



Society for Scientific Exploration

1
00:00:03,300 --> 00:00:07,890

[Music]

2
00:00:12,850 --> 00:00:10,690

I'm going to share some data that I've

3
00:00:15,240 --> 00:00:12,860

been collecting over the years doing

4
00:00:17,620 --> 00:00:15,250

brain mapping studies of healers and

5
00:00:22,150 --> 00:00:17,630

I've also worked with some meditators

6
00:00:24,100 --> 00:00:22,160

and the healers include mystics and

7
00:00:28,420 --> 00:00:24,110

shamans you'll see some data and some

8
00:00:30,640 --> 00:00:28,430

shamans as well now how did I ever get

9
00:00:33,520 --> 00:00:30,650

into something like this and I'll

10
00:00:34,540 --> 00:00:33,530

briefly give you the story I was working

11
00:00:37,150 --> 00:00:34,550

at the University of Washington Medical

12
00:00:38,229 --> 00:00:37,160

Center running an EEG lab there in the

13
00:00:41,380 --> 00:00:38,239

Department of Radiology

14

00:00:45,430 --> 00:00:41,390

and I attended one of those whole-life

15

00:00:48,610 --> 00:00:45,440

body expo I got on a table and received

16

00:00:51,369 --> 00:00:48,620

a Reiki treatment and I got off 20

17

00:00:53,770 --> 00:00:51,379

minutes later seeing a halo around the

18

00:00:56,259 --> 00:00:53,780

woman and feeling like something had

19

00:01:00,160 --> 00:00:56,269

really happened had shifted inside of me

20

00:01:01,900 --> 00:01:00,170

now I've done a lot of bodywork

21

00:01:04,540 --> 00:01:01,910

transformational work you know

22

00:01:08,310 --> 00:01:04,550

psychoactives etc so I knew something

23

00:01:14,320 --> 00:01:08,320

had happened so I left there with that

24

00:01:16,360 --> 00:01:14,330

thought that this may be available you

25

00:01:18,370 --> 00:01:16,370

know you know you might see something if

26
00:01:20,740 --> 00:01:18,380
you hook up a healer to an EEG machine

27
00:01:23,890 --> 00:01:20,750
and discover that they're doing

28
00:01:26,290 --> 00:01:23,900
something different so that was the the

29
00:01:30,640 --> 00:01:26,300
seed that started this and in the short

30
00:01:33,160 --> 00:01:30,650
time I was enrolled in a Reiki group and

31
00:01:35,110 --> 00:01:33,170
I got up to second level and I'm a Reiki

32
00:01:37,240 --> 00:01:35,120
practitioner I don't do it a lot that I

33
00:01:39,310 --> 00:01:37,250
love to do it so I had access to all

34
00:01:40,660 --> 00:01:39,320
this Reiki community so they started

35
00:01:43,090 --> 00:01:40,670
coming in the lab and I started to hook

36
00:01:44,740 --> 00:01:43,100
him up and getting data and pretty soon

37
00:01:46,060 --> 00:01:44,750
other healers were learning about this

38
00:01:50,700 --> 00:01:46,070

and they were coming and knocking on the

39

00:01:56,800 --> 00:01:50,710

door and before long I had a large

40

00:01:58,900 --> 00:01:56,810

sample to work with I like to show this

41

00:02:02,920 --> 00:01:58,910

slide because I think this is where it

42

00:02:05,620 --> 00:02:02,930

all starts this is a beautiful image of

43

00:02:08,770 --> 00:02:05,630

a rock painting from South Africa about

44

00:02:11,020 --> 00:02:08,780

approximately ten thousand years and it

45

00:02:14,500 --> 00:02:11,030

shows a healing circle and in the center

46

00:02:16,510 --> 00:02:14,510

is the healer shaman you can't see the

47

00:02:19,290 --> 00:02:16,520

client very well it's kind of washed out

48

00:02:22,550 --> 00:02:19,300

but he's doing hands-on healing and this

49

00:02:27,750 --> 00:02:22,560

Circle is all of the support in

50

00:02:30,960 --> 00:02:27,760

traditional healing rituals the people

51
00:02:34,110 --> 00:02:30,970
participate this guy here has his rack

52
00:02:37,740 --> 00:02:34,120
of antennas in place and everything and

53
00:02:40,410 --> 00:02:37,750
he's probably also a healer working with

54
00:02:44,610 --> 00:02:40,420
perhaps life force energy depicted there

55
00:02:45,900 --> 00:02:44,620
by the snake all right so this is just

56
00:02:49,770 --> 00:02:45,910
something very quick

57
00:02:53,760 --> 00:02:49,780
most of these healers describe it as

58
00:03:00,740 --> 00:02:53,770
some energy there's many traditions and

59
00:03:08,850 --> 00:03:00,750
they the common word is something like

60
