Bret and Heather 95th DarkHorse Podcast Livestream Collecti...

Sat, 10/9 12:14PM • 1:18:16

**SUMMARY KEYWORDS**

consciousness, book, idea, taboo, learn, fact, rituals, culture, carnival, humans, niche, wisdom, read, excerpt, tension, people, working, innovation, species, share

**SPEAKERS**

Bret, Heather

**Bret** 00:11

Hey folks, welcome to the Dark Horse podcast live stream number 94 to 94.

**Heather** 00:16

It's 95

**Bret** 00:17

it's nine. Welcome to the Dark Horse podcast number 95. I am Dr. Brett Weinstein. This is Dr. Heather hying. We are your dark horses and chiefs. Now that doesn't work. Sorry, I thought it did. And then it turned out that it didn't, doesn't know it doesn't work, right?

**Heather** 00:33

Yeah. Today we are going to be talking about culture and consciousness. That is the subject of the penultimate chapter of our forthcoming book, hunter gatherers guide the 21st century and we have been walking through these chapters a little bit every week in the run up to the publication date, which is now only a week and a half away. So we're going to be talking about collective joy and dancing in the streets and taboo in the sacred in the shamanistic and hallucinogens a little bit and Hell

**Bret** 00:59

yeah, this is where the rubber meets the road, is it? It's one of the places that the rubber meets the road.

**Heather** 01:03

I'm not sure that I'm not even sure what it is. If that's a that's a metaphor. I don't I'm not sure that applies, but maybe

**Bret** 01:09

all right, no, I'm pretty sure metaphorically, we're right there. Although I think

**Heather** 01:12

you may have just given someone a very bad trip, frankly.

**Bret** 01:16

Well, yeah, I hope they were sitting down

**Heather** 01:19

or lying down. Okay, so we're gonna be spending our time with you on that today. And then we'll do the q&a afterwards where, you know, all all topics are possible, but we never get to all the questions and we and we pick and choose the questions that you send in. You can write in questions at Dark Horse submissions.com, which again, we will get to. We'll do this for an hour, hour and a half. Take a 15 minute break or so and then come back. for an hour or so of q&a afterwards. We are streaming on both YouTube and on Odyssey the chat is live on Odyssey. It is not live on YouTube. Just because keeping track of two chats was a little much for our awesome moderators. consider joining our Patreon to help support us especially since we are still demonetised here on YouTube. Brett had an amazing conversation this morning with one of his Patreon groups and you'll be having another one tomorrow

**Bret** 02:14

since I phone conversation. Thank you for it guys.

**Heather** 02:17

Excellent. For those of you watching as I guess at the moment everyone is paying attention right now is watching you just saw the back of Fairfax's head so we will be having occasional cameos from from Fairfax the cat hopefully. Goliath t shirts and other and other Dark Horse wares are available at store dot Dark Horse podcast.org please consider coming over to natural selection is.substack.com to see weekly writings from me this week I was writing about flow and various manifestations of how it is that humans find flow and therefore meaning. And today we have before we get into the bulk of the show two ads for you. First we have all for this week Show is sponsored by all forum and also by ExpressVPN. But first all forum is a company that is making absolutely terrific sofas. What makes it terrific well you can customize your size layout materials easily and that comes at a fraction of the cost of traditional sofas pick your fabric color shape to fit your home needs perfectly. They do armchairs and love seats all the way up to an eight seat sectional. You can start small and buy more seats later on without needing to get a whole new sofa. All firm sofas are also delivered directly to your home shipping is free. They're delivered fast just three to seven days and you can assemble it yourself. We've got a beautiful section on all forms sofa and whiskey leather. It's soft and supple and not cold and many people with leather furniture will recognize that often it's cold and what seemed wonderful at some time of the year did not seem wonderful later and now we have not had the sofa in the winter yet but it feels so warm that it feels like it's going to be inviting even when it's cold outside the four of us in the dog and the cats often pile on it to watch movies, some evenings it looks beautiful, it's very inviting and comfortable. And we just we really enjoy it a lot and if you order one don't like it they've got 100 day um they've got a 100 day full refund policy so you can say no thank you for whatever reason, and they'll come and pick it up for free and they also offer a forever warranty. So to find your perfect self checkout all forum comm slash Darkhorse and you will get 20% off all of your order off all of your orders for listeners to to Darkhorse. forum.com slash Dark Horse and I am

**Bret** 04:45

Excellent. Well, I will see if I can improve on that right. Here's something I did not know about ExpressVPN even though I have been using it, which is that Netflix actually restricts what shows you can watch based on your location and if you use ExpressVPN you can therefore watch shows that are available in other locations that you don't have access to at your home location. So for example, you can look at Pulp Fiction on Canadian Netflix, you can watch Modern Family on UK, Netflix, you can watch Spirited Away on Australia, Netflix, and so on. So how does this happen? ExpressVPN unblocks the content by changing your apparent online location that adjusts your ISP, they have almost 100 different server locations. And this works with many other streaming services as well. I personally have watched bbc documentaries that are not accessible outside of the UK by switching my location so that it appears that I am in the UK and you can do this without even faking the accent

