

1  
00:00:00,000 --> 00:00:05,910  
so good morning everybody I'm going to

2  
00:00:03,629 --> 00:00:09,929  
report today on some ongoing research at

3  
00:00:05,910 --> 00:00:13,169  
the Westfall neuroimaging lab and the

4  
00:00:09,929 --> 00:00:15,809  
division of perceptual studies also

5  
00:00:13,169 --> 00:00:19,379  
known as dots at the University of

6  
00:00:15,808 --> 00:00:24,509  
Virginia just a little background

7  
00:00:19,379 --> 00:00:31,348  
Dobbs's was founded in 1967 by the late

8  
00:00:24,510 --> 00:00:32,399  
dr. Ian Stevenson and was originally

9  
00:00:31,349 --> 00:00:37,558  
known as the division of

10  
00:00:32,399 --> 00:00:42,629  
parapsychological studies so Ian

11  
00:00:37,558 --> 00:00:45,750  
Stevenson is mostly known for his work

12  
00:00:42,628 --> 00:00:48,000  
in reincarnation that work is still

13  
00:00:45,750 --> 00:00:52,170  
ongoing to the state it's being carried

14  
00:00:48,000 --> 00:00:55,558  
forward a little bit of shameless plug

15  
00:00:52,170 --> 00:00:57,530  
for some of the the publications that

16  
00:00:55,558 --> 00:01:00,000  
have been coming out of DAPs lately

17  
00:00:57,530 --> 00:01:05,969  
science the self and survival after

18  
00:01:00,000 --> 00:01:08,549  
death is a summary of some of IANS

19  
00:01:05,969 --> 00:01:12,539  
Stevenson's writings including but not

20  
00:01:08,549 --> 00:01:15,659  
limited to his reincarnation work Jim

21  
00:01:12,540 --> 00:01:17,430  
Tucker is now the head of Dobbs has got

22  
00:01:15,659 --> 00:01:18,990  
a couple of books out one life before

23  
00:01:17,430 --> 00:01:22,500  
life is a review of all the dots

24  
00:01:18,989 --> 00:01:26,640  
research done on children who have past

25  
00:01:22,500 --> 00:01:28,950  
life memories Jim's most recent book

26  
00:01:26,640 --> 00:01:31,140  
returned to life has got a number of

27  
00:01:28,950 --> 00:01:33,299  
interesting American cases of children

28  
00:01:31,140 --> 00:01:37,200  
with past life memories it's really

29

00:01:33,299 --> 00:01:39,030  
quite an interesting read Bruce Grayson

30  
00:01:37,200 --> 00:01:42,180  
who was the head of the division for

31  
00:01:39,030 --> 00:01:45,320  
many years has edited the handbook of

32  
00:01:42,180 --> 00:01:50,040  
near-death experiences and E's is

33  
00:01:45,319 --> 00:01:52,469  
Bruce's area of research irreducible

34  
00:01:50,040 --> 00:01:56,368  
mind is an all-out attack on classical

35  
00:01:52,469 --> 00:01:56,968  
physicalism and is a classic book in and

36  
00:01:56,368 --> 00:02:00,259  
of itself

37  
00:01:56,968 --> 00:02:03,780  
edited by egg Kelly and Emily Kelly and

38  
00:02:00,259 --> 00:02:05,968  
company and the follow-up to that is

39  
00:02:03,780 --> 00:02:09,118  
beyond physicalism it's a theory

40  
00:02:05,968 --> 00:02:11,949  
oriented book looking at what the

41  
00:02:09,118 --> 00:02:15,280  
constructs of humans might be when

42  
00:02:11,949 --> 00:02:19,839  
mystical experiences and sigh phenomena

43  
00:02:15,280 --> 00:02:21,489

are taken into account so right across

44

00:02:19,840 --> 00:02:24,069  
the hall from dops

45

00:02:21,489 --> 00:02:25,180  
under the auspices of Cedar Creek

46

00:02:24,068 --> 00:02:28,449  
Institute DAPs

47

00:02:25,180 --> 00:02:31,450  
it's a sister organization is the

48

00:02:28,449 --> 00:02:36,518  
Westfall neuroimaging lab where I'm

49

00:02:31,449 --> 00:02:38,379  
working the the lab is dedicated to the

50

00:02:36,519 --> 00:02:40,989  
psychophysiological study of altered

51

00:02:38,379 --> 00:02:43,180  
states of consciousness in sy that's

52

00:02:40,989 --> 00:02:47,769  
relatively new lab we just got underway

53

00:02:43,180 --> 00:02:49,890  
really about 2010 one of our goals is to

54

00:02:47,769 --> 00:02:55,810  
identify physiological conditions

55

00:02:49,889 --> 00:02:58,509  
conducive to success inside tasks the

56

00:02:55,810 --> 00:03:01,650  
facility boasts a electromagnetically

57

00:02:58,509 --> 00:03:06,699  
shielded room pretty spacious one that

58  
00:03:01,650 --> 00:03:09,819  
meets the CI a tempest specification for

59  
00:03:06,699 --> 00:03:12,268  
100 DB of shielding and a bandwidth of

60  
00:03:09,818 --> 00:03:15,339  
20 kilohertz to 10 gigahertz

61  
00:03:12,269 --> 00:03:18,039  
we have a hundred 28 channel EEG that's

62  
00:03:15,340 --> 00:03:24,629  
also capable of recording auxiliary

63  
00:03:18,039 --> 00:03:28,298  
channels such as the OG GSR EKG yeah

64  
00:03:24,629 --> 00:03:30,579  
skin potential etc there's a remote

65  
00:03:28,299 --> 00:03:32,819  
agent room in a separate floor of the

66  
00:03:30,579 --> 00:03:36,340  
building with audio-visual capability

67  
00:03:32,818 --> 00:03:42,339  
which we are using for telepathy and OBE

68  
00:03:36,340 --> 00:03:45,730  
type studies and we have a now installed

69  
00:03:42,340 --> 00:03:49,239  
and functioning software base for

70  
00:03:45,729 --> 00:03:52,959  
automated verticals and site testing we

71  
00:03:49,239 --> 00:03:55,569  
also have a set of multiple sensors for

72  
00:03:52,959 --> 00:03:57,370  
PK testing which I'm going to describe a

73  
00:03:55,568 --> 00:04:00,009  
little bit more in a minute but first I

74  
00:03:57,370 --> 00:04:03,299  
would like to put out a plea that if you

75  
00:04:00,009 --> 00:04:07,090  
know of advanced meditators obe

76  
00:04:03,299 --> 00:04:12,129  
practitioners advanced healers trance

77  
00:04:07,090 --> 00:04:13,959  
mediums PK and ESP experts who are

78  
00:04:12,129 --> 00:04:18,048  
interested in engaging in scientific

79  
00:04:13,959 --> 00:04:21,048  
research please direct them our way

80  
00:04:18,048 --> 00:04:27,529  
you can find us by doing a search of

81  
00:04:21,048 --> 00:04:29,179  
tops UVA or CCI UVA on the web and you

82  
00:04:27,529 --> 00:04:33,038  
get to those websites there's directions

83  
00:04:29,180 --> 00:04:37,060  
on how to contact our staff from there

84  
00:04:33,038 --> 00:04:40,658  
so I mentioned we have a an array of

85  
00:04:37,060 --> 00:04:43,788  
various sensors these are 24 channels

86

00:04:40,658 --> 00:04:47,538  
that are simultaneously sampled with the

87  
00:04:43,788 --> 00:04:49,969  
physiological data there are several

88  
00:04:47,538 --> 00:04:53,180  
different types of sensors these are

89  
00:04:49,970 --> 00:04:58,880  
oriented towards RPK studies for example

90  
00:04:53,180 --> 00:05:02,449  
for example a bank of resistors three

91  
00:04:58,879 --> 00:05:06,740  
axis magnetometer four channels of his

92  
00:05:02,449 --> 00:05:10,000  
electric force detector the electric

93  
00:05:06,740 --> 00:05:12,800  
field monitor the Geiger counter

94  
00:05:10,000 --> 00:05:15,589  
temperature sensors were also monitoring

95  
00:05:12,800 --> 00:05:19,520  
temperature and humidity in the shielded

96  
00:05:15,589 --> 00:05:23,209  
room and then we have a class of an odd

97  
00:05:19,519 --> 00:05:25,839  
class of sensors that I guess could best

98  
00:05:23,209 --> 00:05:32,629  
be described as slow rate and then

99  
00:05:25,839 --> 00:05:36,978  
generators just as an aside at this

100  
00:05:32,629 --> 00:05:40,519

point I have to tell you what the bias

101

00:05:36,978 --> 00:05:45,019