00:03:11,690 --> 00:03:08,860
mana energy Chi Elan vital arutam in the

61
00:03:16,680 --> 00:03:11,700
tradition of the ecuadorian Schwar

62
00:03:19,650 --> 00:03:16,690
kundalini etc some people just say I

63
00:03:21,600 --> 00:03:19,660

just channeled Christ energy I just

64

00:03:25,830 --> 00:03:21,610

channeled universal life force energy it

65

00:03:29,490 --> 00:03:25,840

works through me so and I've had the

66

00:03:31,520 --> 00:03:29,500

good fortune to meet many healers of

67

00:03:33,570 --> 00:03:31,530

many diverse traditions who have been

68

00:03:35,280 --> 00:03:33,580

interested in getting hooked up and

69

00:03:40,350 --> 00:03:35,290

tested so I'm gonna give you like a

70

00:03:45,199 --> 00:03:40,360

comparative survey these are some Alex

71

00:03:47,870 --> 00:03:45,209

gray paintings which I think depict the

72

00:03:50,340 --> 00:03:47,880

energy healing component of all this

73

00:03:53,310 --> 00:03:50,350

once you start doing this you you sort

74

00:03:55,140 --> 00:03:53,320

of cross over into science spirituality

75

00:03:59,880 --> 00:03:55,150

so I'm hanging out there in the science

76

00:04:03,240 --> 00:03:59,890

spirituality conversation the probably

77

00:04:06,210 --> 00:04:03,250

the first in fact the word therapeutics

78

00:04:09,900 --> 00:04:06,220

comes from this escalate peon tradition

79

00:04:13,350 --> 00:04:09,910

in greece which is really shamanic

80

00:04:17,580 --> 00:04:13,360

medicine in classical greek times now a

81

00:04:20,520 --> 00:04:17,590

little word about EEG the discoverer of

82

00:04:25,590 --> 00:04:20,530

EG was a German psychiatrist Hans Berger

83

00:04:30,810 --> 00:04:25,600

and he was motivated by a sigh incident

84

00:04:32,710 --> 00:04:30,820

he was nearly badly injured by an

85

00:04:39,280 --> 00:04:32,720

accident when he was in the

86

00:04:42,550 --> 00:04:39,290

I mean Canyon almost hmm you know rolled

87

00:04:45,670 --> 00:04:42,560

over him and that same it says describes

88

00:04:49,420 --> 00:04:45,680

a story he received a telegram from his

89

00:04:51,130 --> 00:04:49,430

father I think it says and his sister

90

00:04:53,950 --> 00:04:51,140

had had a premonition that he was going

91

00:04:56,560 --> 00:04:53,960

to have an accident so this event marked

92

00:05:00,220 --> 00:04:56,570

him for his life and he was determined

93

00:05:02,020 --> 00:05:00,230

that some form of communication some

94

00:05:06,790 --> 00:05:02,030

information had reached him

95

00:05:08,740 --> 00:05:06,800

telepathically and this is why he got

96

00:05:10,960 --> 00:05:08,750

into exploring the possibilities of

97

00:05:13,120 --> 00:05:10,970

detecting something in the brain and he

98

00:05:15,400 --> 00:05:13,130

used his son initially as a subject to

99

00:05:18,300 --> 00:05:15,410

do and he described the first alpha

100

00:05:20,650 --> 00:05:18,310

rhythm and didn't publish until 1929

101

00:05:22,150 --> 00:05:20,660

okay these are just some slides to

102

00:05:25,120 --> 00:05:22,160

entertain you because these are

103

00:05:26,590 --> 00:05:25,130

different healing traditions I have had

104

00:05:29,050 --> 00:05:26,600

the opportunity to work with the which

105

00:05:33,100 --> 00:05:29,060

all people the peyote people in Mexico

106

00:05:35,710 --> 00:05:33,110

and also the ayahuasca Amazonian

107

00:05:42,130 --> 00:05:35,720

tradition the Kuna so these are all

108

00:05:43,830 --> 00:05:42,140

depictions of healers doing work all

109

00:05:48,420 --> 00:05:43,840

right

110

00:05:51,640 --> 00:05:48,430

everyone wants to know what is the whole

111

00:05:53,440 --> 00:05:51,650

summary bottom line of this and that's a

112

00:05:56,920 --> 00:05:53,450

difficult question to answer because

113

00:05:58,930 --> 00:05:56,930

I've sampled over 30 healers perhaps

114

00:06:02,560 --> 00:05:58,940

more but the data the good data is from

115

00:06:06,460 --> 00:06:02,570

about 30 and this is these are the

116

00:06:08,790 --> 00:06:06,470

findings the dominant frequency band

117

00:06:10,330 --> 00:06:08,800

that shows significant changes

118

00:06:15,070 --> 00:06:10,340

consistent robust

119