**Heather** 05:49

I was just going to ask you not even having to affect the accent I do not know that can be fun. I do

**Bret** 05:53

it anyway, right? Of course, you know. So first, but the fact is you don't have to fake the accent and you can still watch everything on the BBC, which is great. So why should you choose Express VPN? When there are many VPNs available one blazing fast speeds, they really are fast, because they have all of these locations. And somehow the interrelationship between them has been well optimized. So you will barely notice that anything different is happening except that from the point of view of your ISP, and others who might watch your behavior, they can't tell who you are because you've been pooled with other users. It is compatible with all of your devices. It's compatible with your phones, laptops, Media Console smart TVs, and it encrypts your data. So you really are hidden in your data won't be sold to people who aggregate such things to build a model of you that they will then use to exploit your own psychology against you or whatever it is that they do. So

**Heather** 06:45

for instance, for example,

**Bret** 06:47

model your psychology and sell your things you don't need. convince you of things that aren't true. Alright, so be smart. Stop paying full price for streaming services, only to get a small fraction of their content get your money's worth@expressvpn.com slash Darkhorse. Don't forget to use our link at ExpressVPN XP p r. e S. S vpn.com slash Darkhorse to get an extra three months of Express VPN for free

07:20

scream or something that says that it is sending a really bad HDMI signal 91 issue mic, you know,

**Heather** 07:29

are we still are we still streaming live but

**Bret** 07:32

we are live we are having a technical difficulty. Hey, Zack, wiggle the cable.

**Heather** 07:36

I've done that I need. So what is it that you need?

07:39

So you're monitoring screen that has pastor's message. And I need your

**Bret** 07:47

you continue on?

**Heather** 07:48

Okay. Maybe Maybe I should begin by reading an excerpt. Since I honestly have no idea what it is that Zack is asking for from us. I don't I'm not currently in the possession of cables. Therefore I have no cables to offer. Why while again, while we are working on our technical problems, I am going to read one of three excerpts this week from we have it here we actually just yesterday got a copy of the actual book in hand, a hunter gatherers guide to the 21st century evolution in the challenges of modern life. And man, this is feels really, really good to have this after, you know, depending on how you count, months of waiting years of waiting well over a decade in the making. So like we said, the penultimate chapter of the book is culture and consciousness. And we are going to share three excerpts from it today. And still, you know, I basically wanted to read all of it, but we're not we're not doing that. So, let us begin. Let us begin with definitions. These will not precisely match others definitions, but it is important on this topic to have stated what we are talking about. For our purposes. Culture, we define as beliefs and practices that are shared and passed between members of a population. These beliefs are often literally false, metaphorically true, implying that they result in increased fitness if we act as if they are true, despite the fact that they are either inaccurate or unfalsifiable. Culture is a special mode of transmission because it can be passed horizontally, rendering cultural evolution immensely faster and more nimble than genetic evolution. This also renders culture noisy in the short term, before new ideas have entered the test of time. long standing features of culture, by contrast, constitute an efficient packaging of proven patterns. culture can spread horizontally, but its consequential parts are ultimately passed vertically from generation to generation. Culture is received wisdom generally handed to you by ancestors and officially transmitted. Consciousness we define as we laid out in the very first chapter of the book as that portion of cognition that is newly packaged for exchange, meaning that conscious thoughts are ones that could be delivered. If someone asked you what you were thinking about. It is emergent cognition. where innovation and rapid refinement occur. conscious thoughts might never be conveyed, but they can be and the most important and the most important ones are as consciousness is most fundamentally a collective process in which many individuals pool insights and skills to discover what was previously not understood. The parts of consciousness are if they prove useful, ultimately packaged into highly transmissible transmissible culture. We have said before in the book that the human niche is niche switching. More specifically, we argue that the human niche is to move between the paired inverse modes of culture and consciousness. As an example, let us consider the Nez Perce people who have lived in the Pacific Northwest for many 1000s of years. Since they arrived, they have inhabited a rich land, and they now have well established cultural rules that keep them safe and thriving. their diet has long included bulbs the storage organs of plants, which do not want to be eaten on these lands with the Nez Perce came to live with chemists with highly nutritious bulbs and death chemists with bulbs that are toxic grow. When not in flower, these bulbs are incredibly difficult to tell apart, then, as parents may not have been the first on this land, but someone was and those first people could not benefit from names that would make the danger clear. Yet they learned the distinction, presumably through trial and error. It was likely a messy, tragic process. But the 19th century However, when Spaniards were documenting what they saw among the Nez peers, the system of distinguishing nutritious cameras from their deadly relatives was nearly perfect. This is culture. When humans were exporting a well understood opportunity like 19th century as peers distinguishing cameras from death cameras, culture is king. But But novelty renders ancestral wisdom inadequate, as it was, as it was, for the more ancient ancestral knows Paris upon arrival in the Pacific Northwest, we need to shift to consciousness. Through parallel processing of multiple human minds, our consciousness can become collective, and we can solve problems that either we could solve as individuals, our ancestors could have even imagined. But another way, in times of stability, when inherited wisdom allows individuals to prosper and spread across relatively homogeneous landscapes, culture reigns, but in times of expansion into new frontiers, when innovation and interpretation and communication of new ideas or critical consciousness writes, that said, novel levels of novelty, such as we are experiencing now are a special danger. This means that what is needed today and urgently is a call to consciousness on a scale that we have not seen before. So that's our first excerpt for today. And we are back we are back in business here, tech wise.