of the experimenter / engineer ie me is

102

00:05:40,519 --> 00:05:47,269

in these types of experiments I noticed

103

00:05:45,019 --> 00:05:50,620

with interest yesterday bill Bengston

104

00:05:47,269 --> 00:05:54,348

talking about the healing it's not PK

105

00:05:50,620 --> 00:05:57,468

it's just something that that's

106

00:05:54,348 --> 00:05:59,750

happening we probably have a slightly

107

00:05:57,468 --> 00:06:02,028

different approach in this and that's

108

00:05:59,750 --> 00:06:05,478

partly based on my own personal

109

00:06:02,028 --> 00:06:08,509

experience I attended a PK party many

110

00:06:05,478 --> 00:06:12,379

years ago that Jack how an engineer from

111

00:06:08,509 --> 00:06:14,778

McDonnell Douglas was giving and in that

112

00:06:12,379 --> 00:06:19,098

party I witnessed firsthand some pretty

113

00:06:14,778 --> 00:06:21,139

amazing metal bending in fact I got to

114

00:06:19,098 --> 00:06:23,718

experience it myself I was standing

115  
00:06:21,139 --> 00:06:24,650  
there with a spoon and two people on the

116  
00:06:23,718 --> 00:06:27,560  
other side of me

117  
00:06:24,649 --> 00:06:30,509  
chanting Bend Bend Bend and I felt that

118  
00:06:27,560 --> 00:06:34,310  
spoon momentarily turning to

119  
00:06:30,509 --> 00:06:37,860  
Kathy and I got to complete 360 degree

120  
00:06:34,310 --> 00:06:42,060  
twists spiral twists in the thing before

121  
00:06:37,860 --> 00:06:44,430  
it got stiff again I afterwards I took a

122  
00:06:42,060 --> 00:06:47,069  
spoon that was exactly the same type and

123  
00:06:44,430 --> 00:06:50,370  
tried doing that by force alone and the

124  
00:06:47,069 --> 00:06:53,879  
thing snapped before it ever reached 90

125  
00:06:50,370 --> 00:06:56,160  
degrees yeah I also witnessed that day

126  
00:06:53,879 --> 00:06:58,740  
aside from lots of other people bending

127  
00:06:56,160 --> 00:07:02,490  
I saw a little old lady take a 3/8 inch

128  
00:06:58,740 --> 00:07:06,090  
steel rod and get a 45 degree bend in

129  
00:07:02,490 --> 00:07:07,740  
that thing and I know for a fact trying

130  
00:07:06,089 --> 00:07:09,869  
it personally and so for other people

131  
00:07:07,740 --> 00:07:13,910  
you cannot bend that steel rod by

132  
00:07:09,870 --> 00:07:16,530  
physical force alone so here we have

133  
00:07:13,910 --> 00:07:19,680  
smoking gun evidence that through

134  
00:07:16,529 --> 00:07:23,519  
intention people are able to affect the

135  
00:07:19,680 --> 00:07:27,569  
molecular structure of metal and that's

136  
00:07:23,519 --> 00:07:31,469  
kind of directed my efforts in making PK

137  
00:07:27,569 --> 00:07:35,269  
sensors and PK research so I tried to

138  
00:07:31,470 --> 00:07:40,950  
build electronic devices that would

139  
00:07:35,269 --> 00:07:44,189  
maybe somehow pick up or respond to what

140  
00:07:40,949 --> 00:07:46,170  
a metal band was doing and turn that

141  
00:07:44,189 --> 00:07:48,600  
into electrical signal that then we can

142  
00:07:46,170 --> 00:07:52,319  
then monitor simultaneously with our

143

00:07:48,600 --> 00:07:57,270  
physiological monitoring I was working

144  
00:07:52,319 --> 00:08:00,719  
on something like that when I discovered

145  
00:07:57,269 --> 00:08:04,519  
quite by accident that the device the

146  
00:08:00,720 --> 00:08:09,530  
electronic circuit was generating these

147  
00:08:04,519 --> 00:08:09,529  
random events the event being defined as

148  
00:08:10,040 --> 00:08:16,410  
one of these sharp edges an edge like

149  
00:08:13,680 --> 00:08:18,740  
that we would define as an event these

150  
00:08:16,410 --> 00:08:23,970  
things are appearing at random intervals

151  
00:08:18,740 --> 00:08:25,920  
they also have different amplitudes I

152  
00:08:23,970 --> 00:08:28,170  
didn't really want them in there I

153  
00:08:25,920 --> 00:08:31,439  
thought that was a problem with this

154  
00:08:28,170 --> 00:08:34,879  
circuit but I accidentally noticed in

155  
00:08:31,439 --> 00:08:37,918  
doing some of our experiments that these

156  
00:08:34,879 --> 00:08:40,500  
events seem to be appearing

157  
00:08:37,918 --> 00:08:42,478

groups are more often when people were

158

00:08:40,500 --> 00:08:46,139

directing their attention towards the

159

00:08:42,479 --> 00:08:48,750

device so that caught my attention and I

160

00:08:46,139 --> 00:08:51,450

started going around doing a little bit

161

00:08:48,750 --> 00:08:54,958

of observational research with this

162

00:08:51,450 --> 00:08:58,589

thing working with groups with healers

163

00:08:54,958 --> 00:09:02,789

and whatnot and noticing that more of

164

00:08:58,589 --> 00:09:05,610

these events were appearing for example

165

00:09:02,789 --> 00:09:07,889

with healers when the healer was working

166

00:09:05,610 --> 00:09:11,909

on a person and they would have a some

167

00:09:07,889 --> 00:09:13,350

sort of breakthrough it seemed like more

168

00:09:11,909 --> 00:09:15,179

of these events were appearing of course

169

00:09:13,350 --> 00:09:20,940

that was just observational practically

170

00:09:15,179 --> 00:09:24,088

anecdotal and the event rates on these

171

00:09:20,940 --> 00:09:25,560

things was extremely slow I will get

172  
00:09:24,089 --> 00:09:28,529  
back to that and then it just a little

173  
00:09:25,559 --> 00:09:29,939  
bit of detail on these events though as

174  
00:09:28,528 --> 00:09:31,919  
I mentioned they're slow it takes about

175  
00:09:29,940 --> 00:09:34,490  
a quarter of a second for an average

176  
00:09:31,919 --> 00:09:37,469  
event to get the full rise time and

177  
00:09:34,490 --> 00:09:40,829  
based on what we know about what's going

178  
00:09:37,470 --> 00:09:43,528  
on in the circuit these events are

179  
00:09:40,828 --> 00:09:48,359  
appearing in conjunction with about

180  
00:09:43,528 --> 00:09:50,789  
25,000 electrons sloshing around so if

181  
00:09:48,360 --> 00:09:52,769  
indeed these things are responding

182  
00:09:50,789 --> 00:09:55,828  
somehow to attention it's an attention

183  
00:09:52,769 --> 00:09:59,310  
that's moving well an average about

184  
00:09:55,828 --> 00:10:02,189  
25,000 electrons the amplifier noise

185  
00:09:59,309 --> 00:10:03,389  
floor is 100 elec the equivalent of 100

186  
00:10:02,190 --> 00:10:07,670  
electrons so we have a pretty good

187  
00:10:03,389 --> 00:10:10,799  
signal to noise ratio with this device a

188  
00:10:07,669 --> 00:10:12,509  
little bit more about it we did some

189  
00:10:10,799 --> 00:10:14,719  
work on the distribution of event

190  
00:10:12,509 --> 00:10:18,179  
intervals found that it was

191  
00:10:14,720 --> 00:10:20,790  
exponentially distributed with the scale

192  
00:10:18,179 --> 00:10:23,759  
factor being equal to the inverse of the

193  
00:10:20,789 --> 00:10:27,269  
measured being rate of events indicating

194  
00:10:23,759 --> 00:10:29,250  
it's a Poisson process I can't go into

195  
00:10:27,269 --> 00:10:30,929  
too much more detail about it because at

196  
00:10:29,250 --> 00:10:34,198  
this point we decided to make that

197  
00:10:30,929 --> 00:10:36,208  
little circuit proprietary in order to

198  
00:10:34,198 --> 00:10:36,799  
possibly maybe get more funding out of

199  
00:10:36,208 --> 00:10:45,949  
it some

200