00:06:17,770 --> 00:06:15,080

is alpha now there are healers who don't

120

00:06:19,480 --> 00:06:17,780

produce the classic alpha they live in

121

00:06:22,600 --> 00:06:19,490

theta and I'll show you an example of

122

00:06:24,580 --> 00:06:22,610

one and these are kind of a special

123

00:06:27,880 --> 00:06:24,590

group and then there are the individuals

124

00:06:30,070 --> 00:06:27,890

that don't have very much alpha for

125

00:06:32,920 --> 00:06:30,080

reasons of having had a traumatic brain

126

00:06:35,350 --> 00:06:32,930

injury or just their wired in a

127

00:06:37,270 --> 00:06:35,360

different way and we'll see some data of

128

00:06:40,839 --> 00:06:37,280

some of these individuals and they

129

00:06:42,909 --> 00:06:40,849

usually have Delta beta however one of

130

00:06:46,000 --> 00:06:42,919

them when he was in the healing state

131

00:06:49,900 --> 00:06:46,010

brought up his alpha and you'll see that

132

00:06:53,530 --> 00:06:49,910

okay so we start with this is a medicine

133

00:06:57,970 --> 00:06:53,540

man apache friend of mine that I had an

134

00:06:59,770 --> 00:06:57,980

opportunity to work with and this was a

135

00:07:02,830 --> 00:06:59,780

PowerPoint that we threw together for

136

00:07:05,410 --> 00:07:02,840

him but what it shows is you do a

137

00:07:08,380 --> 00:07:05,420

baseline you do about a 10-minute eyes

138

00:07:11,200 --> 00:07:08,390

close resting baseline recording and

139

00:07:14,430 --> 00:07:11,210

then you ask the healer to do their

140

00:07:17,470 --> 00:07:14,440

thing now they have to be able to remain

141

00:07:21,220 --> 00:07:17,480

motionless relatively so you won't

142

00:07:24,610 --> 00:07:21,230

record movement artifacts so a lot of it

143

00:07:26,530 --> 00:07:24,620

is their ability to go into that state

144

00:07:27,610 --> 00:07:26,540

and imagine that they're doing all the

145

00:07:29,920 --> 00:07:27,620

things that they do when they're healing

146

00:07:32,860 --> 00:07:29,930

because you run into healers that say

147

00:07:35,470 --> 00:07:32,870

well I only work by walking around my

148

00:07:37,960 --> 00:07:35,480

client and waving my hands and I need to

149

00:07:40,120 --> 00:07:37,970

have all of this activity however most

150

00:07:43,780 --> 00:07:40,130

of them you can talk them into just

151
00:07:47,140 --> 00:07:43,790
sitting still and imagining it so this

152
00:07:49,210 --> 00:07:47,150
is a case where this man doesn't have

153
00:07:54,340 --> 00:07:49,220
very much alpha in fact very unusual

154
00:07:57,490 --> 00:07:54,350
alpha which has a focus frontal left

155
00:07:59,680 --> 00:07:57,500
frontal the traditional common normal

156
00:08:03,310 --> 00:07:59,690
alpha is parietal occipital back here

157
00:08:08,590 --> 00:08:03,320
however he did shift his alpha central

158
00:08:10,330 --> 00:08:08,600
it increased by about 67% and all of

159
00:08:13,720 --> 00:08:10,340
these are called connectivity maps and

160
00:08:16,450 --> 00:08:13,730
you can see these are coherence is is a

161
00:08:18,850 --> 00:08:16,460
measure of synchrony between different

162
00:08:22,480 --> 00:08:18,860
sites all the possible combinations of

163
00:08:24,640 --> 00:08:22,490

paired sites so his brain is going into

164

00:08:27,430 --> 00:08:24,650

different states that's the proof right

165

00:08:28,300 --> 00:08:27,440

here from these maps this one shows a

166

00:08:32,980 --> 00:08:28,310

similar pattern

167

00:08:36,280 --> 00:08:32,990

it's an asymmetry now the client that he

168

00:08:39,190 --> 00:08:36,290

worked with had had some head injury

169

00:08:41,080 --> 00:08:39,200

issues and in fact was a woman that I

170

00:08:43,420 --> 00:08:41,090

mapped several times and every time we

171

00:08:46,930 --> 00:08:43,430

would get the same kind of a map so her

172

00:08:49,120 --> 00:08:46,940

eg signature was quite reliable and so

173

00:08:52,720 --> 00:08:49,130

he shifted it in particular these

174

00:08:54,550 --> 00:08:52,730

coherence lines these are z-scores this

175

00:08:57,730 --> 00:08:54,560

is reference to a database this is a

176
00:08:58,590 --> 00:08:57,740
clinical eg suite called neuro guide so