**Bret** 12:27

Well, let's treat it as if it works. And if not, we will resort to other cameras. Yeah, so I'm really excited that this model is in the world. We have talked about it, at least once publicly before we talked about it on a discussion with Robbie George, on a talk for Princeton in the spring of last year. But I do think that humans are, as my advisor dick Alexander famously said, The uniquely unique species and the question really is what is it about humans that allows us to be uniquely unique? And I believe that this model is a strong contributor to the difference? So just to flesh it out a little bit? Yeah. People will recognize that when we say you know, something like, What does what is a tufted titmouse? Right, we are talking about a particular species, and as

**Heather** 13:22

people remarkably do occasionally say to us, Well, sure, yes. I mean, why wouldn't you? What is a tufted? What is this after titmouse? I can answer that question who did a tufted

**Bret** 13:29

titmouse is just a stand in for any species. And in general, if you ask what a species is, it comes with a description of a niche. each species has some set of things and it doesn't, it can be a very broad, generalist niche, you know, a raccoon has a very generalist niche, it does a lot of different things. A little poorly, mountain lion crows, a little different mountain lion. different populations will exploit different kinds of prey. And so depending upon the habitat, they may look very different. But for human beings, it's very hard to specify what the niche is. Because if you look at all of the various things that people do, it's tremendously variable. And if you look at all of the things that people have done, while we have been fully modern people, it's even more variable, it's

**Heather** 14:14

even more variable in some ways. In many ways we're getting we're becoming a more homogeneous species,

**Bret** 14:19

right? In some ways, we are becoming more homogeneous. But obviously, if a modern human That is to say the physical being can be teleported into any one of those niches, and can function well, so long as it develops there and picks up the correct programming to function that suggests something very bizarre about us, which is that we are somehow a creature that upgrades our own software, and that does not mean improves it. It means radically swaps out one set of software at the point that you change what it is that you're eating and what sorts of hostile forces you're facing. Switches out the software on mass in order to replace it with a software package that has been bootstrapped for the new local circuit. stances. And there's an amazing capacity. So How the hell do we do it?

**Heather** 15:04

How do we do it? And tick Alexander had a different, a somewhat different although not in conflict with I would say this model of oscillating forces oscillating selective forces, right that there were that we were striving against, effectively ecology, Dart was so called Darwin's hostile forces, things like, you know, weather and climate and predators and parasites. And obviously, we still have to contend with those things there. You know, those things are in the news now, right? And then there was also the effectively social competition that we we became our biggest competitors, we became

**Bret** 15:41

our most dominant competitor. And so sorry, we became our own most our own Osama's. So yeah, these things aren't in conflict at all. And in fact, he's that sticks model. And then our model is this culture and consciousness. But I should just say dicks model has to precede ours because thinks model is really an explanation for why the human brain got so disproportionately large. And it had to do with an arms race between human lineages that caused lineages that could out think their competitors to win and basically we all inherited this greatly in charge in large thinking apparatus. But not only is it in a large thinking apparatus, it is a thinking apparatus that is not heavily pre programmed, it is somewhat pre programmed, we are not blank slates, but it is not fully pre programmed. And that means there is room to swap in a an agriculturalist, high altitude agriculturalist program if you're, you know, farming corn in the Andes. Or you could swap in a marine mammal hunting program, if you were, you know, hunting whales in the Arctic. And that's a radically different way of being and it requires very different programming.

**Heather** 16:48

Exactly. And so you know, we we are and as we say, in the book, we are not blank slates, but we are of all the species on the planet, the blank slates, and we are blank or even then, our two closest extinct relatives, that is the two species on the planet to which we are most closely related. We are equally related to chimps and bonobos, and they are they're interestingly, quite different from one another. But you I don't think it's ever been tried. But a prediction behind which I would stand and put a lot of money is that if you try to cross foster up ANOVA with a chimp family, or a chimp with a bonobo family, the chimp Enos will persist in the GIMP raise with the elbows and the banal bonus, abortionists will persist in the bonobo race with chimps. Whereas if you cross foster any human being in any other human culture, so long as you start at infancy, basically all of the things of that of the family in which the baby has been cross fostered, will come on board, obviously, melanin isn't going to change, but and you know, facial shape, although, you know, even even some things like face shape will change as a result of diet, as we've been, as we've talked about,