00:10:36,799 --> 00:10:47,809  
down the road but nonetheless oh and if

201  
00:10:45,950 --> 00:10:50,269  
you'll notice then there's your bean

202  
00:10:47,809 --> 00:10:52,099  
rate point zero one two events per

203  
00:10:50,269 --> 00:10:55,519  
seconds extremely slow

204  
00:10:52,100 --> 00:10:58,610  
so in order to make this device a little

205  
00:10:55,519 --> 00:11:01,339  
bit more amenable to research that

206  
00:10:58,610 --> 00:11:04,220  
decided to start adding channels and

207  
00:11:01,339 --> 00:11:07,240  
making multiple channel devices to get

208  
00:11:04,220 --> 00:11:07,240  
the event rates up

209  
00:11:09,278 --> 00:11:15,528  
what happened was we ended up with

210  
00:11:11,799 --> 00:11:19,929  
device it looks like this inside each of

211  
00:11:15,528 --> 00:11:23,328  
those little boxes are multiple channels

212  
00:11:19,929 --> 00:11:28,789  
with those event sensors in them or

213  
00:11:23,328 --> 00:11:30,708  
event generators in effect we have a

214  
00:11:28,789 --> 00:11:34,599

peak a target that's kind of spread out

215

00:11:30,708 --> 00:11:37,669

over space the whole the whole thing is

216

00:11:34,600 --> 00:11:40,639

electrically shielded extremely well

217

00:11:37,669 --> 00:11:43,879

shielded and then the little box is

218

00:11:40,639 --> 00:11:48,379

remounted inside a second RF shielded

219

00:11:43,879 --> 00:11:50,360

box with special RF shielding on the

220

00:11:48,379 --> 00:11:52,700

cables that run into the box that's the

221

00:11:50,360 --> 00:11:54,860

voice we use to use an MRI scanner so I

222

00:11:52,700 --> 00:11:58,940

know it's running about 130 DB of

223

00:11:54,860 --> 00:12:01,669

electrical shielding the device is

224

00:11:58,940 --> 00:12:03,500

battery operated as is all the

225

00:12:01,669 --> 00:12:06,469

physiological monitoring everything is

226

00:12:03,500 --> 00:12:09,649

isolated from power and Earth ground and

227

00:12:06,470 --> 00:12:13,100

we ran a rather large long series of

228

00:12:09,649 --> 00:12:15,769

tests on this device looking for what

229  
00:12:13,100 --> 00:12:19,970  
kinds of environmental influences might

230  
00:12:15,769 --> 00:12:24,500  
be affecting it we tested for electric

231  
00:12:19,970 --> 00:12:26,360  
and magnetic fields we looked especially

232  
00:12:24,500 --> 00:12:28,940  
a background radiation and cosmic

233  
00:12:26,360 --> 00:12:31,699  
radiation because in a way this thing

234  
00:12:28,940 --> 00:12:34,190  
looks like a poor man's ionization

235  
00:12:31,698 --> 00:12:38,448  
chamber but we could find no correlation

236  
00:12:34,190 --> 00:12:41,920  
with a Geiger counter set up right next

237  
00:12:38,448 --> 00:12:44,659  
to it still doing more work on that but

238  
00:12:41,919 --> 00:12:48,078  
so far the only correlation to an

239  
00:12:44,659 --> 00:12:54,620  
environmental variable that I have found

240  
00:12:48,078 --> 00:12:58,128  
with this thing is humidity so I took

241  
00:12:54,620 --> 00:13:00,528  
this box out in the field as I mentioned

242  
00:12:58,129 --> 00:13:03,319  
earlier and worked with groups I took it

243  
00:13:00,528 --> 00:13:07,009  
to the Monroe Institute and worked with

244  
00:13:03,318 --> 00:13:08,948  
PK groups there again worked with

245  
00:13:07,009 --> 00:13:11,810  
healers I went to norm Hansen's

246  
00:13:08,948 --> 00:13:16,789  
did some work with him and the torsion

247  
00:13:11,809 --> 00:13:20,929  
pendulum and I got data that was again

248  
00:13:16,789 --> 00:13:23,028  
kind of observational suggestive we had

249  
00:13:20,929 --> 00:13:25,159  
some statistics we got statistical

250  
00:13:23,028 --> 00:13:27,110  
significance it was a little loose in

251  
00:13:25,159 --> 00:13:29,659  
terms of timing and things like that but

252  
00:13:27,110 --> 00:13:32,360  
but we were coming up with p-values that

253  
00:13:29,659 --> 00:13:36,860  
were well below point zero five for

254  
00:13:32,360 --> 00:13:38,419  
comparing bass lines against periods of

255  
00:13:36,860 --> 00:13:43,699  
time where when people were trying to

256  
00:13:38,419 --> 00:13:46,308  
affect this device originally in the

257

00:13:43,698 --> 00:13:50,240  
early days we were manually scoring

258  
00:13:46,308 --> 00:13:55,360  
events we had a lab tech who was doing

259  
00:13:50,240 --> 00:14:00,919  
that she went found another job so we

260  
00:13:55,360 --> 00:14:02,839  
switched over to automated scoring so

261  
00:14:00,919 --> 00:14:06,769  
here's a record of two channels of the

262  
00:14:02,839 --> 00:14:10,579  
device with some automated scoring marks

263  
00:14:06,769 --> 00:14:12,528  
in it and what we are doing is pulling

264  
00:14:10,578 --> 00:14:15,588  
out not only timing but amplitude

265  
00:14:12,528 --> 00:14:17,379  
information so that the score that we're

266  
00:14:15,589 --> 00:14:25,939  
using right now is the so-called

267  
00:14:17,379 --> 00:14:27,949  
weighted event count we're getting the

268  
00:14:25,938 --> 00:14:30,889  
events by sliding an average slope

269  
00:14:27,948 --> 00:14:35,149  
filter across the data when it hits one

270  
00:14:30,889 --> 00:14:37,879  
of those events pops up like this but it

271  
00:14:35,149 --> 00:14:42,318

remains well-behaved on the decay down

272

00:14:37,879 --> 00:14:46,490

the other side so with that all in mind

273

00:14:42,318 --> 00:14:48,399

we decided to put this thing to the

274

00:14:46,490 --> 00:14:53,440

tests in the lab

275

00:14:48,399 --> 00:14:58,860

and see what it would do running a very

276

00:14:53,440 --> 00:15:02,530

controlled tightly controlled PK task

277

00:14:58,860 --> 00:15:08,860

with a participants who were wired to

278

00:15:02,529 --> 00:15:11,949

EEG at the same time one other item of

279

00:15:08,860 --> 00:15:14,230

interest on this thing we found that the

280

00:15:11,950 --> 00:15:20,050

multi channel stack device like I was

281

00:15:14,230 --> 00:15:22,320

showing you would be independent which

282

00:15:20,049 --> 00:15:26,469

have independent observations if we used

283

00:15:22,320 --> 00:15:28,210

a segment of the record of eight seconds

284

00:15:26,470 --> 00:15:30,460

anything less than eight seconds and we

285

00:15:28,210 --> 00:15:32,680

start getting some dependence on the

286  
00:15:30,460 --> 00:15:35,320  
records so as you can see an auto

287  
00:15:32,679 --> 00:15:36,849  
correlation plots showing that at eight

288  
00:15:35,320 --> 00:15:38,560  
second intervals these things are

289  
00:15:36,850 --> 00:15:41,379  
independent and that works out pretty

290  
00:15:38,559 --> 00:15:44,049  
well physiological monitoring we can use

291  
00:15:41,379 --> 00:15:49,090  
eight second windows for our spectral

292  
00:15:44,049 --> 00:15:51,849  
analysis of the EEG so we set the device

293  
00:15:49,090 --> 00:15:54,009  
up in the lab put it in the corner as

294  
00:15:51,850 --> 00:15:57,610  
you can see there this is the view that

295  
00:15:54,009 --> 00:16:00,189  
a participant our experiment would see

296  
00:15:57,610 --> 00:16:01,960  
and we ran a pilot study it's this pilot

297  
00:16:00,190 --> 00:16:05,290  
study that I'm going to record on here

298  
00:16:01,960 --> 00:16:08,470  
today the pilot study was set up with

