38

00:02:08,770 --> 00:02:06,229

about when they think about the

39

00:02:11,080 --> 00:02:08,780

achievements of Bob and Brenda and the

40

00:02:15,190 --> 00:02:11,090

pear team but it's something that I

41

00:02:16,869 --> 00:02:15,200

ended up becoming very interested in so

42

00:02:19,089 --> 00:02:16,879

we're gonna do a couple things and talk

43

00:02:20,410 --> 00:02:19,099

about what is a pseudo reg why were they

44

00:02:23,350 --> 00:02:20,420

first studied

45

00:02:27,190 --> 00:02:23,360

what makes them so unique and what did I

46

00:02:30,580 --> 00:02:27,200

do to try and learn about them so first

47

00:02:35,199 --> 00:02:30,590

question is what is a pseudo re G a

48

00:02:39,010 --> 00:02:35,209

pseudo re G is quite simply it is a way

49

00:02:41,860 --> 00:02:39,020

to both mimic and kind of subvert at the

50

00:02:44,979 --> 00:02:41,870

same time a traditional random number

51
00:02:49,180 --> 00:02:44,989
generator the outputs of a pseudo re G

52
00:02:51,699 --> 00:02:49,190
are identical to the outputs of an re G

53
00:02:54,400 --> 00:02:51,709
looking at them you cannot tell the

54
00:02:56,860 --> 00:02:54,410
difference they appear identical when

55
00:02:59,380 --> 00:02:56,870
you are actually operating at a pseudo

56
00:03:03,699 --> 00:02:59,390
re G and you watch the graph go up and

57
00:03:05,949 --> 00:03:03,709
down it's identical to a normal re G so

58
00:03:08,800 --> 00:03:05,959
the output is different but the source

59
00:03:12,160 --> 00:03:08,810
of the randomness where that data is

60
00:03:13,449 --> 00:03:12,170
coming from is different and that's the

61
00:03:16,140 --> 00:03:13,459
key factor and that's what we're going

62
00:03:19,150 --> 00:03:16,150
to explore here so I have a quote

63
00:03:21,490 --> 00:03:19,160

instead of generating bits in real time

64

00:03:23,650 --> 00:03:21,500

by sampling a micro electronic noise

65

00:03:26,110 --> 00:03:23,660

source and converting the output into

66

00:03:28,360 --> 00:03:26,120

ones and zeros a pseudo reg quote

67

00:03:31,390 --> 00:03:28,370

produces a determinate repeating

68

00:03:34,060 --> 00:03:31,400

sequence so that the only remaining non

69

00:03:37,060 --> 00:03:34,070

deterministic aspect of the experiment

70

00:03:39,610 --> 00:03:37,070

is the time of incursion initiated by

71

00:03:42,220 --> 00:03:39,620

the operator and that comes from an 87

72

00:03:47,650 --> 00:03:42,230

paper by the pair team so that's really

73

00:03:50,289 --> 00:03:47,660

key these devices are not random to get

74

00:03:53,259 --> 00:03:50,299

give you a little more introduction okay

75

00:03:58,210 --> 00:03:53,269

it's an algorithm it's a computer

76

00:03:59,740 --> 00:03:58,220

algorithm and it's just a loop of ones

77

00:04:02,199 --> 00:03:59,750

and zeros ones and zeros and ones and

78

00:04:05,039 --> 00:04:02,209

zeros that is fixed that never changes

79

00:04:07,690 --> 00:04:05,049

and that can repeat itself without

80

00:04:10,150 --> 00:04:07,700

without repeating for approximately 60

81

00:04:12,370 --> 00:04:10,160

hours straight so it's always the same

82

00:04:15,430 --> 00:04:12,380

there's nothing random about it it's

83

00:04:17,800 --> 00:04:15,440

just a lot of ones and zeros that run in

84

00:04:20,349 --> 00:04:17,810

a loop so how can you possibly

85

00:04:22,360 --> 00:04:20,359

manipulate that data to prove that your

86

00:04:24,310 --> 00:04:22,370

intention is affecting it well there's

87

00:04:28,690 --> 00:04:24,320

only one way to do it and it's summed up

88

00:04:31,330 --> 00:04:28,700

in this quote so the only random element

89

00:04:33,719 --> 00:04:31,340

is when you dip into the stream okay

90

00:04:35,369 --> 00:04:33,729

that is the important part

91

00:04:37,409 --> 00:04:35,379

you're able to dip into the stream and

92

00:04:40,019 --> 00:04:37,419

intersect it at the right spot you can

93

00:04:42,719 --> 00:04:40,029

get an effect okay so that's key and

94

00:04:45,059 --> 00:04:42,729

that's going to be a theme so why were

95

00:04:47,489 --> 00:04:45,069

these devices originally started what

96

00:04:49,320 --> 00:04:47,499

was the thinking behind what can we

97

00:04:50,459 --> 00:04:49,330

learn from them and I have got one more

98

00:04:54,989 --> 00:04:50,469

quote and then we're done with the

99

00:04:57,390 --> 00:04:54,999

quotes so obviously the team at

100

00:05:00,179 --> 00:04:57,400

Princeton experimented on multiple

101
00:05:01,890 --> 00:05:00,189
different devices it soon became

102
00:05:04,610 --> 00:05:01,900
apparent that these effects that they

103
00:05:06,749 --> 00:05:04,620
were producing were not device specific

104
00:05:08,489 --> 00:05:06,759
everyone knows the random event

105
00:05:10,889 --> 00:05:08,499
generators the electronic coin flippers

106
00:05:13,739 --> 00:05:10,899
but then they also had the the famous