**Bret** 18:01

and different, you know, you could at least have different facial expressions, obviously, there's,

**Heather** 18:07

but you know, but the language will be different, and the cultural, that, you know, the memes and the expressions and the expectations, and, therefore, to some degree, the periodicity and the timing of events, you know, you know, babies who are raised with a lot of love, but in very restrained physical situations, among the Tajik, for instance, if we talked about a couple weeks ago, walk really late compared to two weird babies, you know, Western, educated, industrialized, rich, democratic society, bred weird babies, whereas some babies in Kenya, where it's, you know, the encouragement is to move a lot very early, they walk earlier. And you know, you could take a Tajik baby and raise it in that Kenyan village and, and that Tajik baby would walk earlier, this is not in the genetic layer, it's in the software lies

**Bret** 18:55

in the software layer. And it is both the fact of the software layer, which you know, a lot of this will be familiar in one regard or another to people who've been watching and listening to us. But the software layer is every bit as biological, it is a different way of transmitting information that is transmitted outside of the genome, but it is not less biological. And we argue, I think persuasively in the book, that it is subject to the objectives of the genome. And so the question is, how does a genome that is trying to get into the future and doesn't really care about how it doesn't care about in what form or through what behaviors, upgrade at software programs so that it can take advantage of whatever opportunities it encounters along the way. And so we argue for this oscillating set of modes, one which you use when you figured out how to behave in a particular habitat, and one which you use when you have to figure out how to behave in a new habitat, whether that's because your old habitat changed or because you've moved or because you live at the edge of a habitat where your ancestral path Population developed it's insight. And it is this ability, which, you know, the key thing is that human beings can do something that no other creature can do, we can actually faithfully transmit an abstract idea across open air from one mind to another. And that allows us to do something that no other creature can do, which is to pool insight and get an emergent conclusion that is superior to the sum of the individual conclusions that different, different people would have, if forced to calculate it independently.

**Heather** 20:31

So let's just forestall an objection I see which is that there are at least proto linguistic things proto linguistic communications in some other organisms in which information is being conveyed. But in no other species is information being conveyed with the level of both accuracy and precision, that that we can convey it, you know, like language is several steps beyond what anyone else has. And so, you know, when we were in college, I remember learning about, like she Cheney and St. Barts early work with poison forbids, I think it's vervet monkeys, who have three different vocalizations for the three broad types of predators that they are at risk from. So they have a different vocalization for an aerial predator, and is to say, a predatory bird that might be coming, or a terrestrial basically a mammal like a big cat. And then also for snakes. And snakes, snakes and cats, which are both are both a risk for vervet monkeys come differently, they can move differently, they really do require a different kind of response if you are going to maximize the likelihood that you escape from it. And so, you know, they have three very different vocalizations suggesting an understanding of their environment that is rich, and, and involved and detailed and accurate. And they can convey that that information, but they don't seem to be conveying much beyond this thing is here, no danger of one of three sorts.

**Bret** 22:00

Yeah, it is a it is a pre existing agreement on the meaning of an arbitrary signal, which is very different from an abstraction and just if you haven't been through the logic before, the fact that one can say something, that one can be reasonably sure is novel, right? If I say, potato bearing conifer, right, probably that's not a useful enough thought that anyone will have bothered to try it out. But if I say it, and then I was to ask you to draw a picture, we could establish that I had successfully conveyed it over open air, because you draw a you know, a pine tree with a potato growing off it or something like that, right?

**Heather** 22:42

That I'm not sure what end but I can do it too

**Bret** 22:45

now Oh, useful and except that we have established that in fact, we are not kidding ourselves that we are transmitting abstract thoughts between our minds that we are actually succeeding in doing anything,

**Heather** 22:56

and not just transmitting, right. So you know, the and this is this is one of the frequent concerns about the you know, the the many ape language studies that have that have gone on, where many apes seem to be able to demonstrate receptive language, and to be able to some degree to use combinatorics to convey somewhat new ideas. But that, you know, that second thing is what is often called into question the idea that you can understand that, you know, another species of ape as we are, could understand language and you know, of course, they're working in a disadvantage, not just linguistic, but, but because we are, you know, we are framing things in in the world that makes the most sense to us. They're working with the handicap that we have handed to them, assuming that they they are like us. And of course, they are in many ways, but they will not be in some others. But, you know, how capable are they actually, of innovating new combinations with pieces that we have handed them? unclear, unclear, and certainly not as capable as we are

**Bret** 23:57

right, right. by foreign. There's a famous example what you mean. And the problem is any single example could be explained as dumb luck. But I think the example is from Coco, the gorilla, who new symbol for bird and new symbol for water and describe duck as waterbird. Right, that suggests the combinatorics, but it doesn't nail it down. But in our case, the point is, transmitting an abstract idea is the first step to something that is really the whole point of the exercise. If I can transmit an abstract idea about a problem I have seen or a solution I have imagined, and then you can run it through your separate mind with your separate skills. And without my blind spots, then we can recombine what we have both come up with and that's where the emergent value comes from.