177
00:09:04,199 --> 00:08:58,600
this

178
00:09:07,590 --> 00:09:04,209
is a measure of conduction velocity in

179
00:09:11,400 --> 00:09:07,600
the brain so there's the thick lines are

180
00:09:13,850 --> 00:09:11,410
the +3 or more standard deviation

181
00:09:16,439 --> 00:09:13,860
z-scores and so these shifted as well

182
00:09:18,030 --> 00:09:16,449
she did not show an increase in alpha

183
00:09:21,530 --> 00:09:18,040
she didn't have very much alpha to begin

184
00:09:24,269 --> 00:09:21,540
with that meant that level their 12

185
00:09:28,650 --> 00:09:24,279
micro volts square is very much on the

186
00:09:33,660 --> 00:09:28,660
low side now let's get into some data

187
00:09:38,759 --> 00:09:33,670
here this is me I decided it was high

188
00:09:41,819 --> 00:09:38,769

time for my EEG to attempt to do a Reiki

189

00:09:44,579 --> 00:09:41,829

healing to see if I could also increase

190

00:09:48,600 --> 00:09:44,589

my alpha power and indeed I was able to

191

00:09:51,590 --> 00:09:48,610

do that so this is what this gives you

192

00:09:55,259 --> 00:09:51,600

is a topographic map with the peak

193

00:09:57,449 --> 00:09:55,269

values shown by the scales here so this

194

00:09:59,999 --> 00:09:57,459

is like reading a weather map ok so this

195

00:10:03,449 --> 00:10:00,009

would be now Denver and this would be

196

00:10:06,720 --> 00:10:03,459

Nova Scotian or something and so my

197

00:10:09,780 --> 00:10:06,730

alpha is highest at P Z which is the

198

00:10:14,850 --> 00:10:09,790

midline parietal and I increased it by

199

00:10:16,470 --> 00:10:14,860

approximately 49% so more experienced

200

00:10:21,420 --> 00:10:16,480

Reiki healers can increase it even

201
00:10:25,110 --> 00:10:21,430
further these are some power frequency

202
00:10:29,699 --> 00:10:25,120
spectra these are FFTs that you compute

203
00:10:31,699 --> 00:10:29,709
from the raw EEG and so this is a quick

204
00:10:34,290 --> 00:10:31,709
convenient way to see changes in

205
00:10:36,809 --> 00:10:34,300
frequencies and power and this is an

206
00:10:40,170 --> 00:10:36,819
example from another Reiki healer notice

207
00:10:43,939 --> 00:10:40,180
the scale here is 215 that's the highest

208
00:10:47,639 --> 00:10:43,949
peak it's an occipital sight and now

209
00:10:49,829 --> 00:10:47,649
look at the scale under Reiki and so

210
00:10:52,230 --> 00:10:49,839
again these are the topo maps derived

211
00:10:57,090 --> 00:10:52,240
from this data they also show the

212
00:10:59,189 --> 00:10:57,100
increased values so this is the most

213
00:11:01,620 --> 00:10:59,199

consistent robust effect that I see

214

00:11:05,460 --> 00:11:01,630

across many healing modalities and we'll

215

00:11:09,059 --> 00:11:05,470

see examples of that okay here's another

216

00:11:12,300 --> 00:11:09,069

one now in this case the client is the

217

00:11:15,030 --> 00:11:12,310

one recorded with the EEG so I

218

00:11:18,060 --> 00:11:15,040

most of the tests have been recording

219

00:11:20,940 --> 00:11:18,070

from the healer but I have now a sizable

220

00:11:23,690 --> 00:11:20,950

body of data recording from the client

221

00:11:26,580 --> 00:11:23,700

receiving the healing I have not done

222

00:11:30,930 --> 00:11:26,590

simultaneous paired recordings of client

223

00:11:32,850 --> 00:11:30,940

and healer that's gonna be next but this

224

00:11:34,860 --> 00:11:32,860

was surprising the clients that are

225

00:11:38,160 --> 00:11:34,870

receiving a healing also show a big

226

00:11:41,250 --> 00:11:38,170

boost in alpha power and in this case

227

00:11:43,980 --> 00:11:41,260

this was a very powerful healer who

228

00:11:47,550 --> 00:11:43,990

worked on a woman and brought up her

229

00:11:50,820 --> 00:11:47,560

alpha so you can see that it increased

230

00:11:54,510 --> 00:11:50,830

by approximately 46% these are the

231

00:11:58,470 --> 00:11:54,520

before and during I call it the healing

232

00:12:03,300 --> 00:11:58,480

state so in in all of these studies I'm

233

00:12:06,930 --> 00:12:03,310

really interested in defining a brain

234

00:12:10,290 --> 00:12:06,940

state a change in a brain state that is

235

00:12:15,050 --> 00:12:10,300

