



1
00:00:08,580 --> 00:00:17,190

[Music]

2
00:00:25,479 --> 00:00:20,679

welcome to shattered reality with their

3
00:00:28,240 --> 00:00:25,489

hosts Kate Valentine and furs prepare to

4
00:00:32,290 --> 00:00:28,250

have your paradigms shifted and your

5
00:00:37,870 --> 00:00:32,300

truths questioned and now shattered

6
00:00:40,000 --> 00:00:37,880

reality another day another shattered

7
00:00:41,079 --> 00:00:40,010

reality and I know you're going to want

8
00:00:44,590 --> 00:00:41,089

to slate it

9
00:00:47,169 --> 00:00:44,600

yes I always love to slate that's my old

10
00:00:51,220 --> 00:00:47,179

commercial training from doing

11
00:00:55,770 --> 00:00:51,230

commercials and movies and TV stuff so

12
00:01:00,569 --> 00:00:55,780

what we have here today is December 5th

13
00:01:05,560 --> 00:01:00,579

2017 and this is believe it or not our

14

00:01:07,420 --> 00:01:05,570

59th show and we have a wonderful guest

15

00:01:10,480 --> 00:01:07,430

with us today

16

00:01:16,120 --> 00:01:10,490

somebody who has written a number of

17

00:01:20,190 --> 00:01:16,130

books who is a doctor of philosophy from

18

00:01:23,710 --> 00:01:20,200

Latrobe University she has a

19

00:01:29,290 --> 00:01:23,720

wide-ranging series of interests

20

00:01:33,490 --> 00:01:29,300

including spiders and other natural

21

00:01:37,600 --> 00:01:33,500

phenomena she's even written a book

22

00:01:40,630 --> 00:01:37,610

about a fictional book but we're having

23

00:01:45,940 --> 00:01:40,640

her on today to talk about her book

24

00:01:50,740 --> 00:01:45,950

primarily the memory code now I'm going

25

00:01:56,460 --> 00:01:50,750

to just summarize in one sentence before

26

00:02:01,390 --> 00:01:56,470

I introduce her I she speaks to the pre

27

00:02:04,690 --> 00:02:01,400

historic pre literary cultures that are

28

00:02:08,589 --> 00:02:04,700

have existed around the world some of

29

00:02:12,540 --> 00:02:08,599

which still exist and how they memorize

30

00:02:16,839 --> 00:02:12,550

all the information they need to know

31

00:02:19,680 --> 00:02:16,849

through something called song lines and

32

00:02:24,090 --> 00:02:19,690

then they

33

00:02:27,300 --> 00:02:24,100

then as time went by and people started

34

00:02:32,730 --> 00:02:27,310

to settle in one specific place rather

35

00:02:35,750 --> 00:02:32,740

than nomadically wander about these song

36

00:02:39,570 --> 00:02:35,760

lines were somewhat translated into

37

00:02:42,000 --> 00:02:39,580

monuments and personal devices that

38

00:02:45,600 --> 00:02:42,010

allowed them to remember now I'm sure

39

00:02:49,310 --> 00:02:45,610

all of this sounds very confusing but

40

00:02:52,860 --> 00:02:49,320

once we get into speaking to dr. Lynne

41

00:02:56,490 --> 00:02:52,870

Kelley here you will all understand this

42

00:03:00,000 --> 00:02:56,500

much better so if if you will let's

43

00:03:03,810 --> 00:03:00,010

welcome dr. Lynne Kelly welcome to the

44

00:03:07,140 --> 00:03:03,820

show dr. Kelley thanks Kate her delight

45

00:03:09,540 --> 00:03:07,150

it to be here yeah so how did you start

46

00:03:12,360 --> 00:03:09,550

this study it's sort of an obscure one

47

00:03:14,730 --> 00:03:12,370

but was it because you are in Australia

48

00:03:18,240 --> 00:03:14,740

because because they have original

49

00:03:21,330 --> 00:03:18,250

culture that certainly made a huge

50

00:03:24,030 --> 00:03:21,340

difference sort of kept stumbling onto

51
00:03:26,310 --> 00:03:24,040
things but I just want to explain about

52
00:03:30,540 --> 00:03:26,320
the Aboriginal culture are either

53
00:03:34,250 --> 00:03:30,550
settled or mobile not nomadic nomadic

54
00:03:38,280 --> 00:03:34,260
cultures are those that wander sort of

55
00:03:41,070 --> 00:03:38,290
randomly in some ways where has all

56
00:03:44,449 --> 00:03:41,080
cultures are ones that will move between

57
00:03:46,860 --> 00:03:44,459
a number of different locations over the

58
00:03:48,630 --> 00:03:46,870
celebrations and so on but they know

59
00:03:51,229 --> 00:03:48,640
perfectly well where they're going

60
00:03:54,870 --> 00:03:51,239
they're well worn tracks and those

61
00:03:56,910 --> 00:03:54,880
tracks are recorded in memory they know

62
00:03:59,580 --> 00:03:56,920
them very well mentally as well as

63
00:04:01,290 --> 00:03:59,590

physically and in Australia that song

64

00:04:03,960 --> 00:04:01,300

lines in America they're Native

65

00:04:06,540 --> 00:04:03,970

pilgrimage trails in the Pacific their

66

00:04:09,090 --> 00:04:06,550

ceremonial roads so this is the

67

00:04:11,400 --> 00:04:09,100

well-known phenomenal globally but

68

00:04:15,390 --> 00:04:11,410

Australian Aboriginal cultures of which

69

00:04:19,500 --> 00:04:15,400

there's about 300 at least are the best

70

00:04:22,350 --> 00:04:19,510

example we can get I have to tell you

71

00:04:27,210 --> 00:04:22,360

something I have to make a confession if

72

00:04:30,870 --> 00:04:27,220

you will the confession is this I have a

73

00:04:32,660 --> 00:04:30,880

little bit of a packrat I have much more

74

00:04:36,500 --> 00:04:32,670

stuff than I ought to have

75

00:04:40,000 --> 00:04:36,510

according to today's idea of living

76

00:04:43,550 --> 00:04:40,010

minimally I wouldn't say I'm a

77

00:04:46,790 --> 00:04:43,560

psychiatric case about it but what I

78

00:04:49,580 --> 00:04:46,800

found is that I keep some of the things

79

00:04:53,390 --> 00:04:49,590

that I keep because when I pick the the

80

00:04:56,660 --> 00:04:53,400

object up it reminds me of something in

81

00:04:59,990 --> 00:04:56,670

my life that I might never think about

82

00:05:02,450 --> 00:05:00,000

again if I didn't have the object and so

83

00:05:05,270 --> 00:05:02,460

the object even though it might not be

84

00:05:08,090 --> 00:05:05,280

worth anything it could be lets say a

85

00:05:12,440 --> 00:05:08,100

playbill from a play I've attended on

86

00:05:15,290 --> 00:05:12,450

Broadway or an empty perfume bottle that

87

00:05:18,680 --> 00:05:15,300

was given to me by an ex suitor when I

88

00:05:21,680 --> 00:05:18,690

was a teenager and I picked these things

89

00:05:26,630 --> 00:05:21,690

up and this very rich context comes into

90

00:05:28,760 --> 00:05:26,640

mind is this something I felt like it

91

00:05:30,620 --> 00:05:28,770

was related to what it is that you're

92

00:05:33,860 --> 00:05:30,630

speaking of and it's part of the reason

93

00:05:35,840 --> 00:05:33,870

that made me absolutely certain that I

94

00:05:39,320 --> 00:05:35,850

wanted to have you here on shadowed

95

00:05:41,300 --> 00:05:39,330

reality thank you that's really

96

00:05:46,630 --> 00:05:41,310

interesting because there's a difference

97

00:05:49,310 --> 00:05:46,640

between reminders and memory devices so

98

00:05:52,490 --> 00:05:49,320

reminders are a form of that in that

99

00:05:55,310 --> 00:05:52,500

they are making your memory go back but

100

00:05:59,360 --> 00:05:55,320

indigenous cultures can't carry lots of

101
00:06:03,170 --> 00:05:59,370
stuff and so they build formal methods

102
00:06:06,530 --> 00:06:03,180
into what they do carry if we go to the

103
00:06:08,810 --> 00:06:06,540
absolute minimal stage of one of the

104
00:06:11,030 --> 00:06:08,820
northern Australian central desert

105
00:06:13,940 --> 00:06:11,040
northern Australia Aboriginal cultures

106
00:06:17,050 --> 00:06:13,950
they will carry with them what's called

107
00:06:20,300 --> 00:06:17,060
a Coulomb on and this is a carved wooden

108
00:06:23,300 --> 00:06:20,310
dish that is used to carry food it's

109
00:06:25,820 --> 00:06:23,310
sort of curved carried food carry babies

110
00:06:28,790 --> 00:06:25,830
carry just about anything but on the

111
00:06:31,340 --> 00:06:28,800
reverse of it there will be designs and

112
00:06:34,070 --> 00:06:31,350
those designs act as the sort of memory

113
00:06:36,890 --> 00:06:34,080

device you're talking about but every

114

00:06:39,290 --> 00:06:36,900

single aspect of it as they touch them

115

00:06:42,530 --> 00:06:39,300

will remind them of a song or a story

116

00:06:44,030 --> 00:06:42,540

that encodes the whole culture so there

117

00:06:46,070 --> 00:06:44,040

will be the sort of things you're

118

00:06:48,279 --> 00:06:46,080

talking about but also

119

00:06:50,990 --> 00:06:48,289

all the knowledge of the culture and

120

00:06:52,760 --> 00:06:51,000

that's about all they'll carry with them

121

00:06:57,379 --> 00:06:52,770

apart from digging sticks and a few

122

00:07:00,909 --> 00:06:57,389

other odds and ends and children so they

123

00:07:04,189 --> 00:07:00,919

have to go absolute minimalist and

124

00:07:07,040 --> 00:07:04,199

maintain this encyclopedia based on a

125

00:07:08,929 --> 00:07:07,050

few devices they'll also use artwork and

126

00:07:12,020 --> 00:07:08,939

other devices as well

127

00:07:14,600 --> 00:07:12,030

and you have a photo of this Kulemin in

128

00:07:17,240 --> 00:07:14,610

your book it's I think it's two photos

129

00:07:20,959 --> 00:07:17,250

of different aspects of the same cool

130

00:07:24,350 --> 00:07:20,969

amount yes that's right and other

131

00:07:27,589 --> 00:07:24,360

cultures have other versions but all of

132

00:07:31,129 --> 00:07:27,599

them use some kind of portable devices

133

00:07:34,249 --> 00:07:31,139

which allow them to memorize and sing

134

00:07:37,010 --> 00:07:34,259

all the songs that encode vast amounts

135

00:07:41,420 --> 00:07:37,020

of information a lot of it pragmatic and

136

00:07:44,330 --> 00:07:41,430

scientific which is my area of expertise

137

00:07:45,469 --> 00:07:44,340

but of course the spiritual and belief

138

00:07:48,740 --> 00:07:45,479

side of it

139

00:07:51,680 --> 00:07:48,750

- but that's theory in which we work the

140

00:07:53,420 --> 00:07:51,690

most the area I've looked at to

141

00:07:56,119 --> 00:07:53,430

understand the system of the things

142

00:07:58,550 --> 00:07:56,129

where we agree so kangaroo in Australia

143

00:08:01,040 --> 00:07:58,560

goes blank EDD Boinga Dede whether you

144

00:08:02,659 --> 00:08:01,050

encode that information in writing which

145

00:08:03,499 --> 00:08:02,669

is a bit hard because I can't spell

146

00:08:06,950 --> 00:08:03,509

Boyka Dede

147

00:08:09,019 --> 00:08:06,960

but or in terms of the stories and the

148

00:08:15,769 --> 00:08:09,029

dances that tell the behavior of a

149

00:08:19,399 --> 00:08:15,779

kangaroo well so this wall started for

150

00:08:22,159 --> 00:08:19,409

you with these song lines do you want to

151
00:08:29,350 --> 00:08:22,169
tell us what it means actly for our

152
00:08:37,370 --> 00:08:33,529
but it started for me before that I was

153
00:08:40,550 --> 00:08:37,380
looking into behavior one thing I write

154
00:08:42,949 --> 00:08:40,560
about animal behavior and I was looking

155
00:08:45,800 --> 00:08:42,959
at wondering whether writing about

156
00:08:48,680 --> 00:08:45,810
Aboriginal stories or Native American

157
00:08:52,460 --> 00:08:48,690
stories would make me see the behavior

158
00:08:54,710 --> 00:08:52,470
of an animal more more different more

159