107
00:05:15,149 --> 00:05:13,749
Murphy which is a giant pinball machine

108
00:05:17,189 --> 00:05:15,159
that shoots down a bunch of balls

109
00:05:18,929 --> 00:05:17,199
through an array of pegs and they form a

110
00:05:21,059 --> 00:05:18,939
normal distribution at the end and you

111
00:05:23,579 --> 00:05:21,069
can affect how many balls are falling to

112
00:05:26,219 --> 00:05:23,589
the left or to the right so that's the

113
00:05:29,129 --> 00:05:26,229

same it's a random physical process that

114

00:05:31,829 --> 00:05:29,139

your intention is able to to change the

115

00:05:34,469 --> 00:05:31,839

distribution of so it became apparent

116

00:05:36,800 --> 00:05:34,479

that you can create these effects using

117

00:05:39,809 --> 00:05:36,810

multiple devices okay but they all had

118

00:05:42,749 --> 00:05:39,819

something in common they were all random

119

00:05:45,360 --> 00:05:42,759

they were all chaotic so the question

120

00:05:49,050 --> 00:05:45,370

became well clearly this effect is not

121

00:05:52,379 --> 00:05:49,060

device specific so what's going on is it

122

00:05:53,699 --> 00:05:52,389

even physical at all okay what's

123

00:05:56,219 --> 00:05:53,709

happening when you go and sit by a

124

00:05:58,139 --> 00:05:56,229

random event generator you have this

125

00:06:00,809 --> 00:05:58,149

piece of micro electronic circuitry and

126

00:06:02,459 --> 00:06:00,819

the electrons are flowing through it are

127

00:06:04,320 --> 00:06:02,469

you physically you know nudging an

128

00:06:05,879 --> 00:06:04,330

electron through your one gate or

129

00:06:08,189 --> 00:06:05,889

another are you physically with your

130

00:06:10,049 --> 00:06:08,199

mind you know making a ball bounce to

131

00:06:11,820 --> 00:06:10,059

the left of a peg or to the right what's

132

00:06:16,290 --> 00:06:11,830

going on and that's what these devices

133

00:06:18,480 --> 00:06:16,300

were designed to to test so we can read

134

00:06:19,889 --> 00:06:18,490

the pronoun and the physical behavior of

135

00:06:22,739 --> 00:06:19,899

the electronic noise source being

136

00:06:24,469 --> 00:06:22,749

affected and if so in what way or is the

137

00:06:27,029 --> 00:06:24,479

effect possibly more systemic

138

00:06:29,309 --> 00:06:27,039

manifesting itself in the output data in

139

00:06:32,100 --> 00:06:29,319

an anomalous statistical form without

140

00:06:34,139 --> 00:06:32,110

alteration of any specific physical

141

00:06:36,779 --> 00:06:34,149

process so the bottom line is basically

142

00:06:40,379 --> 00:06:36,789

is the effect we're dealing with is it a

143

00:06:42,569 --> 00:06:40,389

case of mind over matter as are we

144

00:06:44,869 --> 00:06:42,579

manipulating something physical or is it

145

00:06:46,620 --> 00:06:44,879

a case of mind over information

146

00:06:49,710 --> 00:06:46,630

non-physical

147

00:06:51,540 --> 00:06:49,720

the study of these devices tends to

148

00:06:55,200 --> 00:06:51,550

demonstrate that perhaps it is the

149

00:06:59,010 --> 00:06:55,210

latter okay so bottom line what makes

150

00:07:01,980 --> 00:06:59,020

these devices so different and in my

151

00:07:04,820 --> 00:07:01,990

mind so fascinating every other

152

00:07:08,190 --> 00:07:04,830

experimental device that they utilized

153

00:07:10,950 --> 00:07:08,200

operated on one common principle and

154

00:07:14,250 --> 00:07:10,960

that was your intention exerts an

155

00:07:17,700 --> 00:07:14,260

influence on a random physical process

156

00:07:19,560 --> 00:07:17,710

okay whether it's electrons or balls or

157

00:07:21,960 --> 00:07:19,570

a pendulum you have a random physical

158

00:07:23,850 --> 00:07:21,970

process a chaotic on deterministic

159

00:07:26,040 --> 00:07:23,860

process that you were trying to

160

00:07:28,530 --> 00:07:26,050

manipulate the fascinating thing about

161

00:07:31,350 --> 00:07:28,540

it's too direct is that you are the

162

00:07:34,380 --> 00:07:31,360

random process okay nothing else only

163

00:07:36,840 --> 00:07:34,390

you can supply the randomness and that's

164

00:07:40,140 --> 00:07:36,850

what makes them so in my mind profound

165

00:07:41,940 --> 00:07:40,150

and such a valuable tool both for from a

166

00:07:43,970 --> 00:07:41,950

theoretical perspective and a

167

00:07:47,990 --> 00:07:43,980

philosophical perspective and a way to

168

00:07:50,760 --> 00:07:48,000

to understand this entire class of

169

00:07:52,500 --> 00:07:50,770

experiments in a totally new light and

170

00:07:54,960 --> 00:07:52,510

that was kind of my at least that's what

171

00:07:56,930 --> 00:07:54,970

I came away from after three months of

172

00:08:00,560 --> 00:07:56,940

study and what makes them so interesting

173

00:08:02,880 --> 00:08:00,570

and also unlike a traditional are eg

174

00:08:05,640 --> 00:08:02,890