occurring during the healing state

236

00:12:19,640 --> 00:12:15,060

during the actual practice of the

237

00:12:22,260 --> 00:12:19,650

session I'm not concerned with the

238

00:12:24,300 --> 00:12:22,270

effects of the healing the outcomes

239

00:12:26,100 --> 00:12:24,310

whether you know they healed an illness

240

00:12:30,420 --> 00:12:26,110

or disease that's a whole other study

241

00:12:33,830 --> 00:12:30,430

that needs to be addressed later this is

242

00:12:37,170 --> 00:12:33,840

from recently from a Chinese woman who

243

00:12:39,570 --> 00:12:37,180

practices Qi Gong and some other

244

00:12:44,190 --> 00:12:39,580

techniques and she wanted to be hooked

245

00:12:49,290 --> 00:12:44,200

up and we got a nice 48% increase in her

246

00:12:52,320 --> 00:12:49,300

alpha power so she very knew very little

247

00:12:54,570 --> 00:12:52,330

of Reiki or Jouret or pranic healing or

248

00:12:57,030 --> 00:12:54,580

any of those other modalities this is

249

00:13:00,360 --> 00:12:57,040

the theta healer that I worked with a

250

00:13:04,430 --> 00:13:00,370

woman in Texas who is a well-known

251
00:13:07,260 --> 00:13:04,440
healer in the area you can see that she

252
00:13:09,500 --> 00:13:07,270
does not have a normal alpha peak in

253
00:13:13,230 --> 00:13:09,510
fact her principal frequency is around

254
00:13:16,470 --> 00:13:13,240
6.5 right there she has a prominent peak

255
00:13:19,650 --> 00:13:16,480
and then she has a beta a low beta peak

256
00:13:22,550 --> 00:13:19,660
which is like a harmonic here at 13

257
00:13:32,000 --> 00:13:25,360
this is one of the sessions that we did

258
00:13:35,210 --> 00:13:32,010
now she is well I should mention this

259
00:13:37,700 --> 00:13:35,220
that theta healers typically have very

260
00:13:38,390 --> 00:13:37,710
high sensitivity to reading the their

261
00:13:43,120 --> 00:13:38,400
empaths

262
00:13:47,210 --> 00:13:43,130
they have access to their subconscious

263
00:13:49,760 --> 00:13:47,220

they often live in a sort of a semi

264

00:13:51,470 --> 00:13:49,770

translate in her case she's all the time

265

00:13:57,800 --> 00:13:51,480

she's communicating with angelic guides

266

00:13:59,630 --> 00:13:57,810

and you know she's a character so this

267

00:14:03,260 --> 00:13:59,640

is her brain and now this is the effect

268

00:14:05,990 --> 00:14:03,270

of her healing a client and I had never

269

00:14:08,480 --> 00:14:06,000

seen anything like this his alpha power

270

00:14:12,350 --> 00:14:08,490

was increased almost two hundred fifty

271

00:14:14,780 --> 00:14:12,360

percent at Oh - that's occipital right

272

00:14:17,150 --> 00:14:14,790

on this side and this is called a

273

00:14:19,910 --> 00:14:17,160

difference map this is the topo map

274

00:14:22,820 --> 00:14:19,920

derived from this data and what you do

275

00:14:27,670 --> 00:14:22,830

here is you subtract the baseline from

276

00:14:30,650 --> 00:14:27,680

the treatment and the only positive

277

00:14:32,150 --> 00:14:30,660

colors show up in the Alpha indicating

278

00:14:34,580 --> 00:14:32,160

that this is where the big change

279

00:14:37,190 --> 00:14:34,590

happened it's a very significant change

280

00:14:40,450 --> 00:14:37,200

so that's another quite graphic way to

281

00:14:42,770 --> 00:14:40,460

show that changes in the different

282

00:14:45,530 --> 00:14:42,780

frequency bands I had an opportunity

283

00:14:48,110 --> 00:14:45,540

years ago to work with Richard Bartlett

284

00:14:50,570 --> 00:14:48,120

the matrix energetics guy this is when

285

00:14:54,410 --> 00:14:50,580

he had long hair and he was living near

286

00:14:58,100 --> 00:14:54,420

Seattle and wanted to be tested so

287

00:15:01,520 --> 00:14:58,110

they're at the bottom right he's sending

288

00:15:04,280 --> 00:15:01,530

his matrix energetic healing to his

289

00:15:07,430 --> 00:15:04,290

daughter justice I believe is her name

290

00:15:13,270 --> 00:15:07,440

and you know Richard is a very playful

291

00:15:17,570 --> 00:15:13,280

guy and quite in a class of his own and

292

00:15:21,820 --> 00:15:17,580

so what was interesting was he was able

293

00:15:25,160 --> 00:15:21,830