299  
00:16:05,289 --> 00:16:10,990  
the block type design which means that

300  
00:16:08,470 --> 00:16:16,120  
it was run as a series of rests and

301  
00:16:10,990 --> 00:16:18,730  
piqué trials set up in an ABB a type

302  
00:16:16,120 --> 00:16:21,669  
sequence very similar to D Mills like

303  
00:16:18,730 --> 00:16:24,370  
the experiment and we have to run these

304  
00:16:21,669 --> 00:16:26,349  
comparing base lines against task

305  
00:16:24,370 --> 00:16:28,570  
conditions because there's really no set

306  
00:16:26,350 --> 00:16:32,019  
statistics on this device like you would

307  
00:16:28,570 --> 00:16:34,420  
see with a midstream RNG where you're

308  
00:16:32,019 --> 00:16:41,590  
getting an expected value of say of 100

309  
00:16:34,419 --> 00:16:44,349  
for two hundred bits sample the the

310  
00:16:41,590 --> 00:16:47,110  
trials are audio paste so our

311  
00:16:44,350 --> 00:16:51,060  
participant will be sitting there wired

312  
00:16:47,110 --> 00:16:53,399  
up teg and they'll hear audio commands

313  
00:16:51,059 --> 00:16:56,849  
generated by a computer telling

314

00:16:53,399 --> 00:16:58,799  
to either rest or engage in pique they

315  
00:16:56,850 --> 00:17:04,950  
get feedback at the end of each trial

316  
00:16:58,799 --> 00:17:08,879  
and that's a short burst tone of a tone

317  
00:17:04,950 --> 00:17:12,930  
and excuse me indicating whether or not

318  
00:17:08,880 --> 00:17:16,530  
they got more events and the trial than

319  
00:17:12,930 --> 00:17:18,630  
in the previous trial we started out

320  
00:17:16,529 --> 00:17:21,420  
initially with three-minute trial

321  
00:17:18,630 --> 00:17:22,860  
lengths thinking okay that's kind of

322  
00:17:21,420 --> 00:17:24,630  
like what we're doing out in the field

323  
00:17:22,859 --> 00:17:28,829  
it takes people a little while to get

324  
00:17:24,630 --> 00:17:30,390  
them their mojo up and running and found

325  
00:17:28,829 --> 00:17:33,599  
out after a while that three-minute

326  
00:17:30,390 --> 00:17:35,040  
trial lengths are absolutely torture for

327  
00:17:33,599 --> 00:17:38,309  
an individual who's sitting there

328  
00:17:35,039 --> 00:17:40,409

running multiple trials so we gradually

329

00:17:38,309 --> 00:17:48,269

shorten them and we ended up settling on

330

00:17:40,410 --> 00:17:49,700

48 second trial lengths okay what

331

00:17:48,269 --> 00:17:55,349

happened

332

00:17:49,700 --> 00:17:58,740

we ran 68 runs with humans we had seven

333

00:17:55,349 --> 00:18:02,869

significant outcomes the significant

334

00:17:58,740 --> 00:18:05,279

outcome is defined as having a p-value

335

00:18:02,869 --> 00:18:08,549

less than point zero five in a

336

00:18:05,279 --> 00:18:14,160

two-tailed bootstrap resampled t-test

337

00:18:08,549 --> 00:18:17,069

comparing news event waited excuse me

338

00:18:14,160 --> 00:18:20,970

amplitude waited event counts in PK

339

00:18:17,069 --> 00:18:23,039

versus rest conditions now based on the

340

00:18:20,970 --> 00:18:24,809

binomial distribution assuming chance

341

00:18:23,039 --> 00:18:30,289

success the probability of getting that

342

00:18:24,809 --> 00:18:34,919

is 0.03 however several of our hits were

343  
00:18:30,289 --> 00:18:38,119  
much less than point zero five p-value

344  
00:18:34,920 --> 00:18:42,810  
so that's a conservative estimate of the

345  
00:18:38,119 --> 00:18:47,819  
significance of this trial we found out

346  
00:18:42,809 --> 00:18:51,329  
a few other things from the from this

347  
00:18:47,819 --> 00:18:52,710  
pilot study one is that the trial length

348  
00:18:51,329 --> 00:18:58,079  
actually didn't seem to make much

349  
00:18:52,710 --> 00:18:59,850  
difference in terms of their success we

350  
00:18:58,079 --> 00:19:02,339  
got about equal numbers of hits with the

351  
00:18:59,849 --> 00:19:06,339  
longer trials versus the shorter trials

352  
00:19:02,339 --> 00:19:11,069  
the same goes with feedback really

353  
00:19:06,339 --> 00:19:14,319  
didn't seem to make much difference so

354  
00:19:11,069 --> 00:19:17,739  
but from talking with our participants

355  
00:19:14,319 --> 00:19:21,308  
it was clear shorter trial lengths were

356  
00:19:17,739 --> 00:19:23,108  
preferred and feedback made the whole

357  
00:19:21,308 --> 00:19:27,058  
experiment much more interesting for

358  
00:19:23,108 --> 00:19:29,829  
participants we basically had three

359  
00:19:27,058 --> 00:19:32,700  
participants who were running the bulk

360  
00:19:29,829 --> 00:19:36,819  
of this experiment 54 of the runs with

361  
00:19:32,700 --> 00:19:42,788  
four of the hits but we had several

362  
00:19:36,819 --> 00:19:47,138  
other participants scoring hits and one

363  
00:19:42,788 --> 00:19:50,548  
of those before I get to that I have to

364  
00:19:47,138 --> 00:19:53,528  
mention that we ran 25 control rounds

365  
00:19:50,548 --> 00:19:56,679  
was basically running the protocol

366  
00:19:53,528 --> 00:20:01,210  
without anybody in the room with no

367  
00:19:56,679 --> 00:20:04,179  
significant outcomes this is all

368  
00:20:01,210 --> 00:20:06,489  
actually rather surprising to me to see

369  
00:20:04,179 --> 00:20:10,269  
this in action we tried controlling for

370  
00:20:06,489 --> 00:20:13,149  
experimenter effect by clearing out the

371

00:20:10,269 --> 00:20:15,878  
control area of all personnel during

372  
00:20:13,148 --> 00:20:18,479  
experimental run moving everybody to an

373  
00:20:15,878 --> 00:20:21,278  
outer room where we had a video monitor

374  
00:20:18,480 --> 00:20:22,868  
showing a live feed of the participant

375  
00:20:21,278 --> 00:20:25,659  
in the experiment this was done for

376  
00:20:22,868 --> 00:20:28,118  
safety reasons and also an indication of

377  
00:20:25,659 --> 00:20:34,980  
the trial number so we would know when

378  
00:20:28,118 --> 00:20:39,519  
the experiment was finished so I went to

379  
00:20:34,980 --> 00:20:43,108  
now go to part two of this and show you

380  
00:20:39,519 --> 00:20:45,999  
some of the EEG results that we found

381  
00:20:43,108 --> 00:20:52,168  
we're still just really getting into the

382  
00:20:45,999 --> 00:20:55,889  
EEG study of the of this pilot study but

383  
00:20:52,169 --> 00:21:00,249  
one of the first ones we looked at was a

384  
00:20:55,888 --> 00:21:03,508  
pretty good hit you get P of point zero

385  
00:21:00,249 --> 00:21:07,149

zero seven and we happen to get a full

386

00:21:03,509 --> 00:21:09,970

128 channel EEG this was done on a

387

00:21:07,148 --> 00:21:11,428

person who was probably closest to a

388

00:21:09,970 --> 00:21:15,009

professional peak

389

00:21:11,429 --> 00:21:20,259

in existence it's a joke Ellenberger who

390

00:21:15,009 --> 00:21:23,679

is runs PK courses at the Monroe

391

00:21:20,259 --> 00:21:27,960

Institute teaching people manifestation

392

00:21:23,679 --> 00:21:31,540

in pk he also runs groups to Las Vegas

393

00:21:27,960 --> 00:21:37,298

where they get to test their PK in

394

00:21:31,539 --> 00:21:41,259

action in the casinos and Joe Joe was

395

00:21:37,298 --> 00:21:45,160

like a great EEG subject he knows how to

396

00:21:41,259 --> 00:21:48,210

to sit very quietly while he's doing

397

00:21:45,160 --> 00:21:52,779