00:08:57,260 --> 00:08:54,720
differently more thoroughly which of

160
00:08:58,140 --> 00:08:57,270
course it did but as I started doing

161
00:09:00,660 --> 00:08:58,150
that

162
00:09:03,090 --> 00:09:00,670
I started realizing the vast amount of

163
00:09:05,340 --> 00:09:03,100

information they're actually storing so

164

00:09:08,120 --> 00:09:05,350

the Navajo for example there's one study

165

00:09:10,710 --> 00:09:08,130

that shows that they have recorded the

166

00:09:14,550 --> 00:09:10,720

identification of behavior and habitat

167

00:09:17,010 --> 00:09:14,560

and so on of over 700 insects and that's

168

00:09:19,950 --> 00:09:17,020

just insects adding all the other

169

00:09:21,750 --> 00:09:19,960

animals and you're up to a thousand then

170

00:09:24,450 --> 00:09:21,760

adding the plants and navigation it's

171

00:09:27,120 --> 00:09:24,460

turned out to be this vast amount of

172

00:09:29,460 --> 00:09:27,130

information and I couldn't memorize

173

00:09:32,310 --> 00:09:29,470

anything so I started asking how on

174

00:09:35,100 --> 00:09:32,320

earth do they do this and that led me to

175

00:09:38,520 --> 00:09:35,110

song lines now some lines for Australian

176

00:09:41,940 --> 00:09:38,530

Aboriginal people are basically tracks

177

00:09:44,250 --> 00:09:41,950

through the bush location to location so

178

00:09:48,330 --> 00:09:44,260

that they can navigate where at each

179

00:09:51,990 --> 00:09:48,340

location they will perform a ritual now

180

00:09:54,870 --> 00:09:52,000

ritual technically is just a repeated

181

00:09:56,790 --> 00:09:54,880

event it may have a spiritual domain it

182

00:09:59,550 --> 00:09:56,800

may not but it's repeated because

183

00:10:01,590 --> 00:09:59,560

repetition helps you memorize so to each

184

00:10:03,090 --> 00:10:01,600

location they would sing a song or

185

00:10:05,820 --> 00:10:03,100

perform a dance which might be the

186

00:10:08,700 --> 00:10:05,830

behavior of the kangaroo it might be

187

00:10:10,650 --> 00:10:08,710

about how to nap stone where to find a

188

00:10:14,700 --> 00:10:10,660

waterhole because Australia's

189

00:10:17,220 --> 00:10:14,710

desperately short of water and Sun and

190

00:10:19,830 --> 00:10:17,230

all this information would be stored in

191

00:10:22,020 --> 00:10:19,840

these songs that were performed and

192

00:10:26,340 --> 00:10:22,030

songs more memorable than just words

193

00:10:28,350 --> 00:10:26,350

that's why it's so often sung location

194

00:10:30,720 --> 00:10:28,360

by location right across the landscape

195

00:10:33,450 --> 00:10:30,730

which acts as the sort of memory you

196

00:10:36,090 --> 00:10:33,460

were talking about a reminder to sing

197

00:10:38,400 --> 00:10:36,100

that song and what the song is now we

198

00:10:41,130 --> 00:10:38,410

know from the Y annual people right up

199

00:10:44,670 --> 00:10:41,140

north of Australia that they recorded at

200

00:10:47,070 --> 00:10:44,680

least sick at least 800 kilometers I'm

201
00:10:50,730 --> 00:10:47,080
sorry I can't do that miles but eight

202
00:10:55,530 --> 00:10:50,740
it's a long way 800 kilometers of these

203
00:10:57,900 --> 00:10:55,540
song lines with these songs at every few

204
00:11:01,500 --> 00:10:57,910
meters every hundred meters at the most

205
00:11:05,280 --> 00:11:01,510
right along them wow you talk vast

206
00:11:11,190 --> 00:11:05,290
number of songs but that act there's a

207
00:11:11,940 --> 00:11:11,200
wonderful memory system it's the same as

208
00:11:15,390 --> 00:11:11,950
the ancient

209
00:11:18,450 --> 00:11:15,400
Greeks and Romans used called the method

210
00:11:21,000 --> 00:11:18,460
of loci loc I or the art of memory or

211
00:11:24,060 --> 00:11:21,010
memory palaces but just in a more

212
00:11:26,100 --> 00:11:24,070
complex form but then I was able to show

213
00:11:29,760 --> 00:11:26,110

that Native American pilgrimage trails

214

00:11:32,070 --> 00:11:29,770

work the same the incas sect ways see qu

215

00:11:33,780 --> 00:11:32,080

es I'm not sure the pronunciation

216

00:11:38,040 --> 00:11:33,790

different people tell me different

217

00:11:40,470 --> 00:11:38,050

pronunciations the Pacific ceremonial

218

00:11:44,280 --> 00:11:40,480

ropes so it's a universal method because

219

00:11:46,770 --> 00:11:44,290

that's the way the human brain works and

220

00:11:49,230 --> 00:11:46,780

it's phenomenally powerful very

221

00:11:53,820 --> 00:11:49,240

interesting very interesting for sure I

222

00:11:57,060 --> 00:11:53,830

know that ritual is very important to

223

00:12:00,840 --> 00:11:57,070

train the mind because I work sometimes

224

00:12:04,110 --> 00:12:00,850

with people with intentionality like

225

00:12:07,830 --> 00:12:04,120

intending for their success in some way

226

00:12:10,140 --> 00:12:07,840

intending let's say to get a PhD which

227

00:12:13,770 --> 00:12:10,150

would work in your case you have a PhD

228

00:12:15,750 --> 00:12:13,780

that somebody who wants some attainment

229

00:12:20,040 --> 00:12:15,760

to this moment we're going to just use

230

00:12:23,220 --> 00:12:20,050

PhD and I I sort of instruct them that

231

00:12:26,910 --> 00:12:23,230

they need to create a ritual around it

232

00:12:29,520 --> 00:12:26,920

to focus their intention ality so you

233

00:12:35,880 --> 00:12:29,530

know I'm very familiar with the use of

234

00:12:38,130 --> 00:12:35,890

ritual and absolutely yeah I've got lots

235

00:12:40,920 --> 00:12:38,140

of examples of that because it does

236

00:12:42,810 --> 00:12:40,930

focus you I just trained for the

237

00:12:45,150 --> 00:12:42,820

Australian memory championships where

238

00:12:47,310 --> 00:12:45,160

you memorize shuttle decks of cards and

239

00:12:52,110 --> 00:12:47,320

all these terrible things but you're

240

00:12:56,340 --> 00:12:52,120

getting use memory palaces and I put on

241

00:12:59,460 --> 00:12:56,350

earphones to concentrate I don't know

242

00:13:01,920 --> 00:12:59,470

how much they cut out the world but the

243

00:13:04,350 --> 00:13:01,930

moment I put them on I was that's this

244

00:13:06,210 --> 00:13:04,360

is the task I'm working out before I

245

00:13:10,290 --> 00:13:06,220

ride I always write something in a

246

00:13:12,510 --> 00:13:10,300

journal it start that ritual focuses you

247

00:13:17,850 --> 00:13:12,520

I think that what you're onto is very

248

00:13:24,140 --> 00:13:17,860

important why thank you so we've got the

249

00:13:25,870 --> 00:13:24,150

song lines and then we move from the

250

00:13:29,620 --> 00:13:25,880

aboriginal culture

251
00:13:33,610 --> 00:13:29,630
into the cultures that are beginning to

252
00:13:38,170 --> 00:13:33,620
settle settle down and I believe that

253
00:13:41,530 --> 00:13:38,180
you made your first discovery in regards

254
00:13:46,000 --> 00:13:41,540
to this in in Avebury or Stonehenge

255
00:13:46,810 --> 00:13:46,010
which was it and could you explain right

256
00:13:49,060 --> 00:13:46,820
yes

257
00:13:51,340 --> 00:13:49,070
I was totally immersed in these memory

258
00:13:54,370 --> 00:13:51,350
palaces and memory methods and my

259
00:13:56,380 --> 00:13:54,380
husband just reeked walla fide as just

260
00:13:58,930 --> 00:13:56,390
qualified as an archeologist and he want

261
00:14:00,670 --> 00:13:58,940
to go to Stonehenge in England and so I

262
00:14:03,400 --> 00:14:00,680
trotted along with him having no

263
00:14:06,820 --> 00:14:03,410

knowledge and no interest particularly

264

00:14:10,240 --> 00:14:06,830

in archaeology and there we are on

265

00:14:13,600 --> 00:14:10,250

Salisbury Plain stone circle in front of

266

00:14:16,000 --> 00:14:13,610

us and I thought this is very clever

267

00:14:18,370 --> 00:14:16,010

what they've done is when they need to

268

00:14:21,850 --> 00:14:18,380

settle they need to make these song

269

00:14:24,670 --> 00:14:21,860

lines local they can't afford to lose

270

00:14:28,600 --> 00:14:24,680

those locations and the reminders of the

271

00:14:31,660 --> 00:14:28,610

memory aids to all that information so

272

00:14:33,280 --> 00:14:31,670

what they've done is put up a stone in a

273

00:14:35,080 --> 00:14:33,290

big circle because originally it didn't

274

00:14:37,000 --> 00:14:35,090

have the big stone henge didn't have the

275

00:14:39,520 --> 00:14:37,010

big ones in the middle for the first 500

276

00:14:43,120 --> 00:14:39,530

years it was a stone circle about a

277

00:14:46,030 --> 00:14:43,130

hundred metres across with 56 blue

278

00:14:48,640 --> 00:14:46,040

stones in it that's representing the

279

00:14:50,890 --> 00:14:48,650

annual cycle of the locations and the

280

00:14:53,160 --> 00:14:50,900

songs that was just the idea and I

281

00:14:56,410 --> 00:14:53,170

discovered that nobody had ever

282

00:14:58,900 --> 00:14:56,420

suggested that before and therefore my

283

00:15:00,490 --> 00:14:58,910

original assumption was okay somebody

284

00:15:03,040 --> 00:15:00,500

has and they've shown that it's rubbish

285

00:15:06,280 --> 00:15:03,050

but I couldn't get rid of it there's a

286

00:15:08,620 --> 00:15:06,290

thousand stone circles like that of

287

00:15:10,480 --> 00:15:08,630

various size and that all over Britain

288

00:15:14,080 --> 00:15:10,490

and Western Europe but then if you go to

289

00:15:16,420 --> 00:15:14,090

America you've got timber circles in

290

00:15:18,490 --> 00:15:16,430

Louisiana and Poverty Point they had

291

00:15:21,570 --> 00:15:18,500

timber circles similar dimensions

292

00:15:24,030 --> 00:15:21,580

similar numbers you've got a whole lot

293

00:15:28,240 --> 00:15:24,040

over in Ohio

294

00:15:30,700 --> 00:15:28,250

yes Ohio wonderful stuff and then

295

00:15:32,860 --> 00:15:30,710

there's more in Egypt so you've got this

296

00:15:36,250 --> 00:15:32,870

same pattern everywhere where there's

297

00:15:38,350 --> 00:15:36,260

not contact between the cultures the

298

00:15:39,369 --> 00:15:38,360

common factor is that's the way the

299

00:15:42,309 --> 00:15:39,379

human brain

300

00:15:45,969 --> 00:15:42,319

these memory palaces just work in the

301
00:15:51,460 --> 00:15:45,979
neuroscience of associating memory with

302
00:15:53,889 --> 00:15:51,470
place is very strong and so being part

303
00:15:56,849 --> 00:15:53,899
of the research at the moment but won

304
00:15:59,289 --> 00:15:56,859
the Nobel Prize for medicine 2014

305
00:16:01,509 --> 00:15:59,299
studies on this sort of thing so you've

306
00:16:03,909 --> 00:16:01,519
got the human brain as the common factor

307
00:16:06,909 --> 00:16:03,919
setting up these memory palaces

308
00:16:10,569 --> 00:16:06,919
everywhere so tell us more about memory

309
00:16:13,479 --> 00:16:10,579
palaces so memory palace is just a set

310
00:16:16,059 --> 00:16:13,489
of locations if you'd want to set up one

311
00:16:18,879 --> 00:16:16,069
at home and say you wanted to remember

312
00:16:20,739 --> 00:16:18,889
the presidents the United States which I

313
00:16:22,929 --> 00:16:20,749

can't do except don't know them but

314

00:16:24,689 --> 00:16:22,939

would use that as an example you would

315

00:16:27,729 --> 00:16:24,699

