

# SHINZEN'S BILLION DOLLAR HYPOTHESIS

00:00:00 Another thing that's happening is I'm on to the single most exciting science research  
00:00:14 prospect of my career.  
00:00:16 If my idea is right, well, you'll see it.  
00:00:23 You will definitely see it.  
00:00:27 So you want to hear the expansion and contraction on my idea?  
00:00:31 Yes.  
00:00:32 Okay, let's start with expansion.  
00:00:34 No.  
00:00:35 Which shall we start with?  
00:00:38 Let's start with expansion.  
00:00:42 So you know, it's a big thing for me, what I call the philosophy of the American philosopher  
00:01:01 Harry, I don't know if you've ever followed Harry.  
00:01:14 Dirty Harry pretty much summed it up for me.  
00:01:18 He used sexist language, but that was just his character.  
00:01:23 You have to forgive him for that.  
00:01:27 One very important philosophical point that comes across from Dirty Harry is a man's got  
00:01:36 to know his limitations.  
00:01:40 So what does that have to do with anything?  
00:01:45 Well there is a general tendency for people that have deep and authentic mystical experience  
00:01:54 to make broader claims about that than are justified, I think.  
00:02:03 Don't get me wrong, it's still the best thing ever, ever, ever for our species.  
00:02:08 But typically people that have these kinds of experiences claim that they have a special  
00:02:18 knowledge of the ultimate nature of nature and they have the final answer for everything.  
00:02:25 I think that that's an irresponsible claim.  
00:02:31 Irresponsible claims may seem innocuous enough, but they can poison our relationship to the  
00:02:38 scientific world.  
00:02:43 Because in science the one thing you are not allowed to do is make irresponsible claims.  
00:02:49 You have to have evidence and you have to have logic and it has to be tested and tested  
00:02:58 in many locations around the world for decades and decades before it's allowed to be called  
00:03:06 a theory.  
00:03:09 So it's a big deal.  
00:03:12 Because I am very colored by the philosophy of Dirty Harry, which is the philosophy of  
00:03:19 science, I don't like to make irresponsible claims.  
00:03:25 Why am I going to say that?  
00:03:27 Because I'm about to say something that's going to sound like the most egomaniacal,  
00:03:35 hideous, delusional claim that you have ever heard me make.  
00:03:43 But that's going to be the expansive side.

00:03:45 Then I'm going to show you the contraction that it's really not what you might think.

00:03:50 So I'm on to an idea that objectively, absolutely, incontrovertibly is worth billions of dollars.

00:04:04 I've got a billion, multi-billion dollar idea.

00:04:12 That is not an exaggerated claim.

00:04:16 I'll stand by it.

00:04:19 But now you have to hear the contractive side.

00:04:24 Whenever anybody says something, the first thing you ought to have to do is, what's your

00:04:29 definition of X?

00:04:32 You've talked about that over and over and over again.

00:04:36 By what criterion am I evaluating the monetary value of this idea, is the natural question

00:04:43 to ask.

00:04:45 I'm evaluating it by the criterion of the way all science projects are evaluated, what

00:04:54 statisticians call expected value or expectation value.

00:05:04 That is the value of success multiplied by the probability of success.

00:05:08 Follow what I'm saying?

00:05:12 That's the expected value.

00:05:15 It's basic statistics.

00:05:19 So what I gave you was not the value of the idea if it's successful.

00:05:27 I gave you the expected value.

00:05:30 The value of the idea if it's successful is vastly more than a billion dollars.

00:05:38 So what does that mean?

00:05:40 Yes.

00:05:41 The probability of success is not really big.

00:05:49 I give it a thousand to one.

00:05:52 Now you might think, well, that's a real letdown.

00:06:00 They call it blue sky research or moonshot.

00:06:04 It's actually an important aspect of science.

00:06:10 Some philosophers of science would say that blue sky research is the single most important

00:06:15 kind of research to do in science.

00:06:21 Projects that have a reasonable probability of success with a huge payoff.

00:06:28 But one in a thousand is actually a reasonable probability.

00:06:32 Every idea I've ever come up with before has been one in a million, one in a billion.

00:06:39 Not very likely.

00:06:43 This is better.

00:06:44 It's one in a thousand.

00:06:47 But still it's one in a thousand, so do the math.

00:06:52 However the payoff would be trillions and trillions in monetary.