successful studio rehgat operation

175

00:08:12,090 --> 00:08:05,650

requires knowledge of future states or

176

00:08:14,310 --> 00:08:12,100

precognition because the effect can only

177

00:08:17,250 --> 00:08:14,320

be manifested when you initiate the

178

00:08:19,680 --> 00:08:17,260

trial and as soon as you press start I

179

00:08:21,480 --> 00:08:19,690

mean you should be able to if you had

180

00:08:24,300 --> 00:08:21,490

the algorithm you would know you know

181

00:08:27,450 --> 00:08:24,310

what the ten billionth bit was what the

182

00:08:29,730 --> 00:08:27,460

fifth bit was it's all fixed so you have

183

00:08:32,969 --> 00:08:29,740

to when you're sitting behind one of

184

00:08:36,150 --> 00:08:32,979

these machines you have to know when

185

00:08:38,159 --> 00:08:36,160

this trial ends is that sequence gonna

186

00:08:40,650 --> 00:08:38,169

be above you know are there gonna be

187

00:08:42,750 --> 00:08:40,660

more ones than zeroes or less ones and

188

00:08:45,720 --> 00:08:42,760

zeroes so you have to know what the

189

00:08:48,750 --> 00:08:45,730

state we have to be able to predict what

190

00:08:50,640 --> 00:08:48,760

the you know what the 20,000th bit is or

191

00:08:56,300 --> 00:08:50,650

what that series of bits that's fixed is

192

00:08:58,640 --> 00:08:56,310

so inherent within these devices is

193

00:09:02,550 --> 00:08:58,650

precognition

194

00:09:04,740 --> 00:09:02,560

okay so what began as a way to probe for

195

00:09:07,170 --> 00:09:04,750

the physical mechanism by which the

196

00:09:09,780 --> 00:09:07,180

effect manifests itself has transformed

197

00:09:12,600 --> 00:09:09,790

into an affirmation of the most

198

00:09:15,210 --> 00:09:12,610

important random element after all what

199

00:09:16,650 --> 00:09:15,220

we're really interested in at least what

200

00:09:19,320 --> 00:09:16,660

I'm really interested in you know and

201

00:09:20,930 --> 00:09:19,330

that's people and so for me but the

202

00:09:25,410 --> 00:09:20,940

pseudo reg really became a very

203

00:09:30,030 --> 00:09:25,420

empowering pursuit because you know it's

204

00:09:32,640 --> 00:09:30,040

all about the person you know you are

205

00:09:35,220 --> 00:09:32,650

it's almost like you are a random event

206

00:09:37,230 --> 00:09:35,230

generator you are the randomness and to

207

00:09:39,570 --> 00:09:37,240

me you know that's that's the best part

208

00:09:42,000 --> 00:09:39,580

okay so we've got a couple more things

209

00:09:44,700 --> 00:09:42,010

here and then we can start talking about

210

00:09:47,010 --> 00:09:44,710

my experiment so I have to admit that

211

00:09:49,560 --> 00:09:47,020

when I first started the project I was a

212

00:09:51,450 --> 00:09:49,570

little apprehensive you know I travel

213

00:09:53,490 --> 00:09:51,460

all the way from Denver Colorado to

214

00:09:55,770 --> 00:09:53,500

Princeton New Jersey and I wanted to

215

00:09:57,630 --> 00:09:55,780

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

216

00:10:00,210 --> 00:09:57,640

that's what it was all about that was

217

00:10:02,040 --> 00:10:00,220

you know that's what what they did and

218

00:10:04,500 --> 00:10:02,050

when Brenda told me that well you know

219

00:10:06,420 --> 00:10:04,510

Brennan we have this entire class of

220

00:10:08,400 --> 00:10:06,430

experiments that we never felt like we

221

00:10:09,630 --> 00:10:08,410

got a lot of closure on and that you

222

00:10:10,650 --> 00:10:09,640

know maybe there was some room here for

223

00:10:14,340 --> 00:10:10,660

you to make an original contribution

224

00:10:16,440 --> 00:10:14,350

there called pseudo re G's and they're

225

00:10:17,700 --> 00:10:16,450

like the cool re G's except you know

226

00:10:20,030 --> 00:10:17,710

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

227

00:10:25,140 --> 00:10:20,040

use the cool you know quantum tunneling

228

00:10:27,900 --> 00:10:25,150

there's no quantum element but after

229

00:10:30,270 --> 00:10:27,910

after a while I became to be quite fond

230

00:10:32,490 --> 00:10:30,280

of them and also the fact that you know

231

00:10:36,000 --> 00:10:32,500

there isn't a lot of resolution and

232

00:10:37,620 --> 00:10:36,010

they're kind of ignored even by you know

233

00:10:39,270 --> 00:10:37,630

Bob and Brenda I think if I may say so

234

00:10:42,300 --> 00:10:39,280

it's always been kind of a an

235

00:10:44,310 --> 00:10:42,310

afterthought margins of reality their

236

00:10:47,790 --> 00:10:44,320

first book has a chapter devoted to

237

00:10:51,480 --> 00:10:47,800

pseudo reg it's two pages long you know

238

00:10:52,950 --> 00:10:51,490

it's not much there there's the suit of

239

00:10:54,990 --> 00:10:52,960

rags are brought up in other scholarly

240

00:10:57,570 --> 00:10:55,000

papers that they've done but it's always

241