**Heather** 24:45

And that I mean that also reveals that the first individual to be expressing a new idea, maybe doesn't need this but it will be helped and there will be a greater chance that they will want to make the attempt to convey something First place, if they have theory of mind. So I would say theory of mind, which we know to be already present in apes and baboons, which are not apes, but our Old World monkeys to a large degree, if you know if you don't have theory of mind, and you therefore imagine that everything else sees the world exactly as you do, to what end conveying new things, right? The fact that you have an idea in your head may feel like, okay, so I assume she knows that as well. So theory of mind would seem to be a sort of implicit base layer as well. Well,

**Bret** 25:33

yeah, I mean, at some level, I think even a shared language makes theory of mind. so utterly inherent, right? If I'm talking to you, and I say, you know, grocery store, right, I know exactly what you put together, maybe I can't paint the exactly the identical picture. But and whether you imagine, you know, a bodega or a supermarket, it doesn't matter, I know that it lands in a certain quadrant. And if I speak to somebody who speaks Mandarin, and I say, you know, grocery store, I don't know that they pick up anything, right, because I just don't know whether that word will even register as a familiar one. Now, maybe it does. Maybe that's one of the words that is crossed over. But But the point is theory of mind. A shared language is a almost impossibly complex shared theory of mind inherently indeed, and in any way it creates the basis for, for overcoming obstacles extremely rapidly, right? Think about what evolution has to overcome if it functions at a genetic level, in order to innovate the tools necessary to hunt a new kind of prey, right? Unless it's very, like an old kind of prey, it's going to take a long time for the program to be modified at a genetic level. Whereas it can be modified in ours, if people get into conversation about, here's what we're doing, here's why it doesn't work. And here's what we might do that would fix it, right? That's a very rich conversation. And basically, it turns evolution on to an extreme form of fast forward, which is the reason that human beings don't have niches that we're actually better off without one because it means if we happen on to an edge, we can figure out what to do with

**Heather** 27:21

it. So we're constantly happening upon new niches through spatial exploration, and creating new niches through technological innovation and the like. And therefore over time, we find new niches as well. So you know, and you already invoked us, but you know, traveling across space and time, we are able to deal with the new niches that we are either finding ourselves in or creating for ourselves better than any other species on the planet, but not quite good enough to deal with the rapid change that we are creating on the planet today. I think this is a good segue to the next very short excerpt. we're skipping over consciousness and other animals, and going to innovation at the margins of the ancestors wisdom, this again from hunter gatherers guide to the 21st century. During the peopling of the New World, when was relying on consciousness more effective than relying on culture, under what circumstances or cultural rules more trustworthy? As the nest parents are, the ancestors moved into the range of cameras and death Camus, they were looking for food and increasingly unfamiliar landscape, the stables they had come to know with their cultural standbys. As those familiar foods became harder to source innovation became evermore necessary. They were reaching the limits of their ancestors wisdom, and confronting a puzzle for which the best tool is consciousness. as people move across space, it is relatively easy to notice as the ancestors wisdom becomes less applicable. as people move through time. However, as we all do, elders may not recognize their wisdom becoming out of date, the young set, It is no accident that those who are coming of age in times of change push boundaries, and that language and norms change somewhat with each generation. Throughout history, the ancestors, wisdom has generally remained relevant long enough for new generations to get their footing to know what needs to be pushed against. As a people move through time that is changing extremely rapidly. However, as our world is now, it is more difficult to know what to do with the increasing relevancy of the ancestors wisdom, and with what to replace it. The margins of the ancestors, wisdom are rarely hard and fast. At those margins wherever they are, it is time to niche switch. Consider three broad contexts in which humans have learned and innovated in times past. The first is the utterly new idea, the idea that springs to mind often unbidden and without explanation. This was the territory that the first Mayan, Mesopotamian, and Chinese people were in when they innovated farming. Similarly, the innovation of the wheel metallurgy and pottery before those things existed, nobody knew they were possible. The second context in which innovation occurs is when you know that something is possible on the basis that it's been done before, but you have no idea how to make it happen. the Wright brothers saw flight and other organisms and felt confident that it could be accomplished by machine. Third, and finally You might have instruction, you know what you're shooting for, and have someone or some set of rules or instructions telling you how between school and YouTube, we often conflate this third kind of learning for the only kind of learning that is possible. The third type of learning is the most cultural is the learning of perceived wisdom. In contrast, humans are at our most conscious, and therefore our most innovative in the first two contexts. When the status quo when the status quo is no longer sufficient, we must seek to innovate, to push beyond how it's always been done. The status quo is an inherent tension. The status quo is in inherent tension with our unique insights. Those ideas that we have deep at night are often syntheses, reflecting the pulling together of common threads into uncommon meeting. So these three contexts in the ER this, everything in this book does tie together as as diverse and broad as the book is, but you're talking about the three, broadly three different ways that humans can learn. And just making explicit that school and now YouTube, and many people will be surprised to find us lumping YouTube with school, but YouTube and school, especially the YouTube videos that provide direct instruction for you know how to do a thing, or a very explicit modern cultural mode of conveying information that allows for very little freedom and innovation and consciousness.