this PK effort and I should mention that

398

00:21:48,210 --> 00:21:55,179

EEG is quite a difficult thing to do on

399

00:21:52,779 --> 00:21:58,418

people who are engaged in any kind of

400  
00:21:55,179 --> 00:21:59,919  
activity that might involve movement any

401  
00:21:58,419 --> 00:22:02,620  
kind of movement artifact will

402  
00:21:59,919 --> 00:22:05,169  
completely disrupt an EEG such as

403  
00:22:02,619 --> 00:22:07,808  
swallowing talking moving your head

404  
00:22:05,169 --> 00:22:10,660  
blinking your eyes having a little

405  
00:22:07,808 --> 00:22:13,690  
muscle tension from grimacing and

406  
00:22:10,660 --> 00:22:16,210  
whatnot which makes it very difficult to

407  
00:22:13,690 --> 00:22:19,390  
run these types of experiments and I

408  
00:22:16,210 --> 00:22:21,130  
would say that Joe was a model subject

409  
00:22:19,390 --> 00:22:26,340  
which which any man you're going to see

410  
00:22:21,130 --> 00:22:26,340  
is important to what we found in his EEG

411  
00:22:26,940 --> 00:22:34,570  
so actually before I get to this part

412  
00:22:32,200 --> 00:22:37,870  
the first thing we did was looking at as

413  
00:22:34,569 --> 00:22:39,369  
raw EEG and we found that you know there

414  
00:22:37,869 --> 00:22:43,569  
were maybe three or four bad channels

415  
00:22:39,369 --> 00:22:45,668  
and threw those out we saw no gross

416  
00:22:43,569 --> 00:22:48,849  
movement artifact we saw a little bit of

417  
00:22:45,669 --> 00:22:50,410  
eye movement artifact we easily got rid

418  
00:22:48,849 --> 00:22:53,949  
of that just using a three Hertz

419  
00:22:50,410 --> 00:22:55,900  
high-pass filter and we saw a tiny bit

420  
00:22:53,950 --> 00:22:59,669  
of muscle tension on some of the

421  
00:22:55,900 --> 00:23:02,110  
temporal electrodes and the PK trials

422  
00:22:59,669 --> 00:23:05,259  
didn't seem to be significant look like

423  
00:23:02,109 --> 00:23:07,659  
just a few electrodes we had the first

424  
00:23:05,259 --> 00:23:10,329  
analysis we ran a thing called global

425  
00:23:07,660 --> 00:23:12,700  
which takes all the the high density

426  
00:23:10,329 --> 00:23:16,379  
array and collapses it down to just

427  
00:23:12,700 --> 00:23:19,509  
three measures amplitude frequency and

428

00:23:16,380 --> 00:23:20,150  
complexity what we found was that there

429  
00:23:19,509 --> 00:23:24,430  
was a

430  
00:23:20,150 --> 00:23:27,920  
new vegan difference between PK and rest

431  
00:23:24,430 --> 00:23:30,560  
for the amplitude and frequency measures

432  
00:23:27,920 --> 00:23:32,660  
would not the complexity measure and

433  
00:23:30,559 --> 00:23:37,309  
those amplitude and frequency measures

434  
00:23:32,660 --> 00:23:39,170  
were both higher and the peak a mode so

435  
00:23:37,309 --> 00:23:44,109  
the next step in the analysis was to

436  
00:23:39,170 --> 00:23:47,600  
take a look at averaged power spectrum

437  
00:23:44,109 --> 00:23:51,819  
which is what this is we averaged all

438  
00:23:47,599 --> 00:23:54,199  
the PK trials and the frequency domain

439  
00:23:51,819 --> 00:23:56,210  
averaged all the rest trials in the

440  
00:23:54,200 --> 00:24:01,309  
frequency Doom and subtracted the rest

441  
00:23:56,210 --> 00:24:06,319  
from the PK and came up with this result

442  
00:24:01,309 --> 00:24:10,519

I should explain what this graph this is

443

00:24:06,319 --> 00:24:14,049  
starting off in the left frontal area

444

00:24:10,519 --> 00:24:16,910  
moving around the left side of the head

445

00:24:14,049 --> 00:24:20,419  
here we get to about the left occipital

446

00:24:16,910 --> 00:24:25,730  
and then into the right occipital right

447

00:24:20,420 --> 00:24:29,480  
temporal and to right frontal this

448

00:24:25,730 --> 00:24:31,309  
frequency right here is 10 Hertz so at

449

00:24:29,480 --> 00:24:33,769  
first blush what you're seeing is what

450

00:24:31,309 --> 00:24:38,950  
looks like some activation going on in

451

00:24:33,769 --> 00:24:42,200  
this peak a mode and an alpha in this

452

00:24:38,950 --> 00:24:45,880  
left frontal area and in the occipital

453

00:24:42,200 --> 00:24:49,940  
area and then a somewhat bizarre

454

00:24:45,880 --> 00:24:53,510  
asymmetrical theta active oh it's right

455

00:24:49,940 --> 00:24:57,500  
on the Alpha Theta border here on the

456

00:24:53,509 --> 00:24:59,000  
right side now the question is at this

457  
00:24:57,500 --> 00:25:01,299  
point is any of this statistically

458  
00:24:59,000 --> 00:25:05,630  
significant I'll get to that in a minute

459  
00:25:01,299 --> 00:25:09,399  
what we also see is this stuff right

460  
00:25:05,630 --> 00:25:14,960  
here and these are temporal electrons

461  
00:25:09,400 --> 00:25:18,310  
now this is about 28 Hertz so the

462  
00:25:14,960 --> 00:25:21,610  
question at this point is is this neural

463  
00:25:18,309 --> 00:25:24,679  
origin or is this muscle artifact and

464  
00:25:21,609 --> 00:25:27,199  
it's actually a bit of a conundrum for

465  
00:25:24,680 --> 00:25:30,259  
EEG studies when you get up into the

466  
00:25:27,200 --> 00:25:32,600  
high frequency ranges is how much of

467  
00:25:30,259 --> 00:25:33,039  
what you're looking at is neuro on how

468  
00:25:32,599 --> 00:25:38,740  
much is

469  
00:25:33,039 --> 00:25:40,659  
muscle muscle tension on the scalp the

470  
00:25:38,740 --> 00:25:44,319  
smoking gun in this is that it's on the

471  
00:25:40,660 --> 00:25:47,560  
temporal electrodes so one would suspect

472  
00:25:44,319 --> 00:25:52,329  
that maybe this is a muscle muscular

473  
00:25:47,559 --> 00:25:54,039  
origin so one strategy for dealing with

474  
00:25:52,329 --> 00:25:58,689  
this is to just get rid of these

475  
00:25:54,039 --> 00:26:01,690  
electrodes from the analysis okay so

476  
00:25:58,690 --> 00:26:03,700  
that's what I did and I went on to look

477  
00:26:01,690 --> 00:26:09,400  
at a statistical analysis of the

478  
00:26:03,700 --> 00:26:13,840  
electrodes comparing piqué to rest so

479  
00:26:09,400 --> 00:26:19,180  
here and I started off by doing this in

480  
00:26:13,839 --> 00:26:22,529  
bands so the theta band is defined as in

481  
00:26:19,180 --> 00:26:26,920  
this case is four to eight Hertz

482  
00:26:22,529 --> 00:26:29,920  
what we found in 48 Hertz was these red

483  
00:26:26,920 --> 00:26:33,940  
dots mark codes that were significantly

484  
00:26:29,920 --> 00:26:35,710  
different between pique and rest this

485

00:26:33,940 --> 00:26:40,840  
green stuff is just markers for the

486  
00:26:35,710 --> 00:26:44,230  
montage so in the statistical sense

487  
00:26:40,839 --> 00:26:47,529  
there's really not much happening for Jo

488  
00:26:44,230 --> 00:26:49,599  
and the theta band and that weird kind

489  
00:26:47,529 --> 00:26:54,450  
of asymmetry that showed up in the

490  
00:26:49,599 --> 00:26:58,659  
spectral plot was really not significant

491  
00:26:54,450 --> 00:27:01,090  
moving on to the Alpha band this sort of

492  
00:26:58,660 --> 00:27:06,009  
looks a little bit more like what we saw

493  
00:27:01,089 --> 00:27:07,959  
in the spectral plot there's a alpha

494  
00:27:06,009 --> 00:27:15,190  
frequency activation going on on that

495  
00:27:07,960 --> 00:27:18,220  
left side occipital area moving up to