to raise the receiver the clients alpha

294

00:15:28,360 --> 00:15:25,170

this is the before you see there's

295

00:15:31,940 --> 00:15:28,370

here's the ten Hertz there's very few

296

00:15:35,230 --> 00:15:31,950

scattered Peaks you know and so you

297

00:15:38,440 --> 00:15:35,240

average this is 300

298

00:15:42,130 --> 00:15:38,450

a pox each epoch is about eight seconds

299

00:15:44,970 --> 00:15:42,140

so and then when she's receiving the

300

00:15:49,030 --> 00:15:44,980

healing there is now beginning to show a

301
00:15:52,329 --> 00:15:49,040
peak at ten the red bar is the Alpha bar

302
00:15:53,650 --> 00:15:52,339
this is lexico or software now I work

303
00:15:55,990 --> 00:15:53,660
with the different system it's our

304
00:15:57,250 --> 00:15:56,000
amplifiers but these are compressed

305
00:15:59,470 --> 00:15:57,260
spectral arrays and they show very

306
00:16:02,199 --> 00:15:59,480
nicely and you can just get the numbers

307
00:16:05,260 --> 00:16:02,209
right off here average power peak to

308
00:16:07,570 --> 00:16:05,270
peak now this is Richard Bartlett's

309
00:16:10,480 --> 00:16:07,580
brain when he's doing his energy and

310
00:16:13,500 --> 00:16:10,490
energy matrix healing he doesn't have

311
00:16:18,100 --> 00:16:13,510
normal alpha as you can see very very

312
00:16:20,470 --> 00:16:18,110
reduced amplitude not at some sites

313
00:16:22,150 --> 00:16:20,480

these are frontal sites so I didn't show

314

00:16:24,670 --> 00:16:22,160

his occipital sites data they would

315

00:16:26,560 --> 00:16:24,680

probably be more out for there but this

316

00:16:31,269 --> 00:16:26,570

is what I was able to capture he

317

00:16:35,440 --> 00:16:31,279

generates bursts of gamma so this was a

318

00:16:37,780 --> 00:16:35,450

clear demonstration he intuited that he

319

00:16:39,490 --> 00:16:37,790

was gonna go there he said to me let's

320

00:16:43,269 --> 00:16:39,500

go for gamma because that's where I

321

00:16:44,889 --> 00:16:43,279

think I do my work and indeed and I have

322

00:16:47,110 --> 00:16:44,899

not been able to replicate that with

323

00:16:49,930 --> 00:16:47,120

other healers who claim that they also

324

00:16:51,940 --> 00:16:49,940

work in gamma frequencies now this is

325

00:16:55,000 --> 00:16:51,950

interesting data this is from a Swami an

326
00:16:56,860 --> 00:16:55,010
Indian Swami Nithyananda that I had the

327
00:16:59,470 --> 00:16:56,870
opportunity to work with and he told me

328
00:17:02,530 --> 00:16:59,480
that he's always meditating so his

329
00:17:05,319 --> 00:17:02,540
baseline and his meditation maps look

330
00:17:08,140 --> 00:17:05,329
almost identical okay

331
00:17:11,530 --> 00:17:08,150
these are FFTs and these are the sites

332
00:17:12,939 --> 00:17:11,540
the 19 channels of the 10:20 system the

333
00:17:16,929 --> 00:17:12,949
only difference is a little bit more

334
00:17:19,630 --> 00:17:16,939
beta shown here this color in the low

335
00:17:22,540 --> 00:17:19,640
beta around the 14 Hertz or so this

336
00:17:25,540 --> 00:17:22,550
little green peak alright well he went

337
00:17:28,240 --> 00:17:25,550
into a Samadhi State at that same

338
00:17:31,780 --> 00:17:28,250

session okay and the only difference

339

00:17:34,690 --> 00:17:31,790

there is that he increases his beta okay

340

00:17:37,560 --> 00:17:34,700

so quite remarkable you see the little

341

00:17:42,640 --> 00:17:37,570

green peak now when he's doing healing

342

00:17:46,570 --> 00:17:42,650

his alpha comes up okay so this is

343

00:17:48,549 --> 00:17:46,580

another indication that even a Swami

344

00:17:50,590 --> 00:17:48,559

like that works in alpha these are the

345

00:17:53,499 --> 00:17:50,600

shamans and I'll just rush through this

346

00:17:58,210 --> 00:17:53,509

very quickly Peruvian shaman here's the

347

00:18:00,759 --> 00:17:58,220

Alpha increase in the client this is

348

00:18:02,950 --> 00:18:00,769

another shaman a woman from Oaxaca the

349

00:18:06,190 --> 00:18:02,960

Mazatec tradition she does something

350

00:18:11,139 --> 00:18:06,200

that she calls a singing healing and her

351

00:18:13,029 --> 00:18:11,149

alpha went way up this is somebody I

352