**Bret** 31:22

Well, actually, you know, I think it's important to realize that school is necessary in some sense, but it is inherently if done right, a supplement to the majority of learning, which is not best done in school. So for example, and the I think the example that makes this clearest is nobody needs to put you in school to teach you how to talk, right? teaching, teaching you how to talk is something that happens automatically. If you're if your ears and your mind are healthy at birth, we can't even stop you from learning to talk, you will pick it up out of the air and very probably your parents are programmed to be unable to resist the things that will help you do it like babbling back at a child's very hard not to babble back in a child what you heard them say right? Now think about it. The way you sound to yourself inside your head is very different from what other people hear. So how useful is it to have somebody tell you Oh, here's what I heard you just say, right? It's a feedback, right? So anyway, the point is,

**Heather** 32:24

and we Yeah, it's it's a way to allow the child to error correct? Right. Exactly. Not mockery, it's it's a route into admin. It's it is it is training theory of mind. It is it is it again, requires theory of mind. I heard you say this,

**Bret** 32:40

I heard you say this, right. And oh my god, it meant this to me. You said ball. Now maybe I didn't mean to say ball. But if you then break out a ball, and you're all excited, I get the sense that this object and what I just said and your reaction are all somehow tied together, maybe I'll try to trigger that cool thing again, you know? So anyway, we don't have to put you in school to teach you to talk, right? In fact, or walk, right? Or well, right, because again, the parent offspring system is built to make this happen. We do need to put you in school or something very likely, at least we need formal training to teach you to read and write. And the reason for this is pretty obvious, at least in retrospect, it's that speaking are very, very ancient, they're going to go back at least several 100,000 years and more likely a million or more. What what are speaking Oh, reading, writing, what, speaking are not speaking are Yeah, okay. speaking, reading and writing go back a maximum of something like 1000 years, and for most people, they would have been a non issue until very late, like, isn't several 100 years. And so the point is, evolution hasn't had the chance to build the mechanism that you automatically acquire this just by looking at the symbols in your world.

**Heather** 33:55

So I mean, I, we have this argument in the book, and I agree with it. And yet, you know, maybe for the first time hearing you talk about it here, I had this thought of like, I don't know how much formal schooling I needed. I was, you know, I was so driven to the written world. And you and I have such different brains in this regard. I was so sorry, I, I chalked late, you know, more completely, rather than in single words. And I read early, and that was just where I was driven to go. And sure, I had the same kind of parental feedback, as you're talking about with regard to walking and talking. But that happened before school. And yeah, you know, for many, for many people, it is a matter of direct instruction, although, frankly, so much of how direct instruction takes place, is destructive of the desire to keep learning,

**Bret** 34:41

right? I'm not arguing that school itself is necessary. But the formalism of this is an alphabet. Right? These are the letters in it. This is the sequence in which they come these are the

**Heather** 34:50

Yeah, I'm not I'm actually I'm not sure. Like I think I think that that is that is the way it is taught. And that's not the way that some of us learned it. We sort of we were walking around doing sort of picking symbols out of our universe going like, oh, that I see that other people look at that and are making meaning from it, just like you're talking about with regard to spoken language,

**Bret** 35:09

I believe the motivation would be there. But I don't believe that you would the amount of arbitrariness in an alphabet and the way alphabetic symbols are put together into words, and at least in English, right, the variation of the pronunciation of those phonemes and all of that, you need somebody to be the one to clue you into the underlying arbitrary associations before you can begin to put them together with the stuff that you already have on board, which is the spoken word, right? So you know that there is a word for duck, right? And then the arbitrary symbols have sounds, and then those sounds come together. And like, Ah, that's the overarching symbol for duck.

**Heather** 35:48

I met this, this is interesting, I actually, I really do think you have a model in your head, that's not a match for what some of us experience, you know, the idea of like pieces that come together, and it's like, not necessarily Um, I don't I don't think this is the place to get mired down. But I do think that that those of us who are very driven to and seek out and always want to have sort of written word in front of us are probably likely in at least anecdotally, in my case, we're not people who were doing like, you know, phony, and let's see what it sounds like, when you put it together. It was much more like and we're in and we're doing like, Yeah, but

**Bret** 36:25

I, it's interesting to me that we have a disagreement here, you have to be able to say, Daddy, what's the symbol, right? Oh, that's a D, right? In order to get to the word in order to get to the meaning of the word. And so the idea, I think what the upshot of what you're arguing is that some people would learn to read even if nobody clued them into the meaning of the arbitrary symbols in the alphabet. And I don't I don't believe that anybody would pick it up from exposure to those things, that effectively literacy requires formalism. Whereas the ability to speak does not. And it's you know, it's a little bit like, that's almost exactly like reading music to write musicality does not require reading music. But if you're going to go into if you're going to be musically literate in that same sense, then somebody has to clue you into the schema in order to pick it up. But

**Heather** 37:17

anyway, Well, certainly I mean, that, that that is a better match for my experience with with music, having been sort of introduced to both playing music and reading music, both very young and almost simultaneously. And they were in a way, they're both highly formalized processes.