496  
00:27:15,190 --> 00:27:20,019  
the beta band now things are starting to

497  
00:27:18,220 --> 00:27:23,019  
spread out you see some in the frontal

498  
00:27:20,019 --> 00:27:26,889  
areas and more occipital stuff in this

499  
00:27:23,019 --> 00:27:32,680

group this beta band is to find this 12

500

00:27:26,890 --> 00:27:36,310

to 20 Hertz so again the question arises

501

00:27:32,680 --> 00:27:42,519

here how much of this is muscle how much

502

00:27:36,309 --> 00:27:43,569

of it this is actual brain activity one

503

00:27:42,519 --> 00:27:50,170

hint of this is

504

00:27:43,569 --> 00:27:52,599

the amplitude weighted average frequency

505

00:27:50,170 --> 00:27:54,960

in this band for these activations was

506

00:27:52,599 --> 00:27:57,609

about 15 Hertz

507

00:27:54,960 --> 00:28:01,870

now I had taken out the temporal

508

00:27:57,609 --> 00:28:03,519

electrodes for this analysis we're not

509

00:28:01,869 --> 00:28:05,369

seeing anything else showing up although

510

00:28:03,519 --> 00:28:09,309

we do see stuff up here

511

00:28:05,369 --> 00:28:13,479

where we do see some stuff here so so is

512

00:28:09,309 --> 00:28:15,220

it muscle or is it zip ring and the way

513

00:28:13,480 --> 00:28:19,650

folks I've been dealing with some of

514

00:28:15,220 --> 00:28:24,460

this is to use ICA to filter out

515

00:28:19,650 --> 00:28:28,360

frequency components from EEG we haven't

516

00:28:24,460 --> 00:28:32,549

done that analysis yet but and the

517

00:28:28,359 --> 00:28:32,549

reports I've seen using ICA for this

518

00:28:32,910 --> 00:28:38,860

results were inconclusive basically they

519

00:28:36,940 --> 00:28:41,740

were able to say oh yeah we see muscle

520

00:28:38,859 --> 00:28:47,079

here but they weren't able to actually

521

00:28:41,740 --> 00:28:50,200

take it out of an EEG filtrate moving up

522

00:28:47,079 --> 00:28:53,349

to high beta which was defined as 20 to

523

00:28:50,200 --> 00:28:58,809

35 Hertz now we're seeing even more of

524

00:28:53,349 --> 00:29:00,609

this stuff so again it's muscle leaking

525

00:28:58,809 --> 00:29:05,500

into other electrodes and you just can't

526

00:29:00,609 --> 00:29:08,259

see it in the gross charts I don't know

527

00:29:05,500 --> 00:29:11,890

and finally of great interest is the

528  
00:29:08,259 --> 00:29:17,379  
gamma band which is in our case to find

529  
00:29:11,890 --> 00:29:18,759  
us 25 that excuse me 35 to 45 Hertz and

530  
00:29:17,380 --> 00:29:21,270  
we're getting somewhat of a similar

531  
00:29:18,759 --> 00:29:25,319  
distribution of significant electrodes

532  
00:29:21,269 --> 00:29:28,180  
once again and in this case is amplitude

533  
00:29:25,319 --> 00:29:32,889  
weighted average frequency was right

534  
00:29:28,180 --> 00:29:34,920  
around 39 or 40 Hertz very narrowly

535  
00:29:32,890 --> 00:29:37,810  
distributed right around that frequency

536  
00:29:34,920 --> 00:29:40,740  
now this is a great interest to us

537  
00:29:37,809 --> 00:29:46,559  
because there have been other studies

538  
00:29:40,740 --> 00:29:51,069  
the first one was in 1958 das and Gaston

539  
00:29:46,559 --> 00:29:53,308  
who went to a hotel and Nepal and

540  
00:29:51,069 --> 00:29:56,210  
recorded EEG s from

541  
00:29:53,308 --> 00:29:59,548  
meditators and found that they were

542

00:29:56,210 --> 00:30:01,710  
producing high-frequency gamma and these

543  
00:29:59,548 --> 00:30:04,378  
guys were very careful at a lot of

544  
00:30:01,710 --> 00:30:06,329  
reasons that they put forth as to why

545  
00:30:04,378 --> 00:30:12,298  
what they were looking at was not muscle

546  
00:30:06,329 --> 00:30:14,428  
that it truly was brain origin and we

547  
00:30:12,298 --> 00:30:17,009  
would be quite interested to find that a

548  
00:30:14,429 --> 00:30:19,769  
person who who was successful at a peak

549  
00:30:17,009 --> 00:30:23,370  
a task was at the same time producing

550  
00:30:19,769 --> 00:30:28,669  
gamma that would be a great interest to

551  
00:30:23,369 --> 00:30:33,538  
us there's another study the pasta

552  
00:30:28,669 --> 00:30:35,549  
meditators producing occipital gamma and

553  
00:30:33,538 --> 00:30:38,730  
that one they did have to rest a little

554  
00:30:35,548 --> 00:30:41,009  
bit with the muscle issue I know from

555  
00:30:38,730 --> 00:30:45,509  
personal experience I used to work on a

556  
00:30:41,009 --> 00:30:51,079

project where we were doing combined EEG

557

00:30:45,509 --> 00:30:56,128

and fMRI imaging and one of our trips

558

00:30:51,079 --> 00:30:59,249

demoing our system we were talking with

559

00:30:56,128 --> 00:31:02,548

the researchers who mentioned they have

560

00:30:59,249 --> 00:31:06,769

been running EEG studies on Tibetan

561

00:31:02,548 --> 00:31:09,990

meditators and these guys were producing

562

00:31:06,769 --> 00:31:13,798

what sounded early fantastic to me it

563

00:31:09,990 --> 00:31:17,909

was quite high frequency stuff around 70

564

00:31:13,798 --> 00:31:20,599

Hertz extremely high amplitude maybe a a

565

00:31:17,909 --> 00:31:24,149

couple hundred micro volts and

566

00:31:20,599 --> 00:31:27,178

distributed only in one particular area

567

00:31:24,148 --> 00:31:31,229

of the head they didn't think it was

568

00:31:27,179 --> 00:31:33,570

muscle but they weren't sure so they

569

00:31:31,230 --> 00:31:37,200

were going to do they wanted to do

570

00:31:33,569 --> 00:31:38,099

combined EEG and fMRI scanning to get to

571  
00:31:37,200 --> 00:31:40,288  
the bottom of it

572  
00:31:38,099 --> 00:31:42,689  
I think we're faced with the same

573  
00:31:40,288 --> 00:31:47,009  
situation here

574  
00:31:42,690 --> 00:31:50,308  
one of our best subjects had just a

575  
00:31:47,009 --> 00:31:51,690  
little bit of muscle tension we're

576  
00:31:50,308 --> 00:31:55,888  
getting something that looks like maybe

577  
00:31:51,690 --> 00:31:57,450  
he has gamma activation occipital e with

578  
00:31:55,888 --> 00:31:59,969  
a little bit of stuff on the top of the

579  
00:31:57,450 --> 00:32:01,809  
head similar to what was seen in the VIP

580  
00:31:59,970 --> 00:32:05,660  
aasana meditate

581  
00:32:01,809 --> 00:32:10,700  
but we don't know is that stuff muscle

582  
00:32:05,660 --> 00:32:15,529  
or is it EEG now we do have a capability

583  
00:32:10,700 --> 00:32:18,500  
to do combined imaging we could put a

584  
00:32:15,529 --> 00:32:23,539  
person in an MRI scanner and run 64

585  
00:32:18,500 --> 00:32:31,180  
channels of EEG however you think about

586  
00:32:23,539 --> 00:32:31,180  
that for a pea case study an MRI scanner

587  
00:32:32,470 --> 00:32:38,480  
it's not first of all it's not a very

588  
00:32:35,359 --> 00:32:41,449  
friendly environment for a PK agent to

589  
00:32:38,480 --> 00:32:44,180  
work in but secondly I have to admit if

590  
00:32:41,450 --> 00:32:47,870  
I were the PK agent and I was trying to

591  
00:32:44,180 --> 00:32:49,220  
do PK and I was in an MRI scanner you

592  
00:32:47,869 --> 00:32:52,339  
know I would be a little bit worried

593  
00:32:49,220 --> 00:32:55,110  
about maybe some of that PK getting

594  
00:32:52,339 --> 00:32:59,589  
loose and doing something to the scanner

595  
00:32:55,109 --> 00:32:59,589  
[Laughter]