00:10:59,130 --> 00:10:57,580

as oh yeah and you can do it with a

242

00:11:00,540 --> 00:10:59,140

pseudo reg too or you can't do with the

243

00:11:01,710 --> 00:11:00,550

suit of Victor now let's get back on to

244

00:11:03,270 --> 00:11:01,720

you know what we're really interested in

245

00:11:05,040 --> 00:11:03,280

here it's always been kind of an

246

00:11:08,040 --> 00:11:05,050

afterthought and that's kind of been my

247

00:11:10,200 --> 00:11:08,050

quest I guess what turned into my quest

248

00:11:11,269 --> 00:11:10,210

is to you know to rehabilitate the

249

00:11:13,970 --> 00:11:11,279

pseudo reg

250

00:11:16,400 --> 00:11:13,980

to to you know to show that these things

251
00:11:18,530 --> 00:11:16,410
are actually you know interesting and

252
00:11:20,600 --> 00:11:18,540
profound and should be you know

253
00:11:21,429 --> 00:11:20,610
respected and for what they for what

254
00:11:24,739 --> 00:11:21,439
they are

255
00:11:27,410 --> 00:11:24,749
okay so my experiment my experiment

256
00:11:30,139 --> 00:11:27,420
utilizes three separate experimental

257
00:11:33,489 --> 00:11:30,149
conditions I came to be most interested

258
00:11:35,509 --> 00:11:33,499
in a couple things first off what is

259
00:11:37,670 --> 00:11:35,519
whether it is the source of the

260
00:11:40,220 --> 00:11:37,680
randomness which matters most or the

261
00:11:42,410 --> 00:11:40,230
belief and expectations of the operator

262
00:11:43,939 --> 00:11:42,420
regarding said source or put another way

263
00:11:47,689 --> 00:11:43,949

what are the most important

264

00:11:49,549 --> 00:11:47,699

psychological you know what's the most

265

00:11:52,549 --> 00:11:49,559

what's the important psychological mix

266

00:11:55,970 --> 00:11:52,559

that you have to bring to the table for

267

00:11:58,009 --> 00:11:55,980

a successful operation and also to get a

268

00:12:00,350 --> 00:11:58,019

little bit more into the nitty-gritty

269

00:12:04,939 --> 00:12:00,360

mechanics of it you know how does it

270

00:12:06,470 --> 00:12:04,949

work how can we be how can we manipulate

271

00:12:11,329 --> 00:12:06,480

what we know about it in order to

272

00:12:12,559 --> 00:12:11,339

produce the largest effects so the three

273

00:12:15,379 --> 00:12:12,569

conditions we'll talk about him a little

274

00:12:19,670 --> 00:12:15,389

bit more in brief now condition one is a

275

00:12:22,400 --> 00:12:19,680

entire database built using exclusively

276

00:12:24,769 --> 00:12:22,410

the pseudo are eg but the operator me I

277

00:12:27,980 --> 00:12:24,779

was the only operator for this entire

278

00:12:32,259 --> 00:12:27,990

experiment believes that it is a real

279

00:12:35,629 --> 00:12:32,269

are eg he is operating ok so I built

280

00:12:40,549 --> 00:12:35,639

accidentally I built an entire database

281

00:12:42,769 --> 00:12:40,559

of pseudo are eg you know work where I

282

00:12:45,740 --> 00:12:42,779

thought I was operating a real are eg I

283

00:12:48,860 --> 00:12:45,750

hadn't familiarized myself with the with

284

00:12:51,350 --> 00:12:48,870

the style around software yet so it was

285

00:12:53,629 --> 00:12:51,360

quite a shock to me after looking at

286

00:12:56,389 --> 00:12:53,639

this database and seeing that yes I did

287

00:12:59,590 --> 00:12:56,399

have a pretty good effect I was like wow

288

00:13:01,960 --> 00:12:59,600

this is working this is great and then I

289

00:13:04,460 --> 00:13:01,970

started looking more carefully and I

290

00:13:06,919 --> 00:13:04,470

realized I'd overlooked something I was

291

00:13:10,669 --> 00:13:06,929

like wait I just did all that with a

292

00:13:12,559 --> 00:13:10,679

pseudo reg and it was after that that

293

00:13:14,210 --> 00:13:12,569

was kind of the proof-of-concept moment

294

00:13:16,400 --> 00:13:14,220

for me it was after that where I was

295

00:13:19,429 --> 00:13:16,410

like ok I can get excited about this I I

296

00:13:21,590 --> 00:13:19,439

can I can do this because you know I

297

00:13:24,750 --> 00:13:21,600

just did it I didn't even know it so

298

00:13:29,520 --> 00:13:24,760

that was kind of provided a very

299

00:13:31,470 --> 00:13:29,530

Niek piece a set of data you know it's

300

00:13:33,480 --> 00:13:31,480

not often that you can trick yourself

301
00:13:35,400 --> 00:13:33,490
you know without even knowing it and

302
00:13:38,130 --> 00:13:35,410
then use that data later it's a very

303
00:13:41,790 --> 00:13:38,140
unique piece of data that I I wanted to

304
00:13:44,010 --> 00:13:41,800
make use of so that's that addresses the

305
00:13:46,940 --> 00:13:44,020
first question whether it's the source

306
00:13:49,860 --> 00:13:46,950
of the randomness that matters or the

307
00:13:52,320 --> 00:13:49,870
Dupree stated expectations and beliefs

308
00:13:53,910 --> 00:13:52,330
of the operator all the beliefs all the

309