put the first president

316

00:16:29,259 --> 00:16:27,739

imagine him somehow in the location of

317

00:16:31,359 --> 00:16:29,269

the front door

318

00:16:34,210 --> 00:16:31,369

you'd move to the second location and

319

00:16:36,460 --> 00:16:34,220

place the second president there and so

320

00:16:38,439 --> 00:16:36,470

on right through all your presidents so

321

00:16:40,529 --> 00:16:38,449

that as you moved around that memory

322

00:16:43,419 --> 00:16:40,539

palace physically or just in your mind

323

00:16:45,309 --> 00:16:43,429

you would get each of them in order and

324

00:16:47,889 --> 00:16:45,319

the difference between that in a

325

00:16:51,099 --> 00:16:47,899

mnemonic rhyme is that you can add more

326

00:16:53,049 --> 00:16:51,109

and more more data to every one of those

327

00:16:55,179 --> 00:16:53,059

locations and make it more and more

328

00:16:58,689 --> 00:16:55,189

complex and that's what indigenous

329

00:17:00,549 --> 00:16:58,699

cultures do at each location they will

330

00:17:02,529 --> 00:17:00,559

teach the stories that we hear the

331

00:17:05,230 --> 00:17:02,539

children's stories because we're not

332

00:17:06,939 --> 00:17:05,240

initiated and then with initiation they

333

00:17:10,179 --> 00:17:06,949

will add more and more and more

334

00:17:12,429 --> 00:17:10,189

complexity so the concept of a memory

335

00:17:15,159 --> 00:17:12,439

palace is the most powerful memory

336

00:17:17,319 --> 00:17:15,169

method all come all memory champions use

337

00:17:21,579 --> 00:17:17,329

it today in the memory championships in

338

00:17:24,939 --> 00:17:21,589

fact yes no two days ago Alex Mullen an

339

00:17:27,309 --> 00:17:24,949

American just took out the world memory

340

00:17:29,919 --> 00:17:27,319

championship using a memory palace and

341

00:17:34,419 --> 00:17:29,929

memorized one of the events he memorized

342

00:17:37,899 --> 00:17:34,429

a shuffled deck of cards in 15.6 seconds

343

00:17:40,629 --> 00:17:37,909

mylord is astounding and a new world

344

00:17:43,450 --> 00:17:40,639

record I could do it in eight minutes

345

00:17:47,139 --> 00:17:43,460

and I'm pretty pleased with that that's

346

00:17:49,539 --> 00:17:47,149

amazing in itself I will do is create

347

00:17:52,210 --> 00:17:49,549

images and place them in the locations

348

00:17:53,170 --> 00:17:52,220

in a memory palace well I find this

349

00:17:55,450 --> 00:17:53,180

extremely

350

00:18:00,450 --> 00:17:55,460

interesting because I've traveled around

351
00:18:03,760 --> 00:18:00,460
the world going to megalithic places and

352
00:18:07,060 --> 00:18:03,770
quite frankly it never occurred to me

353
00:18:09,460 --> 00:18:07,070
that this was the primary reason for

354
00:18:12,070 --> 00:18:09,470
some of these things have you been to

355
00:18:15,280 --> 00:18:12,080
Newgrange I know you show a picture of

356
00:18:18,010 --> 00:18:15,290
it could you tell us about how you found

357
00:18:22,150 --> 00:18:18,020
Newgrange and and what you thought about

358
00:18:25,240 --> 00:18:22,160
that yes this is the there's a whole lot

359
00:18:29,710 --> 00:18:25,250
more aspects to arguing that these

360
00:18:32,080 --> 00:18:29,720
locations are memory palaces or memories

361
00:18:34,900 --> 00:18:32,090
spaces knowledge spaces because if I

362
00:18:38,200 --> 00:18:34,910
just argued what I've said so far it's

363
00:18:39,940 --> 00:18:38,210

no any complex enough and so what

364

00:18:42,370 --> 00:18:39,950

so there's actually 10 aspects but

365

00:18:44,500 --> 00:18:42,380

another really critical one is that

366

00:18:48,760 --> 00:18:44,510

indigenous cultures use restricted

367

00:18:50,920 --> 00:18:48,770

information yes ASIS stop they they

368

00:18:52,870 --> 00:18:50,930

really important stuff that they can't

369

00:18:55,300 --> 00:18:52,880

get wrong it's held at a very high level

370

00:18:57,730 --> 00:18:55,310

of initiation very secret because that

371

00:19:00,910 --> 00:18:57,740

stops the Chinese whispers effect it

372

00:19:03,220 --> 00:19:00,920

stops corruption of the information by

373

00:19:05,680 --> 00:19:03,230

everybody chattering about it and keeps

374

00:19:07,060 --> 00:19:05,690

it very accurate and we have exempt I

375

00:19:09,190 --> 00:19:07,070

will get back to Newgrange this is

376

00:19:12,790 --> 00:19:09,200

really important than your page okay but

377

00:19:14,110 --> 00:19:12,800

we do have stories in Australia now

378

00:19:15,910 --> 00:19:14,120

research showing that some of the

379

00:19:18,760 --> 00:19:15,920

stories on the landscape changes date

380

00:19:19,420 --> 00:19:18,770

back seven to ten thousand years if not

381

00:19:22,030 --> 00:19:19,430

longer

382

00:19:24,610 --> 00:19:22,040

and that's how robust these methods are

383

00:19:27,970 --> 00:19:24,620

as long as it's kept accurate so

384

00:19:31,750 --> 00:19:27,980

Newgrange and right round the world you

385

00:19:34,540 --> 00:19:31,760

find restricted places so those I'm

386

00:19:37,960 --> 00:19:34,550

saying that what's called tombs and cans

387

00:19:40,660 --> 00:19:37,970

and so on would have included bones

388

00:19:42,370 --> 00:19:40,670

because they don't include many in fact

389

00:19:44,740 --> 00:19:42,380

at Newgrange they have very little

390

00:19:48,550 --> 00:19:44,750

evidence of it but they still call the

391

00:19:50,410 --> 00:19:48,560

tomb of these secret passages which

392

00:19:52,330 --> 00:19:50,420

would have been restricted performance

393

00:19:52,990 --> 00:19:52,340

spaces the acoustics in them are

394

00:19:54,940 --> 00:19:53,000

stunning

395

00:19:57,760 --> 00:19:54,950

there's the artwork that would act as a

396

00:19:59,800 --> 00:19:57,770

memory device but also only those

397

00:20:02,170 --> 00:19:59,810

initiated would have been allowed in

398

00:20:04,630 --> 00:20:02,180

there in order to ensure that this

399

00:20:06,740 --> 00:20:04,640

information was kept accurate but at

400

00:20:09,830 --> 00:20:06,750

Newgrange you've also got a circle of

401
00:20:12,140 --> 00:20:09,840
around it of standing stones you've also

402
00:20:14,540 --> 00:20:12,150
got the stones right around the

403
00:20:18,770 --> 00:20:14,550
perimeter on the outside which had

404
00:20:21,500 --> 00:20:18,780
decorated yes they are that act as each

405
00:20:23,900 --> 00:20:21,510
one quite different those would act as a

406
00:20:26,300 --> 00:20:23,910
set of memory locations as would the

407
00:20:28,400 --> 00:20:26,310
circle of stones around it and then the

408
00:20:31,490 --> 00:20:28,410
highly restricted information would have

409
00:20:35,590 --> 00:20:31,500
been kept in the restricted locations

410
00:20:40,190 --> 00:20:35,600
just as the Native American sites have

411
00:20:41,660 --> 00:20:40,200
their locations they have lodges and it

412
00:20:41,960 --> 00:20:41,670
depends which culture you're talking

413
00:20:44,810 --> 00:20:41,970

about

414

00:20:47,720 --> 00:20:44,820

but restricted areas and initiation into

415

00:20:49,580 --> 00:20:47,730

that information so new grains you have

416

00:20:52,190 --> 00:20:49,590

the restricted and the public knowledge

417

00:20:56,680 --> 00:20:52,200

you have performance spaces outside and

418

00:20:59,060 --> 00:20:56,690

inside acoustic enhancement astronomical

419

00:21:02,960 --> 00:20:59,070

alignments because that enables you to

420

00:21:05,180 --> 00:21:02,970

maintain a calendar which is absolutely

421

00:21:07,550 --> 00:21:05,190

essential for ceremony as well as for

422

00:21:11,270 --> 00:21:07,560

agriculture and hunting and resource

423

00:21:13,130 --> 00:21:11,280

management and I learnt most about that

424

00:21:14,780 --> 00:21:13,140

I Australian Aboriginal people are

425

00:21:17,990 --> 00:21:14,790

really good on this astronomical

426

00:21:20,330 --> 00:21:18,000

alignment but your Pueblo people are

427

00:21:24,500 --> 00:21:20,340

absolutely extraordinary in the level of

428

00:21:27,920 --> 00:21:24,510

astronomy their knowledge and the way

429

00:21:32,830 --> 00:21:27,930

they maintained corn through mythology

430

00:21:36,410 --> 00:21:32,840

through story but also really clever

431

00:21:40,190 --> 00:21:36,420

clever planting of corn of multiple

432

00:21:44,660 --> 00:21:40,200

species varieties colors so that they

433

00:21:46,520 --> 00:21:44,670

didn't in to cross pollinate they kept

434

00:21:48,320 --> 00:21:46,530

them pure for hundreds of years which

435

00:21:50,720 --> 00:21:48,330

enabled them to survive in harsh

436

00:21:53,420 --> 00:21:50,730

conditions so all this sort of

437

00:21:56,650 --> 00:21:53,430

information has to be held and it has to

438

00:21:59,660 --> 00:21:56,660

be held accurately yeah it is quite

439

00:22:04,340 --> 00:21:59,670

fascinating having been down to the

440

00:22:06,890 --> 00:22:04,350

Chaco Canyon area and having traveled

441

00:22:09,640 --> 00:22:06,900

around through there I know that you

442

00:22:12,190 --> 00:22:09,650

don't put a lot of emphasis on the

443

00:22:15,490 --> 00:22:12,200

spirituality of this situation but I

444

00:22:18,560 --> 00:22:15,500

found it in many cases to be

445

00:22:19,760 --> 00:22:18,570

overwhelming myself at Newgrange and in

446

00:22:22,880 --> 00:22:19,770

Chaco Canyon

447

00:22:25,430 --> 00:22:22,890

at various other sites as I said I'd

448

00:22:27,890 --> 00:22:25,440

have gone around the world unfortunately

449

00:22:30,410 --> 00:22:27,900

have not yet made it to Australia or

450

00:22:33,050 --> 00:22:30,420

Easter Island but they're on my list

451

00:22:38,990 --> 00:22:33,060

they're on my my list to go to these

452

00:22:42,080 --> 00:22:39,000

places as well so yeah I I find this

453

00:22:46,700 --> 00:22:42,090

very very fascinating and I'm wondering

454

00:22:50,540 --> 00:22:46,710

if you have interacted at all with the

455

00:22:53,720 --> 00:22:50,550

acoustic people out there because of the

456

00:22:56,810 --> 00:22:53,730

last four or five years in doing my own

457

00:23:02,300 --> 00:22:56,820

research both foreshadowed reality and

458

00:23:07,370 --> 00:23:02,310

my blog I I found that there's a lot of

459

00:23:10,310 --> 00:23:07,380

new research on the quality of acoustics

460

00:23:16,250 --> 00:23:10,320

that can be found in some of these

461

00:23:19,700 --> 00:23:16,260

Cairns and megalithic sites absolutely

462

00:23:23,300 --> 00:23:19,710

the acoustics is one of the major signs

463

00:23:25,880 --> 00:23:23,310

because acoustic enhancement makes stuff

464

00:23:28,250 --> 00:23:25,890

more memorable I don't go into the

465

00:23:30,770 --> 00:23:28,260

spiritual side because I don't have any

466

00:23:33,020 --> 00:23:30,780

expertise in that area I acknowledge

467

00:23:35,930 --> 00:23:33,030

it's important I did come from a

468

00:23:40,330 --> 00:23:35,940

hardcore skeptical scientific background

469

00:23:44,510 --> 00:23:40,340

but I acknowledged that at Chaco Canyon

470

00:23:47,150 --> 00:23:44,520

the impact on me emotionally was

471

00:23:50,930 --> 00:23:47,160

something I hadn't predicted and didn't

472

00:23:53,440 --> 00:23:50,940