**Bret** 37:32

But anyway, the point is, we a hunter gatherer a child does not go to school. And it does not mean that they are educated, it means that they are built such that their environment educates them without the need for the formalism. And the farther you get from an environment that educates you naturally, I mean, even think about walking down the street, right? The fact that there is a line at the edge of the sidewalk where things go from very safe to extremely dangerous. That's a very arbitrary odd thing.

**Heather** 38:02

And you're not so it sounds like you're talking about a line drawn, and sometimes it is, but really, you're talking about a a physical feature of the universe that is a border, called the curb.

**Bret** 38:12

Yeah, it can be either, but I think the point is, the six inch drop at the curb does not begin to tell you about the hazard that starts there.

**Heather** 38:20

It's a tall curb. I think that's a really tall curb.

**Bret** 38:23

Okay. I don't know. I mean, in our in our neighborhood, there are lots of places where there isn't even a curb, but just the idea that you're paying attention to some line and that the you know, the forces generated on one side of that line are so many 1000s of times greater than the forces generated on the other side that it's a whole different model that applies, right, that's a that's the kind of you know, that's not the natural world being logically deducible that's arbitrary stuff. Right? And you know, some formalism is necessary in all those cases.

**Heather** 38:55

Yeah. But

**Bret** 38:58

but so anyway, so yeah, school is necessary, but it's a supplement and we tend to as you were reading we tend to think of school as the way in which learning is done and in fact, this becomes perfectly absurd if you if you think about watching an expert rock climber, right? And you think about learning how it is that they ascend something like El Capitan. You can know a hell of a lot about how you climb El Capitan without knowing the first thing about doing learn better rock climbing, right I'm better yeah you can learn all sorts of things as this now just

**Heather** 39:33

I don't remember who said it but you know this this famous advice to people trying to learn tennis from a tennis pro, you know, play better tennis,

**Bret** 39:41

right? We're in fact what you really need is somebody who plays better tennis than you to keep returning the ball and putting it a different corners

**Heather** 39:48

challenging you in unexpected ways, right? You don't you don't learn when you're super comfortable. You're not going to learn maximally when you're super comfortable, and frankly, a lot of modern schooling as much as it feels ridiculous and deeply uncomfortable to people. is effectively a dulling experience a like we're gonna just gonna like you can sit down You don't have to move too much you don't have to go outside of your expected bounds you know, you know when you sit here you're going today it's history. And that's not where you're going to learn the most you're gonna learn the most was like, oh, we're out you know, we're playing frisbee and now we're going to now we're going to start talking about history or, you know, or we're in the rain forest. So we're gonna start talking about the history of, you know, the rubber industry in the Amazon or whatever it is, this is going to come it the lessons that come at the unexpected moments and and throw you are, are where you are likely to learn the most. Yeah, absolutely. So we do have, I do want to share one more excerpt from from the book. But I also wanted to, because this chapter is about this tension between culture and consciousness we have talked about, and we also talk about, and I think this is maybe in the final excerpt that being analogous to the the tension between the sacred and the shamanistic, the sacred being a sort of a reification of the orthodoxy of the received wisdom of their for the culture, and the shamanistic being an analogy for that which is chaotic that which is unexpected that which is where innovation happens, most of which is going to be probably useless, some of which might even be dangerous, but that's where the innovation is,

**Bret** 41:24

it's it's by analogy to what goes on in the genome, or some things are extremely resistant to mutation and therefore very slow to change. And there's a very good reason that you would do that there are certain things that if you up end them cancel the whole project. And so they get special protection from change. So sacred and cultural spaces, that which is heavily protected from change, because change tends to be very disruptive. And then there are other things that are prone to change things like the immune system, needs to be able to update its model of hazards, you know, even within a lifetime. And so there's sort of overdrive for mutation. And so our point is that you've got these two things, both within you know, we deliberately describe them in this religious framework. But the idea is, it's not that religion is this stodgy force religion has both of these components because of course, religions are compendiums of wisdom that lineages need and so they need in order to be compendiums of wisdom, they have to be able to bootstrap new wisdom. How do you do that? Well, it starts out in the shamanistic and then that which works, gets driven into the sacred and gets protected from change. And you know, it's not that the sacred doesn't change. But the point is, it changes slowly, because because of the hazard of unintended consequences.