596  
00:33:01,210 --> 00:33:10,720  
so anyway that's about where it stands

597  
00:33:07,730 --> 00:33:13,279  
today I think one of the most

598  
00:33:10,720 --> 00:33:17,360  
interesting things that has fallen out

599

00:33:13,279 --> 00:33:22,339  
of this pilot study for us is what we're

600  
00:33:17,359 --> 00:33:24,529  
up against in terms of our participants

601  
00:33:22,339 --> 00:33:27,099  
our participants and what they're doing

602  
00:33:24,529 --> 00:33:29,539  
well we've got them wired up to eg

603  
00:33:27,099 --> 00:33:31,719  
several of the other yuji's I've just

604  
00:33:29,539 --> 00:33:35,509  
started to look at from our pilot study

605  
00:33:31,720 --> 00:33:38,140  
we're nowhere near as good as Joe's I

606  
00:33:35,509 --> 00:33:40,430  
mean folks are in there and they're just

607  
00:33:38,140 --> 00:33:42,320  
you know they're doing all kinds of

608  
00:33:40,430 --> 00:33:44,840  
stuff they're moving their hands they're

609  
00:33:42,319 --> 00:33:47,929  
grimacing they're doing anything they

610  
00:33:44,839 --> 00:33:49,909  
can to get that P case to get that tone

611  
00:33:47,930 --> 00:33:53,269  
to bounce up alarm at the end of the

612  
00:33:49,910 --> 00:33:56,360  
trial when that happens we have to throw

613  
00:33:53,269 --> 00:33:58,849

data up you know if there's gross

614

00:33:56,359 --> 00:34:01,699

artifact we have to throw it out and I

615

00:33:58,849 --> 00:34:03,829

have to admit as the experimenter who's

616

00:34:01,700 --> 00:34:08,539

gone to great effort to get that data

617

00:34:03,829 --> 00:34:12,049

I don't want to throw it out but but

618

00:34:08,539 --> 00:34:14,449

we're faced with that dilemma so moving

619

00:34:12,050 --> 00:34:17,630

forward in the study as we go into more

620

00:34:14,449 --> 00:34:21,259

formal studies one of the first things

621

00:34:17,630 --> 00:34:23,240

we're doing is we're sort of upping the

622

00:34:21,260 --> 00:34:23,840

ante in terms of how you get into the

623

00:34:23,239 --> 00:34:26,678

study

624

00:34:23,840 --> 00:34:29,929

now all the folks in this pilot study

625

00:34:26,679 --> 00:34:33,740

were enrolled based on simply their

626

00:34:29,929 --> 00:34:36,349

interests in pique so some of them had

627

00:34:33,739 --> 00:34:38,589

experiences others had some we're

628  
00:34:36,349 --> 00:34:42,500  
professionals like Joe others were just

629  
00:34:38,590 --> 00:34:44,660  
I'm interested in it going forward we're

630  
00:34:42,500 --> 00:34:46,880  
only going to enroll people in the

631  
00:34:44,659 --> 00:34:50,559  
formal part of the study if they've

632  
00:34:46,880 --> 00:34:53,990  
actually produced say hits and a

633  
00:34:50,559 --> 00:34:58,099  
screening trial that we've run or if

634  
00:34:53,989 --> 00:35:00,259  
they can effect hits on the system

635  
00:34:58,099 --> 00:35:02,569  
remotely I didn't mention but we've been

636  
00:35:00,260 --> 00:35:05,570  
running remote trials with the system as

637  
00:35:02,570 --> 00:35:09,140  
well we've got set up on skype so a

638  
00:35:05,570 --> 00:35:12,590  
person can see a real-time display of

639  
00:35:09,139 --> 00:35:16,159  
the raw signals and they get to hear the

640  
00:35:12,590 --> 00:35:19,700  
feedback as well and we've actually had

641  
00:35:16,159 --> 00:35:25,339  
people get significant hits with the

642  
00:35:19,699 --> 00:35:27,159  
system from 2rm 50 miles away which yes

643  
00:35:25,340 --> 00:35:32,570  
I mean it kind of blew my mind to but

644  
00:35:27,159 --> 00:35:35,869  
there it is so again the plea if you

645  
00:35:32,570 --> 00:35:38,059  
know of anybody that's routinely bending

646  
00:35:35,869 --> 00:35:40,699  
spoons and wants to engage in scientific

647  
00:35:38,059 --> 00:35:43,250  
study if the table slab in

648  
00:35:40,699 --> 00:35:47,719  
Charlottesville please direct them our

649  
00:35:43,250 --> 00:35:50,920  
way and I think I'll I got three minutes

650  
00:35:47,719 --> 00:35:50,919  
left but I'll stop now

651  
00:35:56,579 --> 00:36:04,059  
okay there's a phenomenon called torsion

652  
00:36:00,699 --> 00:36:06,339  
energies and guys like plot Swanson

653  
00:36:04,059 --> 00:36:08,980  
thinks that that's subtle energy torsion

654  
00:36:06,340 --> 00:36:12,250  
chi are all the same thing and there are

655  
00:36:08,980 --> 00:36:14,380  
things such as torsion generators might

656

00:36:12,250 --> 00:36:16,300  
be interesting to see what happens

657  
00:36:14,380 --> 00:36:18,220  
it's Agard - you're set up with

658  
00:36:16,300 --> 00:36:19,450  
something of that nature so I just

659  
00:36:18,219 --> 00:36:22,709  
thought it was interesting because

660  
00:36:19,449 --> 00:36:24,879  
there's maybe some similarities and I

661  
00:36:22,710 --> 00:36:27,340  
know Allison knows some people who've

662  
00:36:24,880 --> 00:36:29,619  
been spoons no it's it's interesting

663  
00:36:27,340 --> 00:36:32,320  
that you bring that up because I have

664  
00:36:29,619 --> 00:36:34,869  
read Claude's book about torsionally I

665  
00:36:32,320 --> 00:36:37,420  
did find it very interesting and I

666  
00:36:34,869 --> 00:36:40,569  
actually visited Claude a couple of

667  
00:36:37,420 --> 00:36:42,369  
years ago with that black box and he set

668  
00:36:40,570 --> 00:36:45,730  
up with one of his torsion generators

669  
00:36:42,369 --> 00:36:47,529  
and we ran a series of control trials

670  
00:36:45,730 --> 00:36:51,490

and and we actually did come up with

671

00:36:47,530 --> 00:36:56,320

more events showing up when that torsion

672

00:36:51,489 --> 00:36:59,500

generator was I was a big wheel that was

673

00:36:56,320 --> 00:37:01,930

spinning at high speed the thing that

674

00:36:59,500 --> 00:37:03,489

confused me about it was I couldn't tell

675

00:37:01,929 --> 00:37:05,949

since Claude and I were both sitting

676

00:37:03,489 --> 00:37:08,349

there and we knew the conditions of the

677

00:37:05,949 --> 00:37:10,659

trial we weren't blind whether it was

678

00:37:08,349 --> 00:37:11,860

just her inadvertent experiment or

679

00:37:10,659 --> 00:37:17,019

effect or whether it was actually a

680

00:37:11,860 --> 00:37:19,030

torsion generator when you describe the

681

00:37:17,019 --> 00:37:23,349

initial development of your circuit and

682

00:37:19,030 --> 00:37:28,240

I explained how you were seeing what you

683

00:37:23,349 --> 00:37:30,039

had taken to be a rant random errors of

684

00:37:28,239 --> 00:37:31,209

some sort until you notice that they

685  
00:37:30,039 --> 00:37:34,809  
seemed to be happening more frequently

686  
00:37:31,210 --> 00:37:37,389  
during intentional or healing efforts

687  
00:37:34,809 --> 00:37:42,009  
I had to restrain myself from getting up

688  
00:37:37,389 --> 00:37:43,059  
and dancing because back in 2008 at the

689  
00:37:42,010 --> 00:37:45,460  
track

690  
00:37:43,059 --> 00:37:48,099  
parrot a conference on the future of

691  
00:37:45,460 --> 00:37:50,699  
parapsychology one of the things I

692  
00:37:48,099 --> 00:37:53,940  
pointed out in my presentation is that

693  
00:37:50,699 --> 00:37:56,399  
off-the-shelf electronic components are

694  
00:37:53,940 --> 00:37:59,889  
automatically going to be inadvertently

695  
00:37:56,400 --> 00:38:02,590  
SCI hardened because electrical

696  
00:37:59,889 --> 00:38:05,589  
engineers don't track their thoughts and

697  
00:38:02,590 --> 00:38:08,860  
emotions and if something is responding

698  
00:38:05,590 --> 00:38:11,950  
to mental effects under development that

699  
00:38:08,860 --> 00:38:13,480  
will be classed as intermittent faults

700  
00:38:11,949 --> 00:38:15,609  
and they'll do the their best to

701  
00:38:13,480 --> 00:38:18,219  
engineer them out and if they can't get

702  
00:38:15,610 --> 00:38:20,920  
rid of them they won't market it so I'd

703  
00:38:18,219 --> 00:38:24,789  
like to express my gratitude that you

704  
00:38:20,920 --> 00:38:26,980  
were an incompetent skillful electrical

705  
00:38:24,789 --> 00:38:29,050  
engineer who also knew about SCI

706  
00:38:26,980 --> 00:38:32,039  
phenomena and was actively working for

707  
00:38:29,050 --> 00:38:32,039  
them thank you

708  
00:38:32,820 --> 00:38:36,019  
[Applause]