00:13:57,420 --> 00:13:53,920
expectations that you that you bring to

310
00:14:00,750 --> 00:13:57,430
the table as a participant what's really

311
00:14:03,210 --> 00:14:00,760
more important and then we have two

312
00:14:05,760 --> 00:14:03,220
other conditions second condition is

313
00:14:10,200 --> 00:14:05,770

identical to the first condition except

314

00:14:13,350 --> 00:14:10,210

now I I know what I'm really working on

315

00:14:16,530 --> 00:14:13,360

so that's kind of control and the third

316

00:14:18,240 --> 00:14:16,540

condition is also the same but one thing

317

00:14:22,610 --> 00:14:18,250

is different and that is the run length

318

00:14:25,050 --> 00:14:22,620

has been decreased so what that means is

319

00:14:28,200 --> 00:14:25,060

most of you probably haven't actually

320

00:14:31,440 --> 00:14:28,210

operated an AR eg yourself maybe maybe

321

00:14:35,550 --> 00:14:31,450

you have but when you sit down to do an

322

00:14:37,920 --> 00:14:35,560

AR AG experiment you when you initiate a

323

00:14:41,520 --> 00:14:37,930

trial when you go high you can either

324

00:14:44,430 --> 00:14:41,530

collect you know the number of bits that

325

00:14:47,460 --> 00:14:44,440

you collect at a time it's called a run

326

00:14:49,470 --> 00:14:47,470

length so I can style I can stop after a

327

00:14:53,550 --> 00:14:49,480

thousand bits I can stop after ten

328

00:14:56,280 --> 00:14:53,560

thousand bits you can vary it but if the

329

00:14:59,760 --> 00:14:56,290

effect is only manifested at the

330

00:15:02,820 --> 00:14:59,770

initiation of the trial if you can chop

331

00:15:06,090 --> 00:15:02,830

that data into smaller pieces and use

332

00:15:09,740 --> 00:15:06,100

smaller run lengths then you have more

333

00:15:12,330 --> 00:15:09,750

opportunities to initiate trials and

334

00:15:15,420 --> 00:15:12,340

theoretically theoretically you would

335

00:15:19,920 --> 00:15:15,430

expect that you can produce a larger

336

00:15:22,290 --> 00:15:19,930

effect that way okay so if you if you're

337

00:15:24,780 --> 00:15:22,300

taking data you a million trials at a

338

00:15:27,510 --> 00:15:24,790

time you know for all of that data

339

00:15:31,170 --> 00:15:27,520

you only have one initiation point only

340

00:15:32,640 --> 00:15:31,180

one chance to start the sequence makes

341

00:15:34,680 --> 00:15:32,650

it a lot you would think a lot more

342

00:15:36,870 --> 00:15:34,690

difficult but if you're taking in tiny

343

00:15:38,310 --> 00:15:36,880

tiny tiny chunks you can start it and

344

00:15:41,100 --> 00:15:38,320

then restart it and

345

00:15:43,230 --> 00:15:41,110

and started and again and perhaps build

346

00:15:48,090 --> 00:15:43,240

a larger effect and that was what that

347

00:15:52,650 --> 00:15:48,100

was meant to to look at so this is

348

00:15:54,840 --> 00:15:52,660

condition one 21,000 trials you as you

349

00:15:57,960 --> 00:15:54,850

can see we achieved a statistically

350

00:16:02,070 --> 00:15:57,970

significant effect in one direction in

351
00:16:05,760 --> 00:16:02,080
the high direction terminal z-score of l

352
00:16:08,450 --> 00:16:05,770
believe two point four which is pretty

353
00:16:11,880 --> 00:16:08,460
good and then you also see this is a

354
00:16:14,720 --> 00:16:11,890
pattern that will which will come up

355
00:16:16,860 --> 00:16:14,730
multiple times is the

356
00:16:23,640 --> 00:16:16,870
indistinguishability between the

357
00:16:27,480 --> 00:16:23,650
baseline and the low okay and this is

358
00:16:30,450 --> 00:16:27,490
condition2 again you see that we have

359
00:16:32,730 --> 00:16:30,460
reached a significant effect but this

360
00:16:36,960 --> 00:16:32,740
time it's been flipped over the

361
00:16:39,150 --> 00:16:36,970
horizontal axis and now the low has

362
00:16:42,720 --> 00:16:39,160
reached a significant threshold at the

363
00:16:45,450 --> 00:16:42,730

0.05 cutoff the terminal z-score of one

364

00:16:48,570 --> 00:16:45,460

point six four and nine over the one

365

00:16:51,420 --> 00:16:48,580

foot which is like point O four over the

366

00:16:55,080 --> 00:16:51,430

the cutoff for significant at the 0.05

367

00:16:57,720 --> 00:16:55,090

level and the highs are error nothing

368

00:17:00,570 --> 00:16:57,730

but again you have the near

369

00:17:06,819 --> 00:17:00,580

indistinguishability of the baselines

370

00:17:10,840 --> 00:17:08,919

okay so both conditions achieved

371

00:17:13,059 --> 00:17:10,850

significant at the 0.05 level but in

372

00:17:15,669 --> 00:17:13,069

different directions as tells us that

373

00:17:20,829 --> 00:17:15,679

expectations and beliefs of the operator

374

00:17:22,779 --> 00:17:20,839

are not exact not in or not we cannot

375

00:17:26,380 --> 00:17:22,789

say that they are necessarily an all

376

00:17:30,130 --> 00:17:26,390

important factor in proper and

377