expect and can't explain and at the

473

00:23:57,230 --> 00:23:53,450

petroglyph National Monument near

474

00:23:59,840 --> 00:23:57,240

Albuquerque I have to say option so I'm

475

00:24:02,930 --> 00:23:59,850

not denying those sides I just don't

476

00:24:06,110 --> 00:24:02,940

have the expertise to talk about them

477

00:24:09,320 --> 00:24:06,120

but the acoustics is absolutely critical

478

00:24:11,690 --> 00:24:09,330

and that's one of the things that if you

479

00:24:14,030 --> 00:24:11,700

look at the megalithic sites in

480

00:24:19,970 --> 00:24:14,040

particular in the chalk where they could

481

00:24:22,400 --> 00:24:19,980

cut these great big deep ditches around

482

00:24:24,500 --> 00:24:22,410

the hinges so we're talking Stonehenge

483

00:24:27,680 --> 00:24:24,510

where the ditch was about two meters

484

00:24:30,980 --> 00:24:27,690

deep at times but Avery and directin

485

00:24:33,289 --> 00:24:30,990

walls the much bigger hinges the ditches

486

00:24:37,759 --> 00:24:33,299

were up to ten meters deep

487

00:24:40,639 --> 00:24:37,769

cutting orc going for a kilometer now if

488

00:24:44,539 --> 00:24:40,649

you can visualize yourself in a choc

489

00:24:47,720 --> 00:24:44,549

white stone ditch 10 meters deep with

490

00:24:50,450 --> 00:24:47,730

flat bottoms they're not defensive ah

491

00:24:53,450 --> 00:24:50,460

the acoustics in there must have been

492

00:24:55,399 --> 00:24:53,460

extraordinary they were performing in

493

00:24:57,109 --> 00:24:55,409

the ditches that's why they put so much

494

00:24:59,450 --> 00:24:57,119

effort to it you're talking million

495

00:25:02,210 --> 00:24:59,460

workers they didn't do this for no

496

00:25:06,200 --> 00:25:02,220

reason or just to show off they did it

497

00:25:08,090 --> 00:25:06,210

because but the weather in England it's

498

00:25:12,259 --> 00:25:08,100

terrible so they must perform the

499

00:25:14,210 --> 00:25:12,269

ceremonies and so they did a ditch deep

500

00:25:15,979 --> 00:25:14,220

enough to perform in to protect

501
00:25:19,849 --> 00:25:15,989
themselves the weather all year round

502
00:25:21,649 --> 00:25:19,859
and but they will have found that the

503
00:25:23,989 --> 00:25:21,659
acoustics would be extraordinary it's

504
00:25:25,729 --> 00:25:23,999
like you're singing in the shower gone

505
00:25:28,460 --> 00:25:25,739
to umpteen extremes because stone

506
00:25:29,930 --> 00:25:28,470
reverberates and reflects and you'll get

507
00:25:31,729 --> 00:25:29,940
interference patterns all sorts of

508
00:25:36,169 --> 00:25:31,739
things the same as they're finding in

509
00:25:39,109 --> 00:25:36,179
the Cairns the the stone can such as you

510
00:25:45,349 --> 00:25:39,119
Grange and lots of them have incredible

511
00:25:46,789 --> 00:25:45,359
acoustics yeah so yes this sorry I can

512
00:25:49,759 --> 00:25:46,799
go on for hours about this because I sat

513
00:25:53,239 --> 00:25:49,769

in there's one on Oakley islands the

514

00:25:56,859 --> 00:25:53,249

islands right up the north of Scotland

515

00:26:00,169 --> 00:25:56,869

where they think a lot of this Neolithic

516

00:26:03,080 --> 00:26:00,179

architecture started and on the island

517

00:26:06,919 --> 00:26:03,090

of Hoyt they there's a can called does

518

00:26:08,899 --> 00:26:06,929

dwarfee stain and because it looks like

519

00:26:11,869 --> 00:26:08,909

a little tune but it's a big rock and

520

00:26:14,060 --> 00:26:11,879

they've come out may I have that may I

521

00:26:17,299 --> 00:26:14,070

interrupt you just for a second having

522

00:26:19,849 --> 00:26:17,309

been there stain is Scottish for stone

523

00:26:21,710 --> 00:26:19,859

for our listeners out there I'm sorry to

524

00:26:27,830 --> 00:26:21,720

interrupt you but just to make things

525

00:26:30,019 --> 00:26:27,840

clear go ahead so sorry Lynn I've been

526

00:26:33,409 --> 00:26:30,029

to the Orkneys I've been to skara brae

527

00:26:35,720 --> 00:26:33,419

I've been to I don't think I've been to

528

00:26:39,739 --> 00:26:35,730

the dwarfee stain but I've been to the

529

00:26:43,460 --> 00:26:39,749

hill Oh stains just cross which is in

530

00:26:46,649 --> 00:26:43,470

it's in Scotland on the mainland but not

531

00:26:51,599 --> 00:26:46,659

too far from the Orkneys and it is more

532

00:26:53,759 --> 00:26:51,609

like the the norman group of stones it's

533

00:26:56,899 --> 00:26:53,769

not a stone circle in my recollection

534

00:27:01,379 --> 00:26:56,909

it's more like being in Karnak in

535

00:27:05,909 --> 00:27:01,389

Normandy wonderful conic I'll try and

536

00:27:08,879 --> 00:27:05,919

keep on topic if you went into an Stan

537

00:27:09,869 --> 00:27:08,889

can the little can right in the middle

538

00:27:13,109 --> 00:27:09,879

of the mainland

539

00:27:15,479 --> 00:27:13,119

the acoustics effect in that a huge but

540

00:27:19,529 --> 00:27:15,489

the dwarf is stayin is just this massive

541

00:27:22,200 --> 00:27:19,539

stone what 10 now be more than that 20

542

00:27:24,330 --> 00:27:22,210

meters long and they've carved out this

543

00:27:27,989 --> 00:27:24,340

bit if you sit cross-legged in it it's

544

00:27:31,950 --> 00:27:27,999

very comfortable and chant the acoustics

545

00:27:34,950 --> 00:27:31,960

are extraordinary and yet thoughts on it

546

00:27:37,649 --> 00:27:34,960

never mention the acoustics they talk

547

00:27:40,080 --> 00:27:37,659

about all sorts of other things and it's

548

00:27:43,139 --> 00:27:40,090

quite extruded in all sorts of those

549

00:27:44,999 --> 00:27:43,149

things and chanted away and got these

550

00:27:47,070 --> 00:27:45,009

effects but that would make the

551
00:27:50,489 --> 00:27:47,080
performance more dramatic and therefore

552
00:27:54,060 --> 00:27:50,499
more memorable of the songs and what was

553
00:27:56,430 --> 00:27:54,070
critical was to memorize remember all

554
00:27:59,190 --> 00:27:56,440
this information because it's not

555
00:28:01,820 --> 00:27:59,200
written down the memories of the elders

556
00:28:04,889 --> 00:28:01,830
were virtually the the cultures

557
00:28:06,739 --> 00:28:04,899
encyclopedia well you know obviously

558
00:28:10,259 --> 00:28:06,749
these people were not silly or stupid

559
00:28:11,849 --> 00:28:10,269
did anyone ever try writing do there any

560
00:28:15,659 --> 00:28:11,859
indication of that because it certainly

561
00:28:19,349 --> 00:28:15,669
bill that simpler writing certainly is

562
00:28:21,960 --> 00:28:19,359
simpler it's depends on how you define

563
00:28:25,129 --> 00:28:21,970

writing if you define it as having a

564

00:28:28,560 --> 00:28:25,139

script mm-hmm not at that stage that

565

00:28:32,219 --> 00:28:28,570

started once people settled and needed

566

00:28:36,570 --> 00:28:32,229

to keep records of trade so most things

567

00:28:39,839 --> 00:28:36,580

started as trade records but others will

568

00:28:42,779 --> 00:28:39,849

tell you that the symbols and all the

569

00:28:45,869 --> 00:28:42,789

artwork and the term art implies

570

00:28:47,729 --> 00:28:45,879

aesthetics first but art certainly for

571

00:28:50,460 --> 00:28:47,739

Aboriginal people and Native American

572

00:28:52,619 --> 00:28:50,470

people primarily is a record of their

573

00:28:55,109 --> 00:28:52,629

knowledge system and they make it

574

00:29:00,460 --> 00:28:55,119

aesthetic as well that that is

575

00:29:03,520 --> 00:29:00,470

effectively the same as writing so just

576

00:29:05,500 --> 00:29:03,530

what you call writing whether they're

577

00:29:08,470 --> 00:29:05,510

right so then if you look at the Inca

578

00:29:11,020 --> 00:29:08,480

people who didn't have a script but they

579

00:29:11,710 --> 00:29:11,030

did have a knotted cord device called a

580

00:29:16,000 --> 00:29:11,720

caboose

581

00:29:23,020 --> 00:29:16,010

sometimes spelt khi PU sometimes qu I PU

582

00:29:24,340 --> 00:29:23,030

and that those knots could be read there

583

00:29:25,990 --> 00:29:24,350

now showing that they're more than just

584

00:29:29,020 --> 00:29:26,000

numeric records they're actually

585

00:29:31,420 --> 00:29:29,030

narrative records they say that that's a

586

00:29:34,780 --> 00:29:31,430

form of writing so it just depends how

587

00:29:39,160 --> 00:29:34,790

you define writing but not a script

588

00:29:41,230 --> 00:29:39,170

no well those does Kipple it seems to me

589

00:29:44,820 --> 00:29:41,240

or when I was reading in your book about

590

00:29:48,760 --> 00:29:44,830

those it seemed to me my mind just

591

00:29:50,650 --> 00:29:48,770

started to roll along and I thought that

592

00:29:54,990 --> 00:29:50,660

that would be an excellent way to

593

00:29:58,570 --> 00:29:55,000

illustrate genealogy absolutely and

594

00:30:01,360 --> 00:29:58,580

genealogy is one of the most complex

595

00:30:06,220 --> 00:30:01,370

areas that all indigenous cultures keep

596

00:30:08,230 --> 00:30:06,230

and they keep genealogies for a number

597

00:30:11,080 --> 00:30:08,240

of reasons

598

00:30:13,240 --> 00:30:11,090

partly for hereditary in those that have

599

00:30:15,970 --> 00:30:13,250

Chiefs and so on but in Australia

600

00:30:18,900 --> 00:30:15,980

Aboriginal cultures in resource rights

601
00:30:22,210 --> 00:30:18,910
who resource rights and resource

602
00:30:24,790 --> 00:30:22,220
responsibilities it's both because the

603
00:30:26,590 --> 00:30:24,800
Aboriginal people if your totem is a

604
00:30:28,630 --> 00:30:26,600
particular animal it's your

605
00:30:30,760 --> 00:30:28,640
responsibility to ensure that it is not

606
00:30:33,280 --> 00:30:30,770
hunted out but it's looked after and so

607
00:30:35,260 --> 00:30:33,290
on so the resource rights and

608
00:30:38,110 --> 00:30:35,270
responsibilities are held within these

609
00:30:41,920 --> 00:30:38,120
genealogies on the relationships to each

610
00:30:44,650 --> 00:30:41,930
other and it's extremely complex at the

611
00:30:47,500 --> 00:30:44,660
beginning of this research over a decade

612
00:30:49,870 --> 00:30:47,510
ago when I got most pretentious young

613
00:30:52,660 --> 00:30:49,880

younger thing not young now it wasn't

614

00:30:53,860 --> 00:30:52,670

young men I asked one of the linguists

615

00:30:56,980 --> 00:30:53,870

that's working with an indigenous

616

00:31:00,250 --> 00:30:56,990

culture in Indonesia why do they keep

617

00:31:01,810 --> 00:31:00,260

such complex genealogies because we know

618

00:31:04,360 --> 00:31:01,820

about genetics and breeding but

619

00:31:07,060 --> 00:31:04,370

obviously they wouldn't and he asked one

620

00:31:09,580 --> 00:31:07,070

of them and the guy said back to him in

621

00:31:12,490 --> 00:31:09,590

their language for resource rights

622

00:31:13,510 --> 00:31:12,500

hereditary rights relationships and he

623

00:31:17,230 --> 00:31:13,520

said but

624

00:31:19,300 --> 00:31:17,240

you white fella know that if you if you

625

00:31:22,630 --> 00:31:19,310

marry somebody close you'll get children

626

00:31:25,680 --> 00:31:22,640

with six fingers and that that's just a

627

00:31:29,440 --> 00:31:25,690

metaphor for you will get in breeding

628