00:06:56 It would change the course of human history.

00:07:01 You could put a price on it, just figure out what the price of the world is, and then do

00:07:07 some non-trivial percentage of that or some percentage of that.

00:07:12 So anyway, I got an idea and I've got scientists who think it's reasonable and I've got people

00:07:25 that are willing to pay for the research.

00:07:31 That's really, really cool.

00:07:34 But it's also something I have to devote some time to.

00:07:41 So there's that.

00:07:44 I've already told you what the idea is actually.

00:07:48 It's actually on the YouTube.

00:07:51 The last person that interviewed me, I laid it all out if you're interested.

00:07:55 I think it was the last interview with the gas—

00:07:59 Buddha at the Gas Pump, remember?

00:08:04 It was that one.

00:08:05 I was talking about atheim hormia and the basal ganglia and neuromodulation.

00:08:09 That was the last time I heard this Buddha at the Gas Pump.

00:08:14 I'm pretty sure I talked about it at the end.

00:08:18 One of the—

00:08:19 It was your happy skull.

00:08:20 It was the culminated with.

00:08:23 So it involves my favorite disorder.

00:08:31 I have a favorite disorder.

00:08:33 It's a rare neurological disorder.

00:08:39 It's horrible, don't get me wrong.

00:08:41 When it happens to people it's horrible, horrible, horrible.

00:08:46 But it may have a huge silver lining for research.

00:08:52 And even for those people, actually, if my hypothesis is correct, you can look it up

00:08:58 on Wikipedia.

00:08:59 It's called atheim hormia, A-T-H-Y-M-H-O-R-M-I-A.

00:09:08 You can read a popular article about it in Scientific American Mind 2005.

00:09:16 The article has the rather intriguing title of The Drowning of Mr. M—or no, no, I'm

00:09:25 sorry, Drowning Mr. M.

00:09:26 Would you spell it again?

00:09:30 A-T-H-Y—

00:09:31 Well, now once again, words and their actual meaning.

00:09:36 I'm going to tell you the Greek origins, but that's not what the condition means,

00:09:42 okay?

00:09:43 It's just what people called it.

00:09:45 So what does thymos mean in Greek?

00:09:49 T-H-Y-M-O-S.

00:09:50 I'll give you a hint.

00:09:52 Dysthymia, euphymia, alexithymia.

00:09:56 It's what I call feel.

00:10:00 Or it's emotion.

00:10:02 Okay.

00:10:03 Thymos is emotion.

00:10:06 And what's hormamine mean?

00:10:07 I'll give you a hint.

00:10:08 Hormone.

00:10:09 They stimulate you.

00:10:13 So it means stimulation or motivation.

00:10:20 A is an alpha privative, which means without.

00:10:23 So if you just look at the words, it seems to refer to a condition where there is no

00:10:30 emotion or motivation.

00:10:33 A-thym-hor-mia.

00:10:34 Ia is a condition.

00:10:39 Hormia is motivation or, yeah, motivation.

00:10:48 Thymos is emotion.

00:10:50 So A is without.

00:10:53 So the word seems to mean, but does not in its essence actually mean, a condition of

00:11:02 no emotion and no motivation.

00:11:05 Okay?

00:11:06 A-t-h-y-m-h-o-r-m-i-a.

00:11:13 Also sometimes called athymhormic syndrome.

00:11:16 It's a syndrome, which actually makes it interesting because it can be caused by a

00:11:23 wide variety of lesions in different locations and of different origins.

00:11:33 And they can even happen at different times in a person's life.

00:11:38 But if they happen in just the right place on both sides of just the right circuit in

00:11:47 the basal ganglia, you develop a caricature, not of stream entry, not of once-returner,

00:11:59 not of non-returner.

00:12:01 You develop a caricature.

00:12:04 I hope you all hear what caricature means.

00:12:07 Not the real thing.

00:12:09 A bizarre something like Arhatsha.

00:12:15 Full in-line, full liberation.

00:12:17 Complete breaking of the identification of the mind-body process.

00:12:22 Total freedom from desire.

00:12:25 And the ability to experience pain of any sort, apparently, without any suffering.

00:12:31 And the ability to maintain a total mental tranquility indefinitely as a pathological

00:12:41 state with a well-defined physical origin.

00:12:51 So of course, a neuropsych medical professional sees a horrific disorder.