00:18:15,999 --> 00:18:13,039

very recently did who does something

353

00:18:17,649 --> 00:18:16,009

called holographic visualization where

354

00:18:19,299 --> 00:18:17,659

she's actually working on the hologram

355

00:18:21,430 --> 00:18:19,309

of the body that she's repairing and

356

00:18:24,909 --> 00:18:21,440

she's oh she does intense visualization

357

00:18:28,090 --> 00:18:24,919

her alpha went up this is a deeksha

358

00:18:30,999 --> 00:18:28,100

healer and so the client receiving the

359

00:18:33,989 --> 00:18:31,009

healing big increase in alpha same thing

360

00:18:36,609 --> 00:18:33,999

difference maps showing the Alpha and

361

00:18:40,899 --> 00:18:36,619

now this is a Buddhist monk that I

362

00:18:43,810 --> 00:18:40,909

recorded also in Texas who could produce

363

00:18:45,960 --> 00:18:43,820

alpha when he was doing a very specific

364

00:18:49,989 --> 00:18:45,970

type of meditation that involved a

365

00:18:51,970 --> 00:18:49,999

visualization task alright his alpha

366

00:18:54,340 --> 00:18:51,980

changed appreciably doing visualization

367

00:18:57,460 --> 00:18:54,350

you can see the peak is off the charts

368

00:19:02,590 --> 00:18:57,470

here okay these are just some statistics

369

00:19:07,779 --> 00:19:02,600

I have this was the early one an N of 20

370

00:19:10,690 --> 00:19:07,789

analyzed baseline average power values

371

00:19:12,399 --> 00:19:10,700

are increased consistently the numbers

372

00:19:16,090 --> 00:19:12,409

are very significant these are

373

00:19:18,389 --> 00:19:16,100

correlated samples you're looking at a

374

00:19:23,259 --> 00:19:18,399

healer as his own self control

375

00:19:27,279 --> 00:19:23,269

this is values for the clients receiving

376

00:19:28,840 --> 00:19:27,289

the healer I have an N of nine and also

377

00:19:33,730 --> 00:19:28,850

very significant increases in alpha

378

00:19:39,480 --> 00:19:33,740

power so in conclusion I think the most

379

00:19:42,070 --> 00:19:39,490

important things here are oh pardon me

380

00:19:45,879 --> 00:19:42,080

what does this really mean increased

381

00:19:47,769 --> 00:19:45,889

power is is a result of increased

382

00:19:50,049 --> 00:19:47,779

synchrony in increased numbers of

383

00:19:53,169 --> 00:19:50,059

neurons communicating and firing

384

00:19:56,460 --> 00:19:53,179

together so this means that more areas

385

00:19:59,259 --> 00:19:56,470

of the brain are recruited and are

386

00:20:01,530 --> 00:19:59,269

linking up and firing synchronously

387

00:20:05,080 --> 00:20:01,540

often you see a lot of phase

388

00:20:08,020 --> 00:20:05,090

coherence during the alpha increase in

389

00:20:09,850 --> 00:20:08,030

in power and how do they get there well

390

00:20:12,669 --> 00:20:09,860

most of them say they just let go and

391

00:20:15,220 --> 00:20:12,679

they get out of the way so that coupled

392

00:20:17,410 --> 00:20:15,230

with visualization would get you into an

393

00:20:20,440 --> 00:20:17,420

alpha state and then I've done some

394

00:20:22,810 --> 00:20:20,450

distant healing a woman from Seattle

395

00:20:25,570 --> 00:20:22,820

sending healing to a client in

396

00:20:27,970 --> 00:20:25,580

California we got an alpha increase this

397

00:20:29,910 --> 00:20:27,980

is my most recent data so it's very

398

00:20:32,500 --> 00:20:29,920

exciting because I may be able to

399

00:20:35,830 --> 00:20:32,510

increase that sample size and show that

400

00:20:38,660 --> 00:20:35,840

this is a really non-local effect so

401
00:20:46,590 --> 00:20:38,670
I'll leave you with that and I thank you

402
00:20:58,830 --> 00:20:48,730
turn that on here we go that much better

403
00:21:01,990 --> 00:20:58,840
all right if you have any questions your

404
00:21:05,290 --> 00:21:02,000
your coherence maps were those just

405
00:21:06,790 --> 00:21:05,300
alpha coherence Maps yes okay right do

406
00:21:09,730 --> 00:21:06,800
you think if you did say to cohere have

407
00:21:11,470 --> 00:21:09,740
you done that there's a lot of coherence

408
00:21:14,110 --> 00:21:11,480
data that I haven't analyzed it because

409
00:21:18,520 --> 00:21:14,120
it's quite complex to analyze coherence