00:31:33,580 --> 00:31:29,450

errors this assumption that their

629

00:31:36,760 --> 00:31:33,590

knowledge is limited is really a result

630

00:31:38,410 --> 00:31:36,770

of we looked for literacy we don't look

631

00:31:41,020 --> 00:31:38,420

at or allottee we don't look at

632

00:31:43,000 --> 00:31:41,030

knowledge and complexity because it's

633

00:31:45,730 --> 00:31:43,010

stored in a form that we're not familiar

634

00:31:47,590 --> 00:31:45,740

with well one of the things that's

635

00:31:50,710 --> 00:31:47,600

interesting they say when the bomb drops

636

00:31:52,900 --> 00:31:50,720

and all of the support of modern culture

637

00:31:54,580 --> 00:31:52,910

goes away most people will start to

638

00:31:56,950 --> 00:31:54,590

death because they have no knowledge of

639

00:32:00,730 --> 00:31:56,960

Agriculture so what you're saying is

640

00:32:03,400 --> 00:32:00,740

that in an undeveloped world knowledge

641

00:32:05,230 --> 00:32:03,410

of Agriculture and how to find various

642

00:32:08,530 --> 00:32:05,240

meats and how to hunt we're certainly

643

00:32:10,770 --> 00:32:08,540

crucial and much more important than I

644

00:32:13,690 --> 00:32:10,780

don't know whatever we have today

645

00:32:16,330 --> 00:32:13,700

absolutely and there's a number of

646

00:32:20,080 --> 00:32:16,340

studies that show that these survival

647

00:32:23,290 --> 00:32:20,090

techniques for extreme cases then you're

648

00:32:25,270 --> 00:32:23,300

drawing on knowledge that could be a

649

00:32:26,620 --> 00:32:25,280

hundred years ago if not longer because

650

00:32:29,350 --> 00:32:26,630

they haven't had a severe drought for

651
00:32:31,180 --> 00:32:29,360
that long that sort of knowledge is held

652
00:32:34,330 --> 00:32:31,190
in the very highly restricted

653
00:32:36,370 --> 00:32:34,340
information so it will include things

654
00:32:38,620 --> 00:32:36,380
like that plant over there that you

655
00:32:40,840 --> 00:32:38,630
never go near because it tastes horrible

656
00:32:43,000 --> 00:32:40,850
if you do this that and the other to it

657
00:32:44,680 --> 00:32:43,010
it is edible and it will keep you alive

658
00:32:45,040 --> 00:32:44,690
you won't like it but they keep you

659
00:32:46,990 --> 00:32:45,050
alive

660
00:32:49,600 --> 00:32:47,000
don't touch that one over there nothing

661
00:32:53,170 --> 00:32:49,610
you do will make it safe that sort of

662
00:32:55,630 --> 00:32:53,180
information is held in these very highly

663
00:32:57,850 --> 00:32:55,640

restricted levels trade agreements

664

00:33:00,100 --> 00:32:57,860

between different cultures in the earth

665

00:33:02,530 --> 00:33:00,110

we're starving you'll help out those

666

00:33:04,660 --> 00:33:02,540

sorts of things are kept at very highly

667

00:33:06,730 --> 00:33:04,670

restricted levels because the

668

00:33:08,020 --> 00:33:06,740

information comes from generations back

669

00:33:11,770 --> 00:33:08,030

and you don't want to start

670

00:33:13,390 --> 00:33:11,780

experimenting with that again you could

671

00:33:16,000 --> 00:33:13,400

lose a lot of people if you eat the

672

00:33:19,420 --> 00:33:16,010

wrong thing um could you give us a

673

00:33:22,330 --> 00:33:19,430

little bit about your take on the giant

674

00:33:27,490 --> 00:33:22,340

drawings of Nazca the Nazca lines

675

00:33:30,490 --> 00:33:27,500

otherwise known as absolutely I was

676
00:33:33,270 --> 00:33:30,500
my attention to those is drawn by one of

677
00:33:36,100 --> 00:33:33,280
the Native American researchers at the

678
00:33:38,290 --> 00:33:36,110
American the National Museum of the

679
00:33:40,510 --> 00:33:38,300
American Indian in Washington because

680
00:33:43,060 --> 00:33:40,520
she was saying that the patterns are

681
00:33:46,600 --> 00:33:43,070
similar to what you get with Native

682
00:33:48,670 --> 00:33:46,610
American patterns but what an Aboriginal

683
00:33:51,550 --> 00:33:48,680
woman here introduced me to is the fact

684
00:33:54,820 --> 00:33:51,560
that if you walk and chant at a regular

685
00:33:56,860 --> 00:33:54,830
rhythm that makes the songs and the

686
00:33:58,840 --> 00:33:56,870
information much more memorable and

687
00:34:04,270 --> 00:33:58,850
they've shown that on the Nazca lines

688
00:34:05,350 --> 00:34:04,280

which are on the big desert campus in

689

00:34:08,200 --> 00:34:05,360

Peru

690

00:34:11,919 --> 00:34:08,210

that had these huge animal glyphs but

691

00:34:15,850 --> 00:34:11,929

also lots of straight lines that the

692

00:34:18,070 --> 00:34:15,860

huge animal images are all walkable even

693

00:34:20,200 --> 00:34:18,080

no matter how complex they are no

694

00:34:22,810 --> 00:34:20,210

tonight no lines cross each other so

695

00:34:24,700 --> 00:34:22,820

then they go in and out so one person

696

00:34:27,159 --> 00:34:24,710

walking up will do the whole thing and

697

00:34:29,169 --> 00:34:27,169

come out again without crossing paths

698

00:34:33,010 --> 00:34:29,179

with anyone behind them or ahead of them

699

00:34:35,260 --> 00:34:33,020

and so if you are chanting those stories

700

00:34:37,360 --> 00:34:35,270

walking those lines and changing the

701

00:34:38,860 --> 00:34:37,370

stories would be hugely memorable

702

00:34:41,980 --> 00:34:38,870

there's a myth

703

00:34:45,909 --> 00:34:41,990

there's myths myths in the falsehoods

704

00:34:48,159 --> 00:34:45,919

term not indigenous mythology term there

705

00:34:50,350 --> 00:34:48,169

are myths about them that they can only

706

00:34:52,360 --> 00:34:50,360

be seen by from the air therefore they

707

00:34:55,480 --> 00:34:52,370

must have been aliens or balloons it's

708

00:34:58,210 --> 00:34:55,490

all not true they can be seen from the

709

00:34:59,890 --> 00:34:58,220

little Hills but the evidence is very

710

00:35:02,230 --> 00:34:59,900

clear that they were designed to be

711

00:35:03,910 --> 00:35:02,240

walked whether they even wanted to see

712

00:35:07,270 --> 00:35:03,920

them because the same patterns are on

713

00:35:10,510 --> 00:35:07,280

the pottery but without that detail of

714

00:35:13,330 --> 00:35:10,520

being able to walk it so these are the

715

00:35:15,340 --> 00:35:13,340

animals that were the characters that

716

00:35:18,700 --> 00:35:15,350

told their stories that form there are

717

00:35:21,580 --> 00:35:18,710

all tradition well some of the people of

718

00:35:25,390 --> 00:35:21,590

those tribes are still with us today

719

00:35:28,420 --> 00:35:25,400

have any memories themselves today's

720

00:35:30,760 --> 00:35:28,430

descendants of those people there are a

721

00:35:33,070 --> 00:35:30,770

few and the stories this is why is joy

722

00:35:34,870 --> 00:35:33,080

in Aboriginal cultures are so useful for

723

00:35:37,360 --> 00:35:34,880

this sort of research because we're

724

00:35:40,829 --> 00:35:37,370

looking at a 40 to 60 thousand year

725

00:35:43,009 --> 00:35:40,839

continuous culture and few low

726

00:35:47,190 --> 00:35:43,019

Asians where the contact was very recent

727

00:35:49,410 --> 00:35:47,200

certainly only last century you have got

728

00:35:53,130 --> 00:35:49,420

the traditions intact but not a lot

729

00:35:56,579 --> 00:35:53,140

because as soon as you get contact with

730

00:35:59,219 --> 00:35:56,589

literacy and with Western culture it's

731

00:36:00,989 --> 00:35:59,229

just so much easier why would you go to

732

00:36:04,529 --> 00:36:00,999

so much work so they're having a lot of

733

00:36:06,809 --> 00:36:04,539

trouble getting the youth to do all the

734

00:36:08,910 --> 00:36:06,819

training and it's years and years you

735

00:36:11,489 --> 00:36:08,920

know there's evidence from all over the

736

00:36:14,400 --> 00:36:11,499

world that you're looking at 10 years 20

737

00:36:17,190 --> 00:36:14,410

years of intense training to get this

738

00:36:18,390 --> 00:36:17,200

full body of knowledge and nobody's

739

00:36:21,059 --> 00:36:18,400

going to do it when you can just write

740

00:36:23,069 --> 00:36:21,069

it down well but that's true with

741

00:36:25,289 --> 00:36:23,079

today's our fields of interest I mean

742

00:36:28,859 --> 00:36:25,299

certainly for a good chemist it takes a

743

00:36:31,499 --> 00:36:28,869

good 15 20 years to learn all of the ins

744

00:36:33,660 --> 00:36:31,509

and outs and that is written down but

745

00:36:38,430 --> 00:36:33,670

you still have to put it in your mind as

746

00:36:42,440 --> 00:36:38,440

well yes and that's why with writing you

747

00:36:45,839 --> 00:36:42,450

can go to much more depth in even

748

00:36:47,729 --> 00:36:45,849

discipline whereas the Aboriginal elders

749

00:36:50,969 --> 00:36:47,739

had to retain the entire knowledge

750

00:36:53,039 --> 00:36:50,979

system yeah all the disciplines once you

751
00:36:54,989 --> 00:36:53,049
start settling if you look at the Native

752
00:36:57,150 --> 00:36:54,999
American cultures there you get

753
00:36:58,799 --> 00:36:57,160
specialists in the different you know

754
00:37:00,299 --> 00:36:58,809
the corn society the snake society

755
00:37:03,839 --> 00:37:00,309
medicine Society and so on

756
00:37:06,329 --> 00:37:03,849
and that stops anyone completely

757
00:37:10,739 --> 00:37:06,339
controlling the information because the

758
00:37:14,849 --> 00:37:10,749
ultra zone at egalitarian those that do

759
00:37:17,819 --> 00:37:14,859
not have individual wealth who knows

760
00:37:19,859 --> 00:37:17,829
cultures knowledge was power controlling

761
00:37:22,950 --> 00:37:19,869
it from poaching was the control of

762
00:37:26,120 --> 00:37:22,960
power and there's a built in systems in

763
00:37:29,729 --> 00:37:26,130

Africa America everywhere to stop anyone

764

00:37:32,299 --> 00:37:29,739

exploiting that power whereas as soon as

765

00:37:36,450 --> 00:37:32,309

you get individual wealth the knowledge

766

00:37:38,459 --> 00:37:36,460

experts become servants to the wealthy

767

00:37:41,519 --> 00:37:38,469

leaders so in Africa you get the griot

768

00:37:44,069 --> 00:37:41,529

s-- who will recite all this information

769

00:37:46,709 --> 00:37:44,079

they're powerful they're wealthy but

770

00:37:48,329 --> 00:37:46,719

they not the absolute bosses and then in

771

00:37:49,990 --> 00:37:48,339

the neolithic you'll move into the

772

00:37:54,800 --> 00:37:50,000

Druids who are

773

00:37:56,810 --> 00:37:54,810

mm-hmm yes the truest they are your

774

00:38:00,680 --> 00:37:56,820

knowledge elite they are using these

775

00:38:04,160 --> 00:38:00,690

methods but they are no longer the

776

00:38:08,300 --> 00:38:04,170

absolute power because violence and

777

00:38:10,720 --> 00:38:08,310

wealth is more powerful than knowledge

778

00:38:13,550 --> 00:38:10,730

do you think what that these

779

00:38:17,990 --> 00:38:13,560

particularly the Druids do you think

780

00:38:22,700 --> 00:38:18,000

that there are persons today in secret

781

00:38:25,000 --> 00:38:22,710

societies who continue to have special

782

00:38:27,349 --> 00:38:25,010

knowledge that may have been passed down

783

00:38:29,540 --> 00:38:27,359

basically from the time of the Druids

784