00:13:08 I see a caricature of full liberation with a known physical cause, purely biophysical

00:13:21 cause.

00:13:22 And a biophysical cause that any first-year medical student would immediately see on an

00:13:30 x-ray.

00:13:31 Okay?

00:13:32 So it's nothing esoteric in that regard, but the effect on the human being is bizarre.

00:13:45 The other name for this condition is much more revealing.

00:13:51 It's mostly been studied by a handful of doctors in France.

00:14:00 The French name is PAP, P-A-P.  
00:14:04 Perte d'auto-activation psychique.  
00:14:10 Perte is loss.  
00:14:13 De auto-activation.  
00:14:17 Of inner auto-activation.  
00:14:21 They cannot boot personhood from the inside.  
00:14:26 Cannot.  
00:14:27 Now an enlightened person can manifest it or demanifest it as the conditions warrant,  
00:14:38 and the it is inner activation.  
00:14:43 People with this disorder are stuck on no-self, unless you activate them from the outside,  
00:14:53 in which case, in the most ideal perfect case of athymormia, where the lesions are like  
00:15:00 Goldilocks, not too big, not too small.  
00:15:04 If they're just the right size and just the right place.  
00:15:09 In the classic case, when you activate that person from the outside by speaking to them,  
00:15:18 they are completely normal.  
00:15:22 But unless you keep activating them, within a minute or two they fall back to a sort of  
00:15:33 bizarre noble silence.  
00:15:41 This to me is intriguing.  
00:15:45 It is not subtle.  
00:15:48 Knowing Mr. M is about someone who first noticed this condition while he was swimming in his  
00:15:57 backyard.  
00:15:58 The way he noticed it is that he no longer felt any need to swim or move his body.  
00:16:10 Now it's true, his head was in the water and therefore he was breathing water.  
00:16:17 He knew that he could turn his head any time he wanted, but breathing water, breathing  
00:16:24 air, not so different.  
00:16:27 He's aware that he's sinking to the bottom of the pool and that he's dying, but being  
00:16:35 alive, being dead, not so different.  
00:16:40 His daughter comes out, sees what's going on, screams and reactivates his normal self-preservation.  
00:16:50 He flails to the surface and doesn't die.  
00:16:53 Hence the intriguing title of the essay in Scientific American, Drowning Mr. M.  
00:16:59 It's in your book.  
00:17:02 Maybe I mentioned it briefly.  
00:17:03 Well, I've been looking a lot deeper into it, a lot deeper.  
00:17:13 It's not an easy subject to look into scientifically.  
00:17:20 Functional neuroanatomy at that level is not well understood.  
00:17:26 But in any event, it's a caricature, but it has some overlap.  
00:17:45 It's nothing mysterious or abstract.  
00:17:50 It's grossly physical.  
00:17:56 To me, the fact that it's stunningly dramatic and that it has some overlap—I don't know  
00:18:05 exactly what the relationship is.  
00:18:08 I mean, it is a disorder, but it overlaps in not just one or two ways.  
00:18:14 It overlaps in about a half dozen ways with what we're spending our lives trying to

00:18:21 achieve here.

00:18:27 So that combination of we know physically exactly what's happening and it has an overlap

00:18:34 and it can happen within a week or a few minutes, and it has an overlap, many intersections

00:18:45 with what takes a lifetime to achieve with practice is not the whole picture.

00:18:52 As soon as I talk about that, people, they think I'm stupid or something.

00:18:58 They think I'm equating this with what we want, or they think I think this is the whole

00:19:03 picture of what we want.

00:19:04 I'm not naive, but I am saying that some things really jump out in this as a possible research

00:19:14 avenue.

00:19:18 Not so much to have a physical intervention.

00:19:27 My paradigm is not so much, oh, we're going to figure out a way to accelerate meditation.

00:19:34 I'm much more grandiose than that.

00:19:42 My paradigm is we're going to simply make liberation part of standard medicine everywhere

00:19:48 in the world.

00:19:55 How could that possibly be?

00:20:00 Well, what's wrong, what's the difference between athymhormia and being an R-hot?

00:20:11 I told you what the similarities are.

00:20:14 That R-hot can activate itself.

00:20:17 That's certainly one difference.

00:20:19 I didn't hear that.

00:20:20 An R-hot can activate itself if need be.