00:17:33,909 --> 00:17:30,140

successful pseudo our eg operation one

378

00:17:36,009 --> 00:17:33,919

important topic to to breach here is you

379

00:17:39,639 --> 00:17:36,019

know what would have happened if I had

380

00:17:43,330 --> 00:17:39,649

flipped the order of the two you know

381

00:17:45,100 --> 00:17:43,340

that first set of data where I you know

382

00:17:49,060 --> 00:17:45,110

was enthusiastic when I thought I was

383

00:17:52,570 --> 00:17:49,070

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

384

00:17:54,879 --> 00:17:52,580

served as a proof of concept and let me

385

00:17:59,009 --> 00:17:54,889

know psychologically that yes it's

386

00:18:02,620 --> 00:17:59,019

possible after all if that had come last

387

00:18:06,549 --> 00:18:02,630

then it could have totally changed the

388

00:18:09,310 --> 00:18:06,559

entire psychological set of the

389

00:18:13,029 --> 00:18:09,320

experiment and could have led to

390

00:18:17,289 --> 00:18:13,039

drastically different results and then

391

00:18:19,870 --> 00:18:17,299

here is the third condition so this was

392

00:18:22,509 --> 00:18:19,880

a condition that was supposed to you

393

00:18:25,210 --> 00:18:22,519

know look at shorter run lengths more

394

00:18:28,620 --> 00:18:25,220

incursions into the data set should mean

395

00:18:31,330 --> 00:18:28,630

a larger effect it was a very reasonable

396

00:18:33,549 --> 00:18:31,340

hypothesis we discussed it quite a lot

397

00:18:37,690 --> 00:18:33,559

with both Bob and Brenda it seemed to

398

00:18:42,759 --> 00:18:37,700

make a lot of intuitive sense but we got

399

00:18:47,340 --> 00:18:42,769

nothing it was the the only database

400

00:18:52,060 --> 00:18:47,350

where we achieved no significance at all

401
00:18:53,860 --> 00:18:52,070
so what went wrong well I think this is

402
00:18:56,860 --> 00:18:53,870
an important reminder that when it comes

403
00:19:00,879 --> 00:18:56,870
to you know consciousness related

404
00:19:04,419 --> 00:19:00,889
research simple questions rarely have

405
00:19:06,820 --> 00:19:04,429
simple answers I kind of reached the

406
00:19:09,639 --> 00:19:06,830
limits of what it means to have a

407
00:19:12,279 --> 00:19:09,649
hypothesis at all you know you can go

408
00:19:14,259 --> 00:19:12,289
into a chemistry experiment and you can

409
00:19:16,450 --> 00:19:14,269
know all the variables and you should be

410
00:19:18,700 --> 00:19:16,460
able to predict how your two molecules

411
00:19:19,930 --> 00:19:18,710
you'll react you know everything there

412
00:19:23,230 --> 00:19:19,940
is no so you should be

413
00:19:27,669 --> 00:19:23,240

to make simple predictions but these

414

00:19:29,830 --> 00:19:27,679

classes of experiments are a whole

415

00:19:34,210 --> 00:19:29,840

different animal than that and no matter

416

00:19:36,210 --> 00:19:34,220

how much sense it makes going in you

417

00:19:38,169 --> 00:19:36,220

know you can there's that that

418

00:19:40,690 --> 00:19:38,179

subjective the x-factor

419

00:19:42,580 --> 00:19:40,700

that you can never account for it and

420

00:19:45,279 --> 00:19:42,590

you know what's very humbling and it's

421

00:19:48,879 --> 00:19:45,289

something that you know instead of you

422

00:19:51,039 --> 00:19:48,889

know frustrating you know the potential

423

00:19:53,230 --> 00:19:51,049

SCI researcher you have to get in the

424

00:19:55,180 --> 00:19:53,240

mindset that this is something that you

425

00:19:58,389 --> 00:19:55,190

can learn from and this is something

426

00:20:02,049 --> 00:19:58,399

important there's also the possibility

427

00:20:04,840 --> 00:20:02,059

something that I entertained that maybe

428

00:20:06,460 --> 00:20:04,850

the effect you know becomes more erratic

429

00:20:09,220 --> 00:20:06,470

and harder to control as run length

430

00:20:11,529 --> 00:20:09,230

decreases this is an area that I would

431

00:20:15,310 --> 00:20:11,539

love to explore more and makes a bit of

432

00:20:17,440 --> 00:20:15,320

intuitive sense to me and as far as the

433

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

precognitive component you know these

434

00:20:21,639 --> 00:20:19,460

results tend to demonstrate that it's

435

00:20:24,999 --> 00:20:21,649

easier to see you know ten minutes into

436

00:20:27,249 --> 00:20:25,009

the future with a longer run length than

437

00:20:29,789 --> 00:20:27,259

it is to see one minute into the future

438

00:20:33,009 --> 00:20:29,799

with the shorter run length and that

439

00:20:37,899 --> 00:20:33,019

doesn't make a ton of sense but is also

440

00:20:41,440 --> 00:20:37,909

interesting so this is a combined graph

441

00:20:42,519 --> 00:20:41,450

of all three trials again significance

442

00:20:44,289 --> 00:20:42,529

in the high direction and

443

00:20:46,840 --> 00:20:44,299

indistinguishability of the baselines