00:38:32,089 --> 00:38:29,550

from the time of Merlin and King Arthur

785

00:38:35,329 --> 00:38:32,099

I mean there have been secret societies

786

00:38:38,870 --> 00:38:35,339

across Europe and in in in the Far East

787

00:38:40,839 --> 00:38:38,880

as well I can't really speak anywhere

788

00:38:45,349 --> 00:38:40,849

nearly as well as you can on on

789

00:38:47,780 --> 00:38:45,359

Australia but in terms of of Great

790

00:38:50,829 --> 00:38:47,790

Britain Europe and the Far East there

791

00:38:54,109 --> 00:38:50,839

there still remains secret societies

792

00:38:56,540 --> 00:38:54,119

it's certainly possible if they're using

793

00:38:58,579 --> 00:38:56,550

these methods they're extremely robust I

794

00:39:01,819 --> 00:38:58,589

don't have evidence of that because as

795

00:39:04,460 --> 00:39:01,829

soon as the cultures settled and we're

796

00:39:06,740 --> 00:39:04,470

no longer material egalitarian I stopped

797

00:39:09,079 --> 00:39:06,750

looking at them I have talked to experts

798

00:39:10,630 --> 00:39:09,089

on the Druids when I've been in the

799

00:39:15,680 --> 00:39:10,640

Britain and they've asked me to

800

00:39:18,530 --> 00:39:15,690

hypothetically take my systems for 2,000

801
00:39:21,530 --> 00:39:18,540
years and they say that it certainly

802
00:39:23,030 --> 00:39:21,540
matches the archaeology but I don't have

803
00:39:26,510 --> 00:39:23,040
the expertise to look at that I'm

804
00:39:30,349 --> 00:39:26,520
certainly looking at that now but the

805
00:39:32,500 --> 00:39:30,359
artwork is certainly a memory aid and

806
00:39:34,819 --> 00:39:32,510
that's been shown right into the

807
00:39:37,579 --> 00:39:34,829
medieval and renaissance times and

808
00:39:40,040 --> 00:39:37,589
certainly the druid and Celtic you know

809
00:39:42,890 --> 00:39:40,050
you've got all sorts there's so much my

810
00:39:49,430 --> 00:39:42,900
poor brain can't cope with it you have

811
00:39:52,579 --> 00:39:49,440
to learn a new song yeah so there's lots

812
00:39:55,370 --> 00:39:52,589
of directions I'd like to go but I've

813
00:39:59,380 --> 00:39:55,380

only 24 hours in a day have you looked

814

00:40:02,750 --> 00:39:59,390

much at a gold-backed gobekli tepe

815

00:40:03,740 --> 00:40:02,760

Turkey I have looked I mentioned it

816

00:40:06,250 --> 00:40:03,750

briefly in the

817

00:40:08,300 --> 00:40:06,260

Rico and I've been in in contact with

818

00:40:10,850 --> 00:40:08,310

archeologists from there since it

819

00:40:13,640 --> 00:40:10,860

certainly fits a pattern so god Beckley

820

00:40:17,600 --> 00:40:13,650

Tepe is a hunter-gatherer site there's

821

00:40:19,700 --> 00:40:17,610

no sign of farming and you have exactly

822

00:40:22,070 --> 00:40:19,710

what you would expect for memory palaces

823

00:40:25,430 --> 00:40:22,080

the set of pillars in a structure within

824

00:40:27,980 --> 00:40:25,440

a restricted location and sets of them

825

00:40:31,130 --> 00:40:27,990

and it sort of changes with time and

826

00:40:36,130 --> 00:40:31,140

they're decorated pillars in a totally

827

00:40:39,020 --> 00:40:36,140

structured order and it fits the pattern

828

00:40:42,650 --> 00:40:39,030

absolutely perfectly it's incredibly

829

00:40:46,280 --> 00:40:42,660

sophisticated for something that was

830

00:40:49,280 --> 00:40:46,290

built over 12,000 years ago even though

831

00:40:52,070 --> 00:40:49,290

they don't have obvious language there

832

00:40:56,090 --> 00:40:52,080

that in the sense of literacy as opposed

833

00:40:58,730 --> 00:40:56,100

to orality it is incredibly

834

00:41:02,120 --> 00:40:58,740

sophisticated for a hunter gathers

835

00:41:06,170 --> 00:41:02,130

gatherer society and includes animals

836

00:41:09,430 --> 00:41:06,180

that we no longer know of true and the

837

00:41:11,510 --> 00:41:09,440

the thing is that we assume that

838

00:41:14,110 --> 00:41:11,520

hunter-gatherers didn't have the same

839

00:41:17,270 --> 00:41:14,120

intellectual curiosity that we do and

840

00:41:21,170 --> 00:41:17,280

obviously they do because they're human

841

00:41:24,890 --> 00:41:21,180

and so of those Navajo 800 insects they

842

00:41:27,080 --> 00:41:24,900

only ate about ten of them sorry ate

843

00:41:28,880 --> 00:41:27,090

about one of them the cicada about 10

844

00:41:31,430 --> 00:41:28,890

minutes and things like that all the

845

00:41:34,130 --> 00:41:31,440

rest were known because they liked

846

00:41:36,770 --> 00:41:34,140

knowing and they used them as metaphor

847

00:41:41,180 --> 00:41:36,780

we have studies in Australia that showed

848

00:41:43,250 --> 00:41:41,190

that stories were traded because it's

849

00:41:45,920 --> 00:41:43,260

information just like we pay for

850

00:41:46,370 --> 00:41:45,930

education traded right across the

851

00:41:49,460 --> 00:41:46,380

country

852

00:41:53,150 --> 00:41:49,470

and so people in the very south of the

853

00:41:56,150 --> 00:41:53,160

country could talk about animals from

854

00:41:58,520 --> 00:41:56,160

the north and describe them so a lot of

855

00:42:01,160 --> 00:41:58,530

cave art is of animals that would did

856

00:42:03,920 --> 00:42:01,170

not occur in that area because it's

857

00:42:05,960 --> 00:42:03,930

knowledge and yeah just as you probably

858

00:42:07,790 --> 00:42:05,970

know about giraffes but don't have them

859

00:42:12,230 --> 00:42:07,800

locally

860

00:42:15,559 --> 00:42:12,240

that's human brain is curious absolutely

861

00:42:18,829 --> 00:42:15,569

and I totally agree with you I believe

862

00:42:22,519 --> 00:42:18,839

as you believe that hunter-gatherers do

863

00:42:25,880 --> 00:42:22,529

not lack for intellectual curiosity my

864

00:42:29,589 --> 00:42:25,890

only point about gobekli tepe

865

00:42:32,599 --> 00:42:29,599

that seems to me different than other

866

00:42:37,130 --> 00:42:32,609

hunter-gatherer societies like those in

867

00:42:40,099 --> 00:42:37,140

Africa and Australia is the level of the

868

00:42:44,390 --> 00:42:40,109

competency in the sculpture and the

869

00:42:46,370 --> 00:42:44,400

artwork seems to be at another level it

870

00:42:50,630 --> 00:42:46,380

just seems like it's it's gone to

871

00:42:53,839 --> 00:42:50,640

another place that I'm I don't I'm not

872

00:42:56,150 --> 00:42:53,849

an archaeologist so I can't say whether

873

00:43:01,219 --> 00:42:56,160

these people were hunter-gatherers or

874

00:43:04,329 --> 00:43:01,229

not but they're there their remains

875

00:43:08,229 --> 00:43:04,339

their their monuments seem much more

876

00:43:10,849 --> 00:43:08,239

like Greek or Roman monuments or

877

00:43:13,819 --> 00:43:10,859

Egyptian monuments than they do like

878

00:43:17,359 --> 00:43:13,829

hunter-gatherer monuments I am NOT an

879

00:43:20,529 --> 00:43:17,369

expert so forgive me I'm it's not in the

880

00:43:24,259 --> 00:43:20,539

sense of an argument only how I see it

881

00:43:26,420 --> 00:43:24,269

yeah I can see what you're saying but if

882

00:43:29,660 --> 00:43:26,430

you look at the artwork of the Lubar

883

00:43:32,420 --> 00:43:29,670

people of Africa it is staggeringly

884

00:43:37,640 --> 00:43:32,430

beautiful and then if you look at some

885

00:43:39,920 --> 00:43:37,650

of the cave art here in Australia you'll

886

00:43:45,709 --> 00:43:39,930

find some of it looks very sophisticated

887

00:43:48,769 --> 00:43:45,719

I hadn't seen that with gobekli tepe to

888

00:43:52,130 --> 00:43:48,779

me it looked indigenous hunter-gatherer

889

00:43:54,620 --> 00:43:52,140

okay so I haven't seen that but I'll

890

00:43:58,549 --> 00:43:54,630

look at it again from that context it's

891

00:44:01,789 --> 00:43:58,559

certainly beautiful they all yes they

892

00:44:04,189 --> 00:44:01,799

all of this cultures my personal

893

00:44:06,979 --> 00:44:04,199

reaction to the carvings of the Luba

894

00:44:10,249 --> 00:44:06,989

people and they had it there from West

895

00:44:12,979 --> 00:44:10,259

Africa and they have this stunningly

896

00:44:14,449 --> 00:44:12,989

beautiful carving but it's also through

897

00:44:17,089 --> 00:44:14,459

them that I understood about these

898

00:44:19,910 --> 00:44:17,099

portable devices because they used a

899

00:44:25,969 --> 00:44:19,920

handheld device known as a Lucas are a

900

00:44:27,589 --> 00:44:25,979

UK a a that a memory board that once I

901
00:44:28,960 --> 00:44:27,599
started reading the research on it

902
00:44:31,760 --> 00:44:28,970
because some of the

903
00:44:34,730 --> 00:44:31,770
America anthropologists were initiated

904
00:44:36,770 --> 00:44:34,740
to the first levels of it I frankly

905
00:44:39,530 --> 00:44:36,780
didn't believe it that they could encode

906
00:44:41,359 --> 00:44:39,540
all this stuff to a bit of wood with

907
00:44:43,010 --> 00:44:41,369
beads and a bit of carving and some

908
00:44:45,319 --> 00:44:43,020
beads nailed on and the shells and

909
00:44:47,720 --> 00:44:45,329
things so I grabbed myself a piece of

910
00:44:52,700 --> 00:44:47,730
wood I glued on some beads and shells

911
00:44:56,390 --> 00:44:52,710
and I started encoding the field guide

912
00:44:58,339 --> 00:44:56,400
to the Victorian Birds 412 native birds

913
00:45:00,770 --> 00:44:58,349

it was 408 when I wrote the book I think

914

00:45:07,069 --> 00:45:00,780

but there's been form for more moved in

915

00:45:09,950 --> 00:45:07,079

I might and I could not believe how well

916

00:45:12,620 --> 00:45:09,960

I could encode I now use that as a

917

00:45:14,900 --> 00:45:12,630

complete field god I have the whole 412

918

00:45:18,260 --> 00:45:14,910

there in taxonomic order so the shells

919

00:45:22,069 --> 00:45:18,270

represent the 82 families and then

920

00:45:25,339 --> 00:45:22,079

stories encode the birds within those so

921

00:45:28,940 --> 00:45:25,349

if we're out birding I have a complete

922

00:45:30,589 --> 00:45:28,950

list so my husband we saw a bird one day

923

00:45:33,559 --> 00:45:30,599

that he couldn't recognize locally which

924

00:45:35,180 --> 00:45:33,569

is not usual for him and it was a honey

925

00:45:38,120 --> 00:45:35,190

eater which is our biggest family and

926

00:45:40,040 --> 00:45:38,130

they did birds with little the nearest

927

00:45:40,970 --> 00:45:40,050

is your hummingbirds there's not really

928

00:45:48,140 --> 00:45:40,980

nothing like it

929

00:45:50,809 --> 00:45:48,150

but there's 26 no 36 of them so I reel

930

00:45:53,599 --> 00:45:50,819

off the 36 and he was a labeled able to

931

00:45:56,150 --> 00:45:53,609

do an elimination and come down to the

932

00:45:58,490 --> 00:45:56,160

juvenile of a particular species so by

933

00:46:01,309 --> 00:45:58,500

having this complete bird guide in my

934

00:46:03,260 --> 00:46:01,319

head I'm seeing patterns and things that

935

00:46:05,780 --> 00:46:03,270

I wouldn't see if I was doing them as

936

00:46:08,809 --> 00:46:05,790

individuals so I could not believe that

937

00:46:10,309 --> 00:46:08,819

this device would work until I tried it

938

00:46:12,380 --> 00:46:10,319

and now there's been lots of people

939

00:46:15,079 --> 00:46:12,390

making them in all sorts of formats and