00:20:25 I can show you the similarities, I can show you the differences, and then I can make some

00:20:33 conjecture about how we may be able to get the baby and throw away the bathwater, so

00:20:43 to speak.

00:20:44 If that metaphor makes sense.

00:20:49 The baby being the liberation, the jewel and the lotus.

00:20:54 What is different?

00:20:55 Well, clearly one thing that's different is, see, this is why the condition is so perplexing

00:21:06 to doctors, the few doctors that know about it or have researched it.

00:21:10 It's very rare, by the way, very rare, because like I say, the lesions have to be in exactly

00:21:18 the right spot and exactly the right size.

00:21:21 If they're not big enough or not in the right locations, then you won't get this dramatic

00:21:29 effect.

00:21:30 If they're too big or in the wrong locations, you get a whole bunch of other effects that

00:21:35 basically leave that person totally disabled and you can't boot a self by talking to them.

00:21:43 They have what's called a kinetic mutism.

00:21:49 The thing about atheimhormia is, on the surface it looks like a kinetic mutism.

00:21:54 A kinetic mutism means you no longer move and you no longer talk, but you're not in

00:22:01 a coma, you're not paralyzed, you're not even somnolent, you're not depressed, but you just

00:22:12 no longer talk or move ever.

00:22:14 So you might as well be in a persistent fidget.

00:22:19 That's the extreme case of a kinetic mutism.

00:22:22 That's when you get the lesions, similar lesions, but they're too big and then they just wipe  
00:22:27 you out.  
00:22:29 This is expansion and contraction.  
00:22:31 It's just right so that it leaves the possibility that just by speaking they're back to normal  
00:22:39 without cognitive or behavioral deficit for about a minute.  
00:22:48 So you have to keep activating them.  
00:22:50 Of course, if someone were to simply create an app that talked to them all day, presumably  
00:22:58 they'd be back to normal.  
00:23:01 Let's see, who knows how to design those kinds of apps?  
00:23:05 I think I do.  
00:23:14 One difference is you can't manifest self unless you are dependent on another person  
00:23:22 manifesting, drawing it out of you.  
00:23:25 But in the most ideal case, they're actually just normal for a few minutes.  
00:23:35 I actually have a student who was a neuropsych evaluator who had this condition in a patient.  
00:23:47 He's one of my facilitators back east.  
00:23:52 He teaches neuroscience now actually.  
00:23:55 But he wrote up a case study and he confirmed for me just on his anecdote that absolutely  
00:24:02 that's what it was like.  
00:24:05 The guy never complained.  
00:24:07 He'd been a math prof at one of the New York universities, the patient.  
00:24:14 If you asked him to deliver a lecture on advanced math he could do it just fine if you kept  
00:24:21 him going.  
00:24:23 But if you went away he would just sit there and look at you and wouldn't eat and wouldn't  
00:24:28 move all day, day after day.  
00:24:32 Not subtle, okay?  
00:24:35 The size of these lesions, rice grain, but bilateral.  
00:24:46 For a few rice grains over the head of the caudate nucleus will do this if it's just  
00:24:52 in the right place.  
00:24:55 Whoa, that's pretty dramatic.  
00:24:57 Okay, one difference, it's totally dysfunctional obviously so we don't want that.  
00:25:06 So what makes up an integrated enlightenment?  
00:25:11 Well concentration, clarity, equanimity, plus wisdom.  
00:25:16 You have a paradigm about how, you know, about emptiness, suffering, self.  
00:25:24 You've got a view, a darshan, a dhāwa as the Tibetans say.  
00:25:29 There's wisdom function.  
00:25:32 And then there's the whole dimension of practice that might be called integration of the void,  
00:25:40 the degree to which emptiness, your own emptiness, the emptiness of the world is a healthy, empowering,  
00:25:50 enlivening, fulfilling, and liberating for you versus the degree to which it's not that  
00:25:59 yet.  
00:26:01 Some people have no difficulty integrating the void.  
00:26:04 Some people have to work at it.  
00:26:07 Some people have to work a lot harder at it.



00:26:10 Every now and again you get the dark night where it's actually sort of catastrophic but  
00:26:21 still fixable.

00:26:23 But that's very labor-intensive and may take a long, long time to fix that.

00:26:28 So you have this whole spectrum of a dimension that might be called the degree to which the  
00:26:35 emptiness or the nothingness of self and world has been integrated.