444

00:20:49,360 --> 00:20:46,850

and lows so we also have some signature

445

00:20:51,269 --> 00:20:49,370

effects replicated on the pseudo re G

446

00:20:54,580 --> 00:20:51,279

which is noteworthy

447

00:20:56,919 --> 00:20:54,590

so in conclusion our best hypothesis

448

00:21:00,399 --> 00:20:56,929

relating operator success to run length

449

00:21:04,899 --> 00:21:00,409

is at best incomplete perhaps totally

450

00:21:06,669 --> 00:21:04,909

wrong I don't really know and but the

451

00:21:10,060 --> 00:21:06,679

proof of concept is there you know

452

00:21:12,580 --> 00:21:10,070

pseudo regs can be operated you know

453

00:21:15,389 --> 00:21:12,590

just like any other class of device and

454

00:21:18,909 --> 00:21:15,399

perhaps we need to expand our existing

455

00:21:25,810 --> 00:21:18,919

theoretical models to accommodate such a

456

00:21:27,669 --> 00:21:25,820

new type of of interaction here you know

457

00:21:29,859 --> 00:21:27,679

a pseudo reg after all it's not really a

458

00:21:33,610 --> 00:21:29,869

physical thing you know it's pure

459

00:21:35,350 --> 00:21:33,620

information so how does this effect

460

00:21:38,049 --> 00:21:35,360

some of our existing theoretical models

461

00:21:42,000 --> 00:21:38,059

developed a you know pair and IC RL etc

462

00:21:44,650 --> 00:21:42,010

you know if if the if resonance between

463

00:21:46,660 --> 00:21:44,660

you know the operator and the device is

464

00:21:50,320 --> 00:21:46,670

so important you know then what are you

465

00:21:53,980 --> 00:21:50,330

resonant with when you operate a pseudo

466

00:21:56,200 --> 00:21:53,990

re G I'm not sure and it really I think

467

00:21:59,170 --> 00:21:56,210

speaks pretty profoundly to the to the

468

00:22:02,980 --> 00:21:59,180

role of uncertainty to the role of you

469

00:22:04,990 --> 00:22:02,990

know randomness you know I've I think

470

00:22:07,240 --> 00:22:05,000

I've shown that you don't need a random

471

00:22:09,280 --> 00:22:07,250

physical process you can have a totally

472

00:22:10,450 --> 00:22:09,290

deterministic one and still create

473

00:22:18,220 --> 00:22:10,460

comparable effects

474

00:22:19,330 --> 00:22:18,230

thank you Brennan we have time for

475

00:22:26,740 --> 00:22:19,340

questions

476

00:22:29,350 --> 00:22:26,750

York let me first say this is very

477

00:22:30,940 --> 00:22:29,360

interesting work but I I do wish

478

00:22:34,060 --> 00:22:30,950

somebody had told me what you were

479

00:22:37,530 --> 00:22:34,070

planting planning to work on I'd have

480

00:22:45,730 --> 00:22:41,350

among other things on your concept that

481

00:22:47,740 --> 00:22:45,740

precognition is necessary for pseudo re

482

00:22:53,620 --> 00:22:47,750

G where it isn't for physical random

483

00:22:55,330 --> 00:22:53,630

devices this is something that maybe SSE

484

00:22:58,870 --> 00:22:55,340

members aren't as much aware of because

485

00:23:03,010 --> 00:22:58,880

I've never published it in JSC it's in

486

00:23:09,840 --> 00:23:03,020

buried in my symposium reports for Dan

487

00:23:15,430 --> 00:23:09,850

sheehan's retro causation symposia the

488

00:23:19,240 --> 00:23:15,440

effect in our remote re G is actually

489

00:23:23,260 --> 00:23:19,250

completely driven by the off time re G

490

00:23:39,400 --> 00:23:23,270

trials the contemporaneous remote re G

491

00:23:44,540 --> 00:23:40,940

thank you for a very interesting

492

00:23:47,390 --> 00:23:44,550

presentation since the pseudo-random

493

00:23:49,040 --> 00:23:47,400

numbers are known out as far as you want

494

00:23:51,830 --> 00:23:49,050

to know them in theory because it's an

495

00:23:53,480 --> 00:23:51,840

algorithm this just reflects my

496

00:23:56,680 --> 00:23:53,490

ignorance about pseudo-random number

497

00:24:01,820 --> 00:23:56,690

generators is it possible to calculate

498

00:24:04,310 --> 00:24:01,830

say a trillion digits out you know in a

499

00:24:08,540 --> 00:24:04,320

quick algorithm somehow and what would

500

00:24:11,720 --> 00:24:08,550

that look like if you did that well yeah

501

00:24:13,460 --> 00:24:11,730

I recognize that this is a difficult

502

00:24:15,280 --> 00:24:13,470

topic to bring people who've never heard

503

00:24:18,230 --> 00:24:15,290

of it up to speed and so short a time

504

00:24:20,960 --> 00:24:18,240

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

505

00:24:22,310 --> 00:24:20,970

bit of esoteric you know when you say a

506

00:24:24,380 --> 00:24:22,320

random event in or you can usually get

507

00:24:27,200 --> 00:24:24,390

people on board pretty quick it's not

508

00:24:29,840 --> 00:24:27,210

really the case with this but you're I

509

00:24:34,130 --> 00:24:29,850

mean you're absolutely right you know in

510

00:24:38,570 --> 00:24:34,140

in practice I I can't do it I don't have

511

00:24:41,990 --> 00:24:38,580