410
00:21:20,680 --> 00:21:18,530
and you don't see anything that looks

411
00:21:23,410 --> 00:21:20,690
consistent from trial to trial you know

412
00:21:25,720 --> 00:21:23,420
I mean when you look at an EEG you know

413
00:21:28,480 --> 00:21:25,730

the complexity of analyzing an EEG and

414

00:21:31,060 --> 00:21:28,490

then when you have many and you're

415

00:21:34,330 --> 00:21:31,070

looking for something that you can say

416

00:21:37,630 --> 00:21:34,340

this change is systematically it's a big

417

00:21:38,799 --> 00:21:37,640

task so that's why I focused on the

418

00:21:40,750 --> 00:21:38,809

Alpha because that was the most

419

00:21:43,930 --> 00:21:40,760

repeatable reliable consistent effect

420

00:21:45,669 --> 00:21:43,940

and it's a big effect I like something

421

00:21:49,150 --> 00:21:45,679

greater than 30% I'm an

422

00:21:50,470 --> 00:21:49,160

electrophysiologist and I I don't just

423

00:21:51,820 --> 00:21:50,480

want to rely on statistics to

424

00:21:54,250 --> 00:21:51,830

demonstrate an effect I want to actually

425

00:21:58,090 --> 00:21:54,260

see it in the raw data you know yeah

426

00:22:02,169 --> 00:21:58,100

sure but I thank you for that I will

427

00:22:04,570 --> 00:22:02,179

look at that I I'm a simian hein

428

00:22:06,130 --> 00:22:04,580

can you comment on this machine that

429

00:22:10,000 --> 00:22:06,140

I've read about recently that's being

430

00:22:12,580 --> 00:22:10,010

used by DARPA to Train snipers to do

431

00:22:14,620 --> 00:22:12,590

their work faster and better apparently

432

00:22:15,250 --> 00:22:14,630

they can train to become a sniper twice

433

00:22:17,080 --> 00:22:15,260

as fast

434

00:22:19,030 --> 00:22:17,090

when they're in an alpha state but it's

435

00:22:20,230 --> 00:22:19,040

induced by a machine and I'm wondering

436

00:22:21,250 --> 00:22:20,240

what the difference is between that and

437

00:22:24,940 --> 00:22:21,260

a self-induced

438

00:22:27,400 --> 00:22:24,950

alpha state I really can't comment

439

00:22:30,370 --> 00:22:27,410

because I don't know about this but I

440

00:22:33,700 --> 00:22:30,380

think it's fascinating yeah I do narrow

441

00:22:36,610 --> 00:22:33,710

feedback so you can train to boost your

442

00:22:40,690 --> 00:22:36,620

alpha and get into alpha states and

443

00:22:42,880 --> 00:22:40,700

there's a fellow my name of Jim Hart who

444

00:22:44,950 --> 00:22:42,890

I think now lives in Canada who used to

445

00:22:49,990 --> 00:22:44,960

do alpha training and he would get

446

00:22:52,630 --> 00:22:50,000

people for a week and you know put him

447

00:22:54,700 --> 00:22:52,640

inside boots and work with alpha

448

00:22:56,890 --> 00:22:54,710

training and you know at the end of the

449

00:22:58,960 --> 00:22:56,900

week they they were talking to God

450

00:23:01,750 --> 00:22:58,970

apparently you know they they would have

451
00:23:07,350 --> 00:23:01,760
very transformative transcendent

452
00:23:10,510 --> 00:23:07,360
experiences so you know the Alpha

453
00:23:13,630 --> 00:23:10,520
frequency it's involved in many many

454
00:23:16,720 --> 00:23:13,640
things there's many the most number of

455
00:23:18,310 --> 00:23:16,730
papers in eg research are probably

456
00:23:21,640 --> 00:23:18,320
concerned with alpha it's been studied

457
00:23:25,830 --> 00:23:21,650
in innumerable ways it's involved also

458
00:23:31,060 --> 00:23:25,840
in cognition memory it's not just an

459
00:23:32,890 --> 00:23:31,070
idling rhythm that is is a measure of

460
00:23:35,370 --> 00:23:32,900
inactivity which is sort of the

461
00:23:38,049 --> 00:23:35,380
conventional view of looking at it so

462
00:23:40,659 --> 00:23:38,059
interestingly I heard a healer many

463
00:23:42,460 --> 00:23:40,669

years ago before I did any of this who

464

00:23:44,980 --> 00:23:42,470

was a chiropractor who would work on a

465

00:23:49,450 --> 00:23:44,990

group of people and he said oh it's all

466

00:23:52,690 --> 00:23:49,460

it's all happening in the alpha band you

467

00:23:55,570 --> 00:23:52,700

know and I I thought how does he know

468

00:24:01,420 --> 00:23:55,580

that you know has he tested that and so