00:26:41 It's functional.

00:26:45 It does good things.

00:26:47 So concentration power, sensory clarity, equanimity, insight, wisdom, and integration of the void  
00:27:01 might be one way to talk about dimensions of the practice.

00:27:09 So here's my hypothesis.

00:27:13 People with this condition have been biophysically, have biophysically induced irreversible perfect  
00:27:27 equanimity or something like that.

00:27:32 Well, that actually could be a good thing.

00:27:37 The one characteristic in all cases reported is they don't complain about anything.

00:27:46 Now are they actually happy?

00:27:51 Okay so doctors know how to do something that they call a mental status exam.

00:27:56 If you go on YouTube and learn how to do it, it's interesting.

00:28:00 I did just for the fun of it.

00:28:06 Because they're a professional and it took actually many, many decades to figure out  
00:28:12 how to teach doctors how to do this, a quick mental status exam.

00:28:16 It's very systematic.

00:28:17 It's very clever.

00:28:21 Like I say, if you're interested, just mental status exam on YouTube and you can get a little  
00:28:26 tutorial on how to do it.

00:28:28 Why do I mention it?

00:28:29 Well, I'm a professional and I know how to do something called spiritual status examination.

00:28:36 It's just as well thought out and it's just as systematic.

00:28:40 No one has ever done a spiritual status examination on an athymormia patient.

00:28:48 I'm going to see if I can pull some strings and make that happen.

00:28:55 Until then I can make a hypothesis.

00:28:58 My hypothesis is they have a physically induced profound equanimity and they probably do not  
00:29:13 have the taste of concentration or sensory clarity, because that has to be cultivated.

00:29:20 And they probably do not have the insight and they probably have not integrated their  
00:29:28 own nothingness.

00:29:29 So they're probably lacking those three elements, four elements, is my guess.

00:29:36 So the question is, and I'm not pretending I know the answer to this question, but if  
00:29:46 the answer happened to be in the affirmative, that could be very, very good.

00:29:52 But I don't have a clue.

00:29:55 But I certainly know what the question is.

00:29:58 Since these are all dimensions of a single gestalt in healthy practice, will the fact  
00:30:08 that one of those dimensions seems to be on max all the time, would that make it easier  
00:30:18 for them to quickly attain the other dimensions with interactive guidance?



00:30:25 Because remember you can turn them on by interacting.

00:30:30 So if they were given a little bit of interactive coaching, could we re-engineer this from a

00:30:39 bizarre caricature to something like the real thing?

00:30:47 Is there a potential for neuroplasticity in this condition?

00:30:52 I have no idea.

00:30:54 But I think it's an important question.

00:30:56 These lesions are static?

00:31:00 They're permanent, yeah, if that's what you mean.

00:31:06 And they happen...

00:31:07 Well, they're permanent and they don't change size.

00:31:10 That's correct.

00:31:11 Well, it's sort of...

00:31:14 Let's see.

00:31:16 They may change size if they're dependent on tumors.

00:31:21 It can be caused by a lot of things.

00:31:23 That's what's so amazing.

00:31:24 It can be caused by ischemic stroke, what are called lacunar infarctions.

00:31:31 But it can be caused by tumors in those locations.

00:31:34 Those might change size.

00:31:36 It can also be caused by carbon monoxide poisoning.

00:31:41 Apparently the basal ganglia are very vulnerable to carbon monoxide poisoning.

00:31:48 There's even one case where it was caused by a wasp sting, an anaphylactic shock.

00:31:55 Happened for whatever reason to hit right in the right place in the basal ganglia.

00:32:01 So they can be caused by various things, but essentially, yeah.

00:32:06 So let's say we got lucky.

00:32:11 Let's say that there's a one in ten chance that there's some potential for training here

00:32:24 that's significant.

00:32:27 That's just a guess.

00:32:28 It might be one in a hundred.

00:32:34 So if that were the case, that would be interesting and good for patients, for the few hundred

00:32:45 people around the world that has this condition.

00:32:48 We put it into an app for them and it would be nice.

00:32:54 But then we have to, of course, ask bigger questions.

00:32:57 Of course, go big or go home.

00:33:01 So let's say we got lucky.

00:33:04 Let's say it turns out that because they're in perfect equanimity, they can acquire all

00:33:08 this other stuff in a few weeks.