940

00:46:18,650 --> 00:46:15,089

finding the same thing these memory

941

00:46:22,490 --> 00:46:18,660

methods are extraordinarily effective am

942

00:46:25,700 --> 00:46:22,500

I correct in saying that you are working

943

00:46:28,940 --> 00:46:25,710

on another book that will be instructive

944

00:46:32,450 --> 00:46:28,950

to individuals such as myself or Miss

945

00:46:35,660 --> 00:46:32,460

Kate Valentine on how to construct a

946

00:46:41,760 --> 00:46:35,670

memory palace and a memory board we have

947

00:46:47,430 --> 00:46:45,120

what about the memory code ah okay how

948

00:46:49,980 --> 00:46:47,440

do we actually do it I thought it would

949

00:46:51,750 --> 00:46:49,990

be the archaeology well new theories for

950

00:46:55,010 --> 00:46:51,760

the monuments that would attract the

951
00:46:57,960 --> 00:46:55,020
attention and it does but mostly it's

952
00:47:00,810 --> 00:46:57,970
these memory methods are extraordinary

953
00:47:02,580 --> 00:47:00,820
they have only not been so used right

954
00:47:06,300 --> 00:47:02,590
across the world and right into the

955
00:47:08,280 --> 00:47:06,310
Renaissance so it's only the last four

956
00:47:10,410 --> 00:47:08,290
hundred years or so of Western culture

957
00:47:12,990 --> 00:47:10,420
that we haven't used them and memory

958
00:47:15,540 --> 00:47:13,000
champions and so on still use them but

959
00:47:18,090 --> 00:47:15,550
they don't use all this complexity of

960
00:47:20,610 --> 00:47:18,100
interweaving song and dance and memory

961
00:47:24,180 --> 00:47:20,620
boards and memory palaces all together

962
00:47:26,940 --> 00:47:24,190
and so I'm actually writing exactly as

963
00:47:28,620 --> 00:47:26,950

you say a book about how to do this and

964

00:47:30,960 --> 00:47:28,630

I'm doing the sorts of things people

965

00:47:32,490 --> 00:47:30,970

asked like how do you do it to memorize

966

00:47:34,830 --> 00:47:32,500

a language when you're learning a

967

00:47:37,230 --> 00:47:34,840

language now I was really bad with

968

00:47:40,400 --> 00:47:37,240

languages at school and hated them so

969

00:47:43,260 --> 00:47:40,410

I've gone back to doing French and

970

00:47:46,670 --> 00:47:43,270

adjusting the way I'm learning to draw

971

00:47:49,410 --> 00:47:46,680

on all these methods and I am loving it

972

00:47:52,200 --> 00:47:49,420

it's just a much more natural way to

973

00:47:54,330 --> 00:47:52,210

learn and more effective and more fun so

974

00:47:57,210 --> 00:47:54,340

that's exactly what the new book is well

975

00:47:59,310 --> 00:47:57,220

that that is just extremely interesting

976

00:48:02,960 --> 00:47:59,320

I wanted to make a funny point here

977

00:48:07,410 --> 00:48:02,970

about writing and today's culture

978

00:48:10,500 --> 00:48:07,420

because I am struck not being a child

979

00:48:14,340 --> 00:48:10,510

myself having learned to write

980

00:48:17,880 --> 00:48:14,350

compositions and writing a blog and so

981

00:48:19,980 --> 00:48:17,890

forth I you know I have learned to write

982

00:48:21,540 --> 00:48:19,990

not I don't think I'm Hemingway I don't

983

00:48:26,130 --> 00:48:21,550

think I'm great but I am constantly

984

00:48:29,460 --> 00:48:26,140

struck by people under 35 who can't

985

00:48:33,120 --> 00:48:29,470

construct a sentence so we may be

986

00:48:37,140 --> 00:48:33,130

slipping back into the free literate

987

00:48:41,520 --> 00:48:37,150

state once again except the preliterate

988

00:48:44,640 --> 00:48:41,530

state with Azure ality yes whatever they

989

00:48:48,480 --> 00:48:44,650

took the lack of literacy and delay and

990

00:48:50,460 --> 00:48:48,490

no reality at all so you know this would

991

00:48:54,030 --> 00:48:50,470

be a worry I've been working in schools

992

00:48:55,569 --> 00:48:54,040

and one thing we found memory palaces

993

00:48:58,359 --> 00:48:55,579

are hugely effective

994

00:49:01,089 --> 00:48:58,369

but it's the way of constructing stories

995

00:49:03,430 --> 00:49:01,099

and using characters now the Pueblo

996

00:49:06,339 --> 00:49:03,440

people call their characters Kachina and

997

00:49:08,890 --> 00:49:06,349

they have active about two hundred and

998

00:49:11,229 --> 00:49:08,900

fifty at a given time that dance and act

999

00:49:13,660 --> 00:49:11,239

out all the stories and information so

1000

00:49:15,430 --> 00:49:13,670

we tried this at a primary school and we

1001
00:49:17,499 --> 00:49:15,440
didn't call them Kachina because that

1002
00:49:20,289 --> 00:49:17,509
would be inappropriate and all cultures

1003
00:49:22,239 --> 00:49:20,299
have these mythological characters that

1004
00:49:25,859 --> 00:49:22,249
tell the stories we called them

1005
00:49:29,499 --> 00:49:25,869
rapscallions because we wanted a lively

1006
00:49:31,589 --> 00:49:29,509
name and so that the kids each made a

1007
00:49:33,549 --> 00:49:31,599
little character and they also

1008
00:49:35,680 --> 00:49:33,559
incorporated their own toys as

1009
00:49:37,930 --> 00:49:35,690
characters and started telling the

1010
00:49:42,069 --> 00:49:37,940
stories and we did mathematical tables

1011
00:49:45,359 --> 00:49:42,079
that way but also argumentative texts

1012
00:49:47,499 --> 00:49:45,369
and I can go on for hours about this but

1013
00:49:49,479 --> 00:49:47,509

argumentative text is something where

1014

00:49:51,069 --> 00:49:49,489

the kids are the children's students

1015

00:49:57,209 --> 00:49:51,079

whatever you respectfully want to call

1016

00:50:08,160 --> 00:50:04,329

hello yeah it's our M but not to just

1017

00:50:12,130 --> 00:50:08,170

continue on don't worry about it okay

1018

00:50:15,699 --> 00:50:12,140

students have argue a case and these are

1019

00:50:19,269 --> 00:50:15,709

little students were from Cheers up to

1020

00:50:21,219 --> 00:50:19,279

12 years if they had that character

1021

00:50:24,249 --> 00:50:21,229

sitting on the desk in front of them and

1022

00:50:26,890 --> 00:50:24,259

they had to convince that character the

1023

00:50:29,650 --> 00:50:26,900

quality of their writing improved

1024

00:50:33,370 --> 00:50:29,660

massively and then the teacher made them

1025

00:50:34,749 --> 00:50:33,380

right the rascallions approach once

1026

00:50:36,069 --> 00:50:34,759

they started building up these

1027

00:50:38,469 --> 00:50:36,079

characters and they were using each

1028

00:50:41,620 --> 00:50:38,479

other's as well as their own in their

1029

00:50:44,259 --> 00:50:41,630

studies no matter what topic they

1030

00:50:47,620 --> 00:50:44,269

started getting much better information

1031

00:50:49,749 --> 00:50:47,630

so we started adding in song the

1032

00:50:53,109 --> 00:50:49,759

students all had to do force because

1033

00:50:55,630 --> 00:50:53,119

force is one of the key aspects of their

1034

00:50:57,670 --> 00:50:55,640

science curriculum they'd all done study

1035

00:51:00,609 --> 00:50:57,680

a couple of hours of force and I went to

1036

00:51:02,439 --> 00:51:00,619

each student and said a week later do

1037

00:51:05,079 --> 00:51:02,449

you remember doing force in science yes

1038

00:51:07,120 --> 00:51:05,089

what is a force and three out of the

1039

00:51:08,920 --> 00:51:07,130

seventy told me it was a push or pull

1040

00:51:09,460 --> 00:51:08,930

the other said it's what sent the

1041

00:51:12,070 --> 00:51:09,470

balloon

1042

00:51:17,859 --> 00:51:12,080

the road and a lot of them said it's may

1043

00:51:21,460 --> 00:51:17,869

the force be with you teacher then a

1044

00:51:24,160 --> 00:51:21,470

little song using the Imperial March of

1045

00:51:25,960 --> 00:51:24,170

force is a push or pull push a pull and

1046

00:51:28,570 --> 00:51:25,970

I'm doing the actions now sitting here

1047

00:51:30,820 --> 00:51:28,580

because he put a little dance to it they

1048

00:51:33,849 --> 00:51:30,830

did that once then and once an assembly

1049

00:51:36,160 --> 00:51:33,859

not again for a week and I did the exact

1050

00:51:38,680 --> 00:51:36,170

same wording and every single student

1051
00:51:42,730 --> 00:51:38,690
told me a force is a push or a pull and

1052
00:51:45,070 --> 00:51:42,740
did the actions now until then the

1053
00:51:47,740 --> 00:51:45,080
teachers every time I mentioned force

1054
00:51:49,870 --> 00:51:47,750
and built that curriculum were building

1055
00:51:53,080 --> 00:51:49,880
on sand because most of the students

1056
00:51:57,040 --> 00:51:53,090
were not thoroughly using the word force

1057
00:51:59,500 --> 00:51:57,050
or concept as science uses it so just

1058
00:52:01,870 --> 00:51:59,510
that little idea of waking it into a

1059
00:52:04,780 --> 00:52:01,880
song and getting those definitions right

1060
00:52:07,870 --> 00:52:04,790
can change everything so these methods

1061
00:52:11,650 --> 00:52:07,880
form a solid foundation and then the

1062
00:52:14,230 --> 00:52:11,660
higher levels of learning of analysis

1063
00:52:16,300 --> 00:52:14,240

and theory and so can build on that I

1064

00:52:19,270 --> 00:52:16,310

think that's what we're losing in

1065

00:52:21,970 --> 00:52:19,280

education is that solid foundation on

1066

00:52:25,720 --> 00:52:21,980

which you can build I think that this is

1067

00:52:28,950 --> 00:52:25,730

a really a fascinating topic and I wish

1068

00:52:32,560 --> 00:52:28,960

we could continue on for a lot longer

1069

00:52:35,200 --> 00:52:32,570

unfortunately we can't at this juncture

1070

00:52:38,260 --> 00:52:35,210

perhaps we could have you on again when

1071

00:52:41,130 --> 00:52:38,270

you have your next book out however I

1072

00:52:45,870 --> 00:52:41,140

wanted to close with the question

1073

00:52:49,780 --> 00:52:45,880

because here at shattered reality we are

1074

00:52:53,950 --> 00:52:49,790

interested in edge science and frankly

1075

00:52:57,040 --> 00:52:53,960

paranormal phenomena and a lot of things

1076
00:53:00,339 --> 00:52:57,050
that can't readily be explained and one

1077
00:53:04,180 --> 00:53:00,349
of the general topics that seems to come

1078
00:53:07,480 --> 00:53:04,190
up is the topic of forbidden archeology

1079
00:53:09,640 --> 00:53:07,490
that is the catch phrase that is used in

1080
00:53:13,109 --> 00:53:09,650
the United States and maybe in Australia

1081
00:53:17,410 --> 00:53:13,119
too for all I know but it it sort of

1082
00:53:20,230 --> 00:53:17,420
stems around things that archeologists

1083
00:53:22,990 --> 00:53:20,240
have told stories down through the years

1084
00:53:25,060 --> 00:53:23,000
that this happened in Egypt and they

1085
00:53:27,520 --> 00:53:25,070
was separated from the people in

1086
00:53:31,300 --> 00:53:27,530
Australia and from the people in the

1087
00:53:35,350 --> 00:53:31,310
Americas and everybody was living in

1088
00:53:40,060 --> 00:53:35,360

caves before the Year 7000 or something

1089

00:53:42,400 --> 00:53:40,070

like the 7000 BC and now we're coming to

1090

00:53:45,940 --> 00:53:42,410

see that some of those quote unquote

1091

00:53:48,250 --> 00:53:45,950

facts may not be exactly the case now I

1092

00:53:51,130 --> 00:53:48,260

am not making a case for any one

1093

00:53:53,440 --> 00:53:51,140