709  
00:38:49,690 --> 00:38:54,039  
a colleague of mine Bogg neurology from

710  
00:38:52,239 --> 00:38:56,619  
the IEC has recently done some pilot

711  
00:38:54,039 --> 00:38:58,960  
work in fMRI producing a bio energetic

712  
00:38:56,619 --> 00:39:00,279  
field mobilizing bio energies or chi or

713

00:38:58,960 --> 00:39:02,500  
prana wherever you want to call it and

714  
00:39:00,280 --> 00:39:06,040  
trying to look for the neural correlates

715  
00:39:02,500 --> 00:39:09,070  
of this and what they found was a lot of

716  
00:39:06,039 --> 00:39:11,199  
activation outside of the brain which

717  
00:39:09,070 --> 00:39:13,690  
was suggestive of not brain activity of

718  
00:39:11,199 --> 00:39:15,849  
course but perhaps bioenergetic you

719  
00:39:13,690 --> 00:39:17,559  
could say noise in this case they then

720  
00:39:15,849 --> 00:39:18,670  
went in this scanner with a phantom

721  
00:39:17,559 --> 00:39:20,469  
which i'm sure you're familiar with and

722  
00:39:18,670 --> 00:39:21,940  
he exteriorized threw his hands into the

723  
00:39:20,469 --> 00:39:24,219  
phantom and did like you know block

724  
00:39:21,940 --> 00:39:26,619  
design exteriorization no exterior is a

725  
00:39:24,219 --> 00:39:30,279  
ssin and they saw huge huge effects of

726  
00:39:26,619 --> 00:39:32,409  
this so my thought on this is that

727  
00:39:30,280 --> 00:39:34,300

perhaps there's a third alternative not

728

00:39:32,409 --> 00:39:38,019

muscle noise not necessarily neuronal

729

00:39:34,300 --> 00:39:39,700

activity but a bio energetic artifact of

730

00:39:38,019 --> 00:39:44,739

the field that's being produced that

731

00:39:39,699 --> 00:39:47,349

might be conducive for the PK so I

732

00:39:44,739 --> 00:39:49,629

wonder if I don't know if we don't have

733

00:39:47,349 --> 00:39:53,110

a great apparatus to directly measure

734

00:39:49,630 --> 00:39:55,390

bioenergy unfortunately but I think that

735

00:39:53,110 --> 00:39:56,530

that could also be the link between some

736

00:39:55,389 --> 00:39:57,639

these meditators that are

737

00:39:56,530 --> 00:40:01,030

these kind of high-frequency

738

00:39:57,639 --> 00:40:03,519

bioenergetic fields are coherent self

739

00:40:01,030 --> 00:40:05,560

coherent fields that are being read as

740

00:40:03,519 --> 00:40:07,570

as neural activity I just saw John

741

00:40:05,559 --> 00:40:09,039

cruising you're saying going yes we do

742  
00:40:07,570 --> 00:40:13,539  
he's about to give a talk of it alright

743  
00:40:09,039 --> 00:40:16,029  
cool thank you thank you hi I was

744  
00:40:13,539 --> 00:40:19,170  
wondering if you had spoken with I think

745  
00:40:16,030 --> 00:40:23,500  
it's name is John your advanced PK agent

746  
00:40:19,170 --> 00:40:26,530  
or Joe not true Joe I was did you speak

747  
00:40:23,500 --> 00:40:28,570  
with him about how he goes about doing

748  
00:40:26,530 --> 00:40:31,170  
his PA activity and how it differs from

749  
00:40:28,570 --> 00:40:34,150  
the other subjects that you worked with

750  
00:40:31,170 --> 00:40:36,430  
yeah in fact that's a huge subject and

751  
00:40:34,150 --> 00:40:39,250  
and Joe goes into that and depth in his

752  
00:40:36,429 --> 00:40:41,230  
courses and I think it just in a

753  
00:40:39,250 --> 00:40:47,889  
nutshell he's talking about opening the

754  
00:40:41,230 --> 00:40:50,769  
heart chakra when he does it one other

755  
00:40:47,889 --> 00:40:54,579  
quick thing about Joe just a quick aside

756  
00:40:50,769 --> 00:40:56,969  
I have seen him also sure that he and

757  
00:40:54,579 --> 00:40:59,920  
this goes to the point you were making

758  
00:40:56,969 --> 00:41:04,899  
he seems to be able to generate very

759  
00:40:59,920 --> 00:41:07,030  
high voltage voltages on his body now he

760  
00:41:04,900 --> 00:41:09,670  
does he shows that demonstrates it by

761  
00:41:07,030 --> 00:41:12,040  
taking a round fluorescent tube and

762  
00:41:09,670 --> 00:41:14,110  
he'll hold it and flick it and you'll

763  
00:41:12,039 --> 00:41:17,409  
see the thing light up what person could

764  
00:41:14,110 --> 00:41:19,240  
say oh that's just static charge but he

765  
00:41:17,409 --> 00:41:21,819  
showed this to me in a very damp

766  
00:41:19,239 --> 00:41:25,359  
basement on a very hot damp night there

767  
00:41:21,820 --> 00:41:27,580  
was no static and he also says that he

768  
00:41:25,360 --> 00:41:31,539  
can do in a shower with water running on

769  
00:41:27,579 --> 00:41:35,110  
him and there was a study done at the

770

00:41:31,539 --> 00:41:37,000  
Menninger Institute with meditators and

771  
00:41:35,110 --> 00:41:40,300  
healers they had set up a special

772  
00:41:37,000 --> 00:41:42,639  
facility with a very insulated chair and

773  
00:41:40,300 --> 00:41:44,230  
electric field detectors around people

774  
00:41:42,639 --> 00:41:46,659  
and they were measuring what they

775  
00:41:44,230 --> 00:41:48,969  
thought was pushing about 80 volts or so

776  
00:41:46,659 --> 00:41:50,829  
on some people so it's you know it's

777  
00:41:48,969 --> 00:41:52,149  
possible Joe's generating a high voltage

778  
00:41:50,829 --> 00:41:54,579  
feel and that's part of the reason we

779  
00:41:52,150 --> 00:41:57,220  
set these electric field monitors and

780  
00:41:54,579 --> 00:41:59,940  
whatnot and we're trying to pursue that

781  
00:41:57,219 --> 00:41:59,939  
with him as well

782  
00:42:01,139 --> 00:42:06,000  
yeah I hate to be the skeptic in the

783  
00:42:03,210 --> 00:42:08,338  
group but uh I'm a member of the

784  
00:42:06,000 --> 00:42:10,289

International remote viewing Association

785

00:42:08,338 --> 00:42:13,199

and I have been to all of their meetings

786

00:42:10,289 --> 00:42:15,630

since 2001 with the exception of two and

787

00:42:13,199 --> 00:42:18,328

the first one or two I believe had Jack

788

00:42:15,630 --> 00:42:21,390

Hawke and his spoon bending parties I

789

00:42:18,329 --> 00:42:23,430

was it both of those and then after he

790

00:42:21,389 --> 00:42:26,460

no longer was healthy enough to do that

791

00:42:23,429 --> 00:42:30,358

Lynn Buchanan's all those years I have

792

00:42:26,460 --> 00:42:32,519

never yet witnessed a spoon bending that

793

00:42:30,358 --> 00:42:34,650

I thought was done without just physical

794

00:42:32,518 --> 00:42:36,778

force and I've walked around with my

795

00:42:34,650 --> 00:42:38,670

camera I've looked very carefully I

796

00:42:36,778 --> 00:42:40,349

don't know if I'm just moving in a

797

00:42:38,670 --> 00:42:42,778

different reality than everybody else

798

00:42:40,349 --> 00:42:45,059

you know there are piles of bent spoons

799  
00:42:42,778 --> 00:42:48,329  
and forks you know in the middle of the

800  
00:42:45,059 --> 00:42:50,220  
floor but I have yet to witness one now

801  
00:42:48,329 --> 00:42:52,670  
I know Russell Targ and I think Dean

802  
00:42:50,219 --> 00:42:56,189  
Radin both have claimed that they had

803  
00:42:52,670 --> 00:42:59,670  
spoons bent when they were not thinking

804  
00:42:56,190 --> 00:43:01,980  
hard about it and others but I'd love to

805  
00:42:59,670 --> 00:43:03,990  
witness one see that that's the

806  
00:43:01,980 --> 00:43:06,179  
interesting thing about my experience I

807  
00:43:03,989 --> 00:43:07,709  
would probably be in the same camp as

808  
00:43:06,179 --> 00:43:10,949  
you except for that little lady with the

809  
00:43:07,710 --> 00:43:13,920  
steel rod but I actually felt that darn

810  
00:43:10,949 --> 00:43:16,768  
thing turned into taffy you know I don't

811  
00:43:13,920 --> 00:43:18,389  
think for a minute I was the PK agent

812  
00:43:16,768 --> 00:43:19,949  
there's two other people sitting there

813  
00:43:18,389 --> 00:43:22,528  
chanting along with me

814  
00:43:19,949 --> 00:43:25,288  
I felt that thing turned into taffy just

815  
00:43:22,528 --> 00:43:27,630  
briefly and it just almost fell into

816  
00:43:25,289 --> 00:43:31,380  
place to complete spiral twists on it

817  
00:43:27,630 --> 00:43:33,329  
and then it got stiff again believer I

818  
00:43:31,380 --> 00:43:40,410  
think that would make me a believer as

819  
00:43:33,329 --> 00:43:42,750  
well but it must be a very rare incident

820  
00:43:40,409 --> 00:43:47,608  
it seems to me that's one of the

821  
00:43:42,750 --> 00:43:49,650  
problems with this kind of rares a party

822  
00:43:47,608 --> 00:43:52,048  
with a bunch of secretaries are we done

823  
00:43:49,650 --> 00:43:54,150  
anyway she said sorry she was the only

824  
00:43:52,048 --> 00:43:57,530  
one that couldn't bend the spoon so

825  
00:43:54,150 --> 00:44:00,579  
apparently it you know depends

826  
00:43:57,530 --> 00:44:00,579  
[Music]

827

00:44:03,150 --> 00:44:06,340  
[Applause]