00:33:13 Now they'd still need an app to keep them like human, okay?

00:33:19 But the combination of that app, the app would deliver two things.

00:33:23 It would keep them activated and it would train them in what they lack.

00:33:29 The paradigm, the integration, the concentration, the clarity skills.

00:33:35 Let's say we get lucky and this works.

00:33:37 Well that's great for a few hundred people that have a rare disorder.

00:33:47 And I don't give that even a high probability.

00:33:51 That's low probability that this is so.

00:33:55 Let's say we got lucky and it turns out it is so.

00:33:58 What's the next question?

00:34:00 What about everyone else in the room?

00:34:07 Well now, we could, of course, through various means, high intensity focused ultrasound,

00:34:17 for example, we could lesion your brain and then give you the app.

00:34:24 That something tells you that this is not going to get FDA approved.

00:34:35 Yes, imagine the IRB.

00:34:41 We want to take a healthy person and cause a horrific dysfunction that will cause their

00:34:49 family to have to pay millions and millions of dollars to warehouse them for the rest

00:34:53 of their lives.

00:34:54 And we would like human subjects approval to do this.

00:35:01 Well, maybe in the Third Reich, but certainly not in the civilized world.

00:35:11 But let me throw out a very weird sounding word, a very weird sounding phrase that is

00:35:19 not science fiction, but it actually is science, is done, is known.

00:35:26 You can look it up if you want.

00:35:28 It's going to sound a little weird, a little oxymoronic.

00:35:37 The phrase is virtual lesion.

00:35:41 Now you say, what the hell is a virtual lesion?

00:35:49 A lesion means destruction, damage to tissue.

00:35:57 So what's a virtual lesion?

00:36:01 Specifically what's a virtual lesion in someone's brain?

00:36:07 There are forms of neuromodulation which will temporarily downregulate or even suspend the

00:36:17 activity of a certain region in the brain in a way that no harm is done and the normal

00:36:26 activity returns in a short period of time.

00:36:31 That's a virtual lesion.

00:36:36 They're not very controllable at this point in terms of precision, location, and so forth.

00:36:42 But it is done.

00:36:44 It's done for basic science research and you can get an IRB for that.

00:36:49 You can get an Institutional Review Board approval.

00:36:52 That means a human subject's approval is done all the time.

00:36:56 I volunteer.

00:36:58 Now I've already decided which cranium is going to be the first one to go under the

00:37:07 virtual scalpel.

00:37:10 Guess which one?

00:37:12 It's a long, long tradition in medicine of doctors researching on themselves.

00:37:19 Sometimes the results have been fatal.

00:37:21 I didn't want you to hear that.

00:37:22 Maybe it won't have any effect on you.

00:37:23 How will you know?

00:37:24 Well, actually, my thing is I probably know better because I can calibrate the dose and  
00:37:33 the location.

00:37:35 Would you lose the ability to calibrate?

00:37:39 Not if they're talking me through because you could activate me.

00:37:44 Oh, you guys are all freaking out.

00:37:46 Remember, the universities where we're planning on doing this will not give approval.

00:37:54 Unless it is absolutely safe.

00:37:58 I can promise you there's no university in the civilized world that is going to let anyone  
00:38:05 do anything on anyone where there's a potential for damage that is known.

00:38:16 No one will allow me to do this unless a very, very tight ass group of people have looked  
00:38:28 at it and said, this is safe.

00:38:31 This is not like you can't just go off and do stuff.

00:38:36 You have to get institutional approval.

00:38:39 They have structures and they are very, very conservative as to what they let you do.

00:38:46 Don't worry, I'm not going to come back like Max Headroom or something.

00:38:59 The next question is, can we temporarily induce it with virtual lesions?

00:39:07 Probably not, unfortunately, because the virtual lesions are hard to control.

00:39:15 Remember, we're talking about surgical strikes here.

00:39:18 We're talking about cubic millimeter precision.

00:39:23 So probably not too bad, but hey, let's give it one in ten.

00:39:29 Let's be generous.

00:39:31 Well, if number one turned out, that's a one in ten shot.

00:39:38 And number two turned out, that's a one in ten shot.

00:39:40 So now we're talking about a one in a hundred shot.

00:39:46 But that would mean that we could take people, put them in this state and accelerate their  
00:39:55 practice.