particular persons theories but what I

1094

00:53:57,430 --> 00:53:53,450

will the question I wanted to ask you

1095

00:54:01,720 --> 00:53:57,440

lyn is simply have you been in contact

1096

00:54:05,440 --> 00:54:01,730

with some of these other people who are

1097

00:54:09,100 --> 00:54:05,450

scholars in their own right who think

1098

00:54:13,360 --> 00:54:09,110

that archaeology as was told in the year

1099

00:54:16,810 --> 00:54:13,370

1920 and perpetuated since then might

1100

00:54:18,790 --> 00:54:16,820

not be exactly the way it is well better

1101

00:54:21,250 --> 00:54:18,800

be Michael Cremona would be the main

1102

00:54:24,550 --> 00:54:21,260

architect oh well I also think of Robert

1103

00:54:29,410 --> 00:54:24,560

Schoch and John Anthony West and people

1104

00:54:33,190 --> 00:54:29,420

like that I have veining with some I'm

1105

00:54:36,270 --> 00:54:33,200

not qualified to I'm not knocking oh

1106

00:54:40,600 --> 00:54:36,280

just feeeel these orality

1107

00:54:44,820 --> 00:54:40,610

I certainly think archaeology has lacked

1108

00:54:47,530 --> 00:54:44,830

a recognition of the intellectual side

1109

00:54:50,800 --> 00:54:47,540

for me the common factor is the human

1110

00:54:54,130 --> 00:54:50,810

brain I don't think I'm qualified to

1111

00:54:56,140 --> 00:54:54,140

assess that but at the moment a lot of

1112

00:54:59,470 --> 00:54:56,150

archaeologists are looking much more

1113

00:55:02,350 --> 00:54:59,480

deeper at the way the human brain works

1114

00:55:05,820 --> 00:55:02,360

how emotions work a reaction to

1115

00:55:09,340 --> 00:55:05,830

landscape being far more emotional than

1116

00:55:12,730 --> 00:55:09,350

the purely pragmatic approach that's

1117

00:55:14,980 --> 00:55:12,740

been used but I'm far from the person

1118

00:55:17,080 --> 00:55:14,990

that that's an authority to be able to

1119

00:55:20,530 --> 00:55:17,090

talk about those things I still come

1120

00:55:22,450 --> 00:55:20,540

from a fairly scientific aspect but

1121

00:55:24,520 --> 00:55:22,460

admit there are things that happened

1122

00:55:27,310 --> 00:55:24,530

like happened to me at Chaco Canyon that

1123

00:55:29,740 --> 00:55:27,320

I can't explain and I'm perfectly happy

1124

00:55:32,560 --> 00:55:29,750

to say that I don't know everything and

1125

00:55:35,380 --> 00:55:32,570

I would only archaeologist I've dealt

1126

00:55:36,980 --> 00:55:35,390

with certainly in Australia feel the

1127

00:55:39,980 --> 00:55:36,990

same that they've only tap

1128

00:55:42,020 --> 00:55:39,990

the surface I think probably with you

1129

00:55:45,020 --> 00:55:42,030

and I think perhaps though that you may

1130

00:55:49,220 --> 00:55:45,030

have misunderstood me somebody like

1131

00:55:51,980 --> 00:55:49,230

Robert Schoch is a is a is a geologist

1132

00:55:56,089 --> 00:55:51,990

and the things that he talks about are

1133

00:55:58,760 --> 00:55:56,099

not that spiritually inclined per se but

1134

00:56:01,880 --> 00:55:58,770

because you had some interesting work on

1135

00:56:05,150 --> 00:56:01,890

Easter Island and he has done some very

1136

00:56:09,829 --> 00:56:05,160

interesting fact based work on Easter

1137

00:56:10,339 --> 00:56:09,839

Island as well as on Egypt and gobekli

1138

00:56:12,920 --> 00:56:10,349

tepe

1139

00:56:16,760 --> 00:56:12,930

I always don't pronounce that right but

1140

00:56:18,290 --> 00:56:16,770

I would and and it's not about most of

1141

00:56:22,579 --> 00:56:18,300

his stuff is really not about

1142

00:56:25,430 --> 00:56:22,589

spirituality but more about the ages of

1143

00:56:28,490 --> 00:56:25,440

these things I would think that your

1144

00:56:29,990 --> 00:56:28,500

work in the oral tradition the orality

1145

00:56:33,470 --> 00:56:30,000

if you will

1146

00:56:35,450 --> 00:56:33,480

might nicely augment some of his

1147

00:56:37,670 --> 00:56:35,460

findings and I'm only I'm only

1148

00:56:44,240 --> 00:56:37,680

suggesting that you look into it perhaps

1149

00:56:47,000 --> 00:56:44,250

and I suggest that with with all due

1150

00:56:48,770 --> 00:56:47,010

respect to you that sounds very

1151
00:56:51,260 --> 00:56:48,780
interesting I've avoided everything to

1152
00:56:54,890 --> 00:56:51,270
do with Egypt because those cultures

1153
00:56:59,720 --> 00:56:54,900
were all literate so I'm looking at that

1154
00:57:01,970 --> 00:56:59,730
now yes I'll absolutely look into it but

1155
00:57:06,620 --> 00:57:01,980
I can't comment on something I know

1156
00:57:10,130 --> 00:57:06,630
nothing about all right well I just I

1157
00:57:12,650 --> 00:57:10,140
saw it out there and and I think that

1158
00:57:14,960 --> 00:57:12,660
that's about no we have not mentioned

1159
00:57:18,109 --> 00:57:14,970
the good doctors book

1160
00:57:20,050 --> 00:57:18,119
oh geez let let her mention her book and

1161
00:57:24,589 --> 00:57:20,060
the publishers in the various places

1162
00:57:27,589 --> 00:57:24,599
because we have listeners in across the

1163
00:57:30,829 --> 00:57:27,599

United States and Canada and also in

1164

00:57:33,349 --> 00:57:30,839

Great Britain in Sweden and Germany in

1165

00:57:35,300 --> 00:57:33,359

Switzerland in Austria and it's a nice

1166

00:57:37,490 --> 00:57:35,310

new way of looking at things too you

1167

00:57:39,770 --> 00:57:37,500

know it's not the same old same old

1168

00:57:41,690 --> 00:57:39,780

no I think you've actually uncovered in

1169

00:57:43,370 --> 00:57:41,700

very interesting and pretty unique field

1170

00:57:44,900 --> 00:57:43,380

and people should look into it

1171

00:57:47,960 --> 00:57:44,910

and I'm looking forward to your new book

1172

00:57:51,779 --> 00:57:47,970

so I can become a memory palace every

1173

00:57:58,480 --> 00:57:56,019

the book it's the memory code it the if

1174

00:58:01,089 --> 00:57:58,490

anyone wants the academic version

1175

00:58:02,920 --> 00:58:01,099

Cambridge University Press has published

1176

00:58:06,910 --> 00:58:02,930

that as knowledge and power in

1177

00:58:12,819 --> 00:58:10,660

so it has a strong academic backing but

1178

00:58:14,890 --> 00:58:12,829

much more readable is the memory code

1179

00:58:19,539 --> 00:58:14,900

published in Australia by Eleanor nun

1180

00:58:22,210 --> 00:58:19,549

one in the US by Pegasus books in the UK

1181

00:58:24,549 --> 00:58:22,220

and Europe by Atlantic books and it's

1182

00:58:27,579 --> 00:58:24,559

available through all book shops Amazon

1183

00:58:30,279 --> 00:58:27,589

and anywhere you want readily available

1184

00:58:33,849 --> 00:58:30,289

and I'd be delighted if your readers

1185

00:58:35,620 --> 00:58:33,859

read it and let me know how they feel do

1186

00:58:39,970 --> 00:58:35,630

you have a website where they contact

1187

00:58:42,730 --> 00:58:39,980

you yes if they just google my name ly

1188

00:58:45,160 --> 00:58:42,740

double any kwy they'll get my website

1189

00:58:48,370 --> 00:58:45,170

straight away okay well thank you so

1190

00:58:50,130 --> 00:58:48,380

much for being our guest and excuse us

1191

00:58:53,049 --> 00:58:50,140

because we have a kind of a

1192

00:58:55,539 --> 00:58:53,059

rough-and-ready conversational style so

1193

00:59:01,029 --> 00:58:55,549

we do interrupt occasionally but with no

1194

00:59:03,359 --> 00:59:01,039

disrespect oh we did - it was great

1195

00:59:06,549 --> 00:59:03,369

speaking to you wish you best of luck

1196

00:59:08,170 --> 00:59:06,559

thank you talk to you after the new book

1197

00:59:12,460 --> 00:59:08,180

comes out oh please do

1198

00:59:14,620 --> 00:59:12,470

thanks Lynn bye-bye okay well that was

1199

00:59:17,890 --> 00:59:14,630

really interesting isn't it yeah I

1200

00:59:20,680 --> 00:59:17,900

really want to make one of those memory

1201
00:59:23,289 --> 00:59:20,690
devices well you know kidding aside with

1202
00:59:25,750 --> 00:59:23,299
the smartphone and you know her thesis

1203
00:59:28,200 --> 00:59:25,760
that the human brain is what's the same

1204
00:59:30,670 --> 00:59:28,210
through the ages and this is why as

1205
00:59:32,589 --> 00:59:30,680
dependent as they were on their memory

1206
00:59:34,180 --> 00:59:32,599
devices people now are dependent on

1207
00:59:36,760 --> 00:59:34,190
their phones I think you're onto

1208
00:59:38,950 --> 00:59:36,770
something there Kate I think so I think

1209
00:59:40,900 --> 00:59:38,960
people are alike whether it's now or a

1210
00:59:43,029 --> 00:59:40,910
hunter-gatherer back fifty thousand

1211
00:59:45,609 --> 00:59:43,039
years ago we all know where to get the

1212
00:59:47,559 --> 00:59:45,619
woolly mammoths mm-hmm I'm looking for

1213
00:59:48,279 --> 00:59:47,569

that woolly mammoth it's in the Museum of

1214

00:59:50,920 --> 00:59:48,289

Natural History

1215

00:59:53,500 --> 00:59:50,930

well 170 seconds when they get that DNA

1216

00:59:55,750 --> 00:59:53,510

from the woolly mammoth and make a new

1217

00:59:58,630 --> 00:59:55,760

one that's what I'm interested in what

1218

01:00:02,470 --> 00:59:58,640

I'd like to ask everybody is to check us

1219

01:00:04,030 --> 01:00:02,480

out on YouTube like us on Facebook let

1220

01:00:06,730 --> 01:00:04,040

us know if you would like to be a

1221

01:00:10,090 --> 01:00:06,740

guest in our listeners corner you can do

1222

01:00:12,460 --> 01:00:10,100

so in writing as well as verbally on the

1223

01:00:14,860 --> 01:00:12,470

actual show you can be a guest at the

1224

01:00:18,490 --> 01:00:14,870

end of the show or you can write the

1225

01:00:22,390 --> 01:00:18,500

stuff down include as much pertinent

1226

01:00:25,270 --> 01:00:22,400

information about your experience and if

1227

01:00:27,430 --> 01:00:25,280

you don't want to actually speak it

1228

01:00:30,610 --> 01:00:27,440

yourself we will read the account of

1229

01:00:34,630 --> 01:00:30,620

your sighting or encounter it can be

1230

01:00:37,150 --> 01:00:34,640

about UFOs orbs beings electronic voice

1231

01:00:39,850 --> 01:00:37,160

phenomena phantoms you name it we want

1232

01:00:45,150 --> 01:00:39,860

to hear at all please feel free to

1233

01:00:49,870 --> 01:00:45,160

comment on either of our websites either

1234

01:00:54,370 --> 01:00:49,880

HTTP colon slash slash shadowed reality

1235

01:00:57,610 --> 01:00:54,380

podcast dot wordpress.com or shattered

1236

01:01:00,400 --> 01:00:57,620

reality podcast comm you can comment on

1237

01:01:03,760 --> 01:01:00,410

either of those sites you can comment on

1238

01:01:08,110 --> 01:01:03,770

our YouTube pages or on our Facebook

1239

01:01:13,810 --> 01:01:08,120

pages we guarantee that you will receive

1240

01:01:16,330 --> 01:01:13,820

a response in short order so we are also

1241

01:01:18,970 --> 01:01:16,340

interested very interested in recent

1242

01:01:22,210 --> 01:01:18,980

accounts of what happened on the

1243

01:01:26,350 --> 01:01:22,220

aircraft carrier Nimitz so stay tuned

1244

01:01:28,690 --> 01:01:26,360

for more adventures about that you want

1245

01:01:32,530 --> 01:01:28,700

to say something no I'm done okay I'm

1246

01:01:40,140 --> 01:01:32,540

good - okay so now yes farewell from