the the formulas but all the all the

512

00:24:44,060 --> 00:24:42,000

students read is it's just a you know

513

00:24:46,100 --> 00:24:44,070

like a never-ending loop well it's not

514

00:24:48,650 --> 00:24:46,110

never-ending I mean it's a loop so it it

515

00:24:50,720 --> 00:24:48,660

never ends in that way but it's it's

516

00:24:53,360 --> 00:24:50,730

just one you know it's two one zero one

517

00:24:57,980 --> 00:24:53,370

zero one zero one zero and the sequence

518

00:25:01,430 --> 00:24:57,990

goes on the number of bits in the

519

00:25:03,860 --> 00:25:01,440

sequence has been noted in multiple

520

00:25:06,920 --> 00:25:03,870

papers that they did it's a huge number

521

00:25:09,200 --> 00:25:06,930

if you it takes about 60 hours of

522

00:25:11,480 --> 00:25:09,210

continual operation of just letting the

523

00:25:13,670 --> 00:25:11,490

algorithm play out to go back to go

524

00:25:18,380 --> 00:25:13,680

through the entire loop so yeah it is

525

00:25:23,450 --> 00:25:18,390

possible without a doubt to know you

526
00:25:27,500 --> 00:25:23,460
know any any number in the series at any

527
00:25:29,090 --> 00:25:27,510
time that information is there so I want

528
00:25:32,360 --> 00:25:29,100
to stress again you know there's no the

529
00:25:35,030 --> 00:25:32,370
only random element is you this is just

530
00:25:36,770 --> 00:25:35,040
you know just like you could say if you

531
00:25:39,440 --> 00:25:36,780
want to reduce the entire loop you could

532
00:25:41,810 --> 00:25:39,450
reduce it down to five you know numbers

533
00:25:43,010 --> 00:25:41,820
you know zero one zero one zero and then

534
00:25:44,690 --> 00:25:43,020
it would just loop over zero one zero

535
00:25:46,850 --> 00:25:44,700
one zero and just loop stops oops now

536
00:25:48,920 --> 00:25:46,860
just extrapolate that and to you know I

537
00:25:52,549 --> 00:25:48,930
don't know like a trillion it's the same

538
00:25:58,830 --> 00:25:56,790

thank you I've worked with random noise

539

00:26:00,780 --> 00:25:58,840

generators both on the analog and on the

540

00:26:03,270 --> 00:26:00,790

digital side as you know

541

00:26:06,840 --> 00:26:03,280

analog noise generators preceded the

542

00:26:09,390 --> 00:26:06,850

digital ones by many years my feeling is

543

00:26:12,570 --> 00:26:09,400

that you're making a big thing about the

544

00:26:14,430 --> 00:26:12,580

difference between pseudo random and

545

00:26:17,370 --> 00:26:14,440

random generators which is not justified

546

00:26:19,260 --> 00:26:17,380

if it takes 50 hours of a sequence of

547

00:26:21,780 --> 00:26:19,270

ones and zeros to repeat itself and your

548

00:26:25,740 --> 00:26:21,790

experiment is a few seconds long it

549

00:26:28,020 --> 00:26:25,750

makes no difference and and to say that

550

00:26:29,610 --> 00:26:28,030

you need precognition to to know what's

551
00:26:32,430 --> 00:26:29,620
going to happen an hour from now when

552
00:26:36,590 --> 00:26:32,440
the thing doesn't repeat for 50 hours to

553
00:26:39,540 --> 00:26:36,600
me this is a is meant as a manufactured

554
00:26:44,040 --> 00:26:39,550
conclusion which I only can justify by

555
00:26:46,919 --> 00:26:44,050
the facts okay well I would disagree I

556
00:26:52,470 --> 00:26:46,929
think that there is a large difference

557
00:26:55,919 --> 00:26:52,480
between a pseudo re G and a traditional

558
00:26:58,049 --> 00:26:55,929
re G I think that you know when Bob and

559
00:27:03,710 --> 00:26:58,059
Brenda went out to start and studying

560
00:27:06,630 --> 00:27:03,720
these things they were focused on random

561
00:27:10,500 --> 00:27:06,640
physical processes they wanted to know

562
00:27:13,980 --> 00:27:10,510
how we interact with random physical

563
00:27:17,690 --> 00:27:13,990

processes things we can't predict this

564

00:27:20,040 --> 00:27:17,700

is predictable in the most you know

565

00:27:24,240 --> 00:27:20,050

literal sense of the word there's

566

00:27:28,980 --> 00:27:24,250

nothing random about it and so I think

567

00:27:30,810 --> 00:27:28,990

that it's not to say that you know that

568

00:27:32,970 --> 00:27:30,820

it's because they appear the same that

569

00:27:35,700 --> 00:27:32,980

they are the same to me

570

00:27:38,280 --> 00:27:35,710

you know is unwarranted yes they behave

571

00:27:41,880 --> 00:27:38,290

just like the random number generators

572

00:27:45,210 --> 00:27:41,890

but you know with that if you don't have

573

00:27:50,400 --> 00:27:45,220

that it's I mean it's it's so determined

574

00:27:53,480 --> 00:27:50,410

that you know it where is the the wiggle

575

00:27:56,160 --> 00:27:53,490

room for you know our intention to

576

00:27:58,530 --> 00:27:56,170

operate on something so fixed like that

577

00:28:02,530 --> 00:27:58,540

thank you Brennan thank you

578

00:28:08,790 --> 00:28:02,540

[Applause]