00:39:57 That would be good for the meditators of the world.

00:40:00 But like I say, my ambition is much, much bigger.

00:40:08 It's like everyone or it's todo o nada.

00:40:13 It's like you do the whole thing, we fix the planet or I'm going home.

00:40:23 The next thing you'd have to get very lucky is that the medical establishment realizes  
00:40:33 that this is an alternate, a better way to do a whole bunch of things that they're currently  
00:40:40 trying to do.

00:40:42 Like treat addiction or manage pain or induce general anesthesia or cure depression.

00:40:58 For people to be depressed, you have to have negative ideation.

00:41:07 There's no such thing as being depressed without intense, incessant negative rumination.

00:41:22 People in an athiomorphic state have no rumination at all.

00:41:27 They can't ruminate, even if they wanted to.

00:41:31 I've got to ask myself, if we had safe, virtual athiomorphia and you took a depressed person  
00:41:41 and suspended their depression completely for an hour or a week and were guiding them  
00:41:58 in mindfulness practice the whole time, when that intervention is over, would it have any  
00:42:05 effect?

00:42:06 Who knows?

00:42:07 But it's not a ridiculous question.

00:42:16 Maybe you get lucky.

00:42:17 Maybe you've got a cure for depression.

00:42:21 I'll put a monetary value on that.

00:42:29 So we'd have to get lucky, number one, and we probably won't.

00:42:34 The first lucky is the condition is actually one of enhanced neuroplasticity for acquiring

00:42:43 the other factors you need to be liberated.

00:42:48 Probably not, but maybe.

00:42:52 Then we'd have to induce it safely, reliably, controllably, easily, non-invasively.

00:42:59 Is there a way to do that now?

00:43:05 Probably not, but maybe.

00:43:08 Then it would have to turn out that doing that turns out to solve a lot of standard

00:43:13 medical things.

00:43:16 We know for sure that people in an athiomormic condition report pain, even intense pain,

00:43:25 without suffering.

00:43:29 In other words, they feel it, but they don't experience it as a problem.

00:43:34 I mean, I've meditated for a long time, but I cannot breathe water as easily as I breathe

00:43:40 air.

00:43:41 And this guy did in a minute, just because he had a tumor in just the right place.

00:43:53 So is this another way to have analgesia, anesthesia?

00:44:03 I don't know, but it's not a ridiculous question.

00:44:11 So first we have to get lucky the condition is treatable.

00:44:15 When we have to get lucky, we can induce it simply, reliably, safely, non-invasively,

00:44:28 controllably.

00:44:30 These are all big things.

00:44:32 And neuromodulation at this point might be able to do that.

00:44:45 So that's get lucky number two.

00:44:47 Then get lucky number three, it turns out that when you do this, it's not just a nice

00:44:52 thing for people that want to meditate, it speeds up your practice.

00:44:56 It has one, but I'm guessing if it has one, it probably has a half dozen, significant

00:45:08 applications in standard medicine, both physical medicine and psychiatry, addiction recovery.

00:45:17 That's get lucky number three.

00:45:23 Now how do you compute the probability of the overall success if it's contingent on,

00:45:34 let's say, one in ten chance of A, one in ten chance of B, one in ten chance of C?

00:45:43 What's the total probability of success?

00:45:45 One in a thousand.

00:45:47 One in a thousand.

00:45:48 It's a tenth.

00:45:49 Are you sure about three being one in ten?

00:45:50 Are you sure about your third case being one in ten, or do you guess it's one in ten?

00:46:00 My guess is somewhere between one in ten and one in a hundred for each of these.

00:46:08 So what does that give us?

00:46:09 If it's one in a hundred, that gives us a total probability of one one hundredth times

00:46:20 one one hundredth times one one hundredth.

00:46:22 What's that?

00:46:23 That makes it one hundred.

00:46:25 If it's ten, it's one tenth times one tenth times ten.

00:46:30 It's one in a thousand.

00:46:32 So somewhere between a million to one shot and a thousand to one shot I think is reasonable.

00:46:42 But the payoff is still going to be in the tens of trillions.

00:46:47 So the expected value is just huge.

00:46:50 So that's pretty exciting.

00:46:51 Question?

00:46:52 Yeah.

00:46:53 Can you explain why number one is necessary?

00:47:03 Well if it's not trainable, then it's not a situation that can be used to accelerate

00:47:16 spiritual growth.

00:47:20 Number one means...

00:47:23 If those subjects have possibly a normal brain that has a temporary lesion, a virtual lesion,

00:47:30 I am going to...

00:47:31 ...exclude number two.

00:47:33 Yeah, I'm going to guess that because the only thing different about the person with

00:47:41 the permanent lesions and the temporary lesions is one is permanent.

00:47:47 There's no other difference in the most idealized case of atheanormia.

00:47:54 There's a lot of difference that we know of, but there's a few subjects with the condition.

00:48:03 It seems to me that it might still be reasonable, even if number one fails, to find a, hopefully

00:48:08 not Shenzhen first subject, to step up and have a virtual lesion.

00:48:15 I'm guessing since the physical and psychiatric exams on the most idealized atheanormic patient

00:48:24 show them as being completely normal, it's most likely that there's nothing else going

00:48:29 on there.

00:48:30 So that's a nice idea.

00:48:31 You didn't have your first sell to the institution that you were also a part of.

00:48:32 You didn't have number one success.

00:48:33 No, no, actually...

00:48:34 Oh, now you're on to something.

00:48:35 Okay.

00:48:36 Now you're on to what we're actually going to probably do.

00:48:49 I don't think I'm going to be able to get access to the atheanormia patients.

00:48:55 That's a big deal because it's too rare and I don't think I'm going to be able to do that.

00:49:02 So I'm going to make a hypothesis that it's trainable and we're going to go right to the

00:49:08 virtual lesion.

00:49:10 So you're absolutely correct in that you're totally on the mark with respect to my strategies.

00:49:24 We want your brain.

00:49:27 So this isn't what I intended to talk about at all.

00:49:32 Here we are.

00:49:33 Did we get it on camera?

00:49:35 It's all on camera.

00:49:36 Okay.

00:49:37 We've got the record of it.

00:49:38 You heard it here first.

00:49:41 It's still between one in a thousand and one in a million.

00:49:46 But if we get very, very lucky, this is going in the archives, you could all say, I was

00:49:55 there when they made that YouTube.

00:49:59 The one that has a thousand more views than any YouTube in the history of YouTube because...

00:50:11 So that's my thing.

00:50:12 Okay, go big or go home.

00:50:15 Have you ever got a dark night in a brain scene?

00:50:22 No.

00:50:23 I don't think someone else has.

00:50:27 But what we did capture at Harvard was a physical cessation in one of the participants, a real

00:50:41 neuroda where she was gone, gone, gone for a minute or two.

00:50:49 We captured that in an MRI scanner.

00:50:53 Even though it's been years ago, we still have not gotten around to analyzing that part

00:50:57 of the data.

00:50:58 It takes forever to analyze this data.

00:51:02 But we did capture that, but no, we've never gotten a dark night.

00:51:04 Well, I'm sorry.

00:51:05 I just got carried away.

00:51:07 I was just going to explain why I might not be answering your phone call.

00:51:15 Now I filled in the details so you can maybe have some vicarious whatever...

00:51:24 Say what?

00:51:25 You'll continue to retreat?

00:51:26 Oh yeah, yeah.

00:51:29 You won't see that much difference, just maybe a little latency in my response.

00:51:34 And now we're getting at equanimity.

00:51:38 Because he's off on his mad scientist trip doing what he always wanted to do, which is

00:51:48 control people's brains.

00:51:51 Okay, well, sorry about that.

00:51:56 I got carried away.

00:51:58 Is there anything we can do to help?

00:52:03 Volunteer your brain?

00:52:04 No, deepen your practice.

00:52:09 That's what helps.

00:52:11 It forms the base in the world to deepen your own practice.

00:52:15 Because the more people that go deep, it creates a culture where someday some team of researchers

00:52:28 will pull off something like this, if we can last long enough.

00:52:33 Now, can we last long enough?

00:52:36 That's a whole other thing.

00:52:37 I'm not going to predict if we're going to make it or not.

00:52:41 But if we can somehow just hang on, keep civilization going for another century or so, I would say

00:52:50 there's a high probability that some group of people will come up with something like

00:52:58 this.

00:52:59 And then the world will change rapidly, rapidly for the better.

00:53:06 It's the old messianic vision, but not based on mythology, based on logic and evidence.

00:53:15 So anyway, so much for that.