**Heather** 42:43

Yeah. So I want to read an excerpt from a different book. But first, just to talk about me exactly what you were you were just going the the tension within society between the sacred and the shamanistic. And sometimes sometimes it's within a religion and sometimes it's, as a religion is trying to move in and displace the old ways. So I'm reminded of, you know, actually a description of it's a it's a fantasy novel that I recently read, but it describes some accuracies from from history, the mists of Avalon, which is a sort of a women's or retelling of Arthurian legend from the perspective of the women involved. And it portrays the tension between the old ways like the druids and the and the fairies and such and the new ways the Christians and and portrays Arthur as exactly at this nexus between them you know, feeling this tension feeling the value in the old and also the pole of the new and frankly the order of the new the you know, the the the organization of the new and everything that organization promises and also the the chaos and the unexpected and the passion and the fury of the old right. So, you know, for all of us, we can imagine we can recognize that there is tension between between order and chaos, right. And similarly, in it was Episode 67. On February 13 of this year, we talked about Carnival, which is in the US. It manifests as Mardi Gras, but we have we have attended, we've attended a carnival together, and I've been at a couple more in Latin America. And we spoke some about what a former professor of mine who works on Carnival in the Atlantic coast of Brazil, describes as some of the really necessary parts of this, you know, this, these three, three or four, I can't remember three or four days of just, just freedom before the 40 days of very, very careful attention to your religion of love Let before before Good Friday and then Easter. And so my professor denlinger anthropology professor at UC Santa Santa Cruz talked about symbolic reversals of power being Important in Carnival, and, you know, that can manifest as men dressing up as women and vice versa. And young people acting as if they're old and have power and employers acting as employees and vice versa. And of course, in the old days that could even that even manifested with regard to slave relationships. So you know, during carnivals through all of the expected rules were on hold. Like everyone knew that they were coming back, but they were on hold for a little. So it's

**Bret** 45:29

a little bit analogous to what we were talking about with respect to babbling back at a baby. Yeah, right. Interesting. If you from the other side of the power relationship, say, yeah, here's what that's like. Yeah, that's what that seems to be like.

**Heather** 45:42

Here's how it seems like you're acting when you do this. Right.

**Bret** 45:45

Yeah. I'm also I don't know how new or thought it is. But you know, one of the things at the carnival that we experienced in Ecuador in 2016, yeah. was, you know, one of the sort of games that gets played has to do with this canned foam that people are shooting at each other, it's boom at the carnival, right? Exactly. And I was remembering, we may have even showed a picture of it, this police marching band being sprayed with foam by onlookers. And the thing is, it's actually, you know, if in the US context, you know, the tension between police and others is such that it's almost hard to imagine such a thing. But the idea that, you know, this band is just playing on as people that, you know, they would have had a very different power relationship with under any other circumstances were freed in some very non lethal way to, you know, to blow off steam at them. How much better are those relations between one party and the next, when there is this sort of recurring pressure relief,

**Heather** 46:55

it does suggest that we could all use some Carnival, some regular, you know, knowing that it's coming, being able to prepare for it, knowing that it's finite, knowing that it will end. But that I think, some of what happened last summer in the US and to some degree, large cities around the world with a part of the protests that became riots, was as we said, then in response to lock downs, but it was in part precisely a response not just to lock downs of, you know, being away from one another. But there were no concerts, there were no festivals there, you know, the bars were closed. And it's easy to dismiss such things as festivals and concerts and bars and, you know, large parties, as unimportant, but they're not. They're not they're necessary for humans. And you know, different people enjoy them differently. Some people have none of them in their lives and do just fine. And some of them live for these things, and maybe could do with a little bit less than would be more productive. But the idea that they are frivolous and can just be dismissed with with no cost is is absurd. So there are symbolical verses of power and Carnival, there are rituals of rebellion and critiques of the status quo and inviting in of the liminal. So specifically, this professor of mine 20, almost 30 years ago, was talking about working at the edge of consciousness, specifically at Carnegie Hall that this is a place for conscious exploration of end and play. And I'm reminded of that, too, in this terrific book, this is a 2006 book by Barbara Ehrenreich dancing in the streets. I don't even know where my camera is. There we go dancing in the streets, a history of collective joy, which is a book that I read, actually, as part of one of the programs I taught, the linguist I was teaching with recommended it and we we read this, and I have just a short section from chapter two that she's called civilization and backlash to share. Almost as soon as static rituals appear in the historical that is written record, a note of ambivalence enters into the story, a suggestion of social tension surrounding these rituals and even violent hostility towards their participants. Your deputies play the Bach a, for example, both records these tensions and expresses what seems to be a tormented ambivalence on the part of the playwright in the play pantheists. The King of Thieves greets the God with derision and determines to suppress him by force. Go at once to the electronic gate. He commands his officers tell all my men who bear shields heavier light, all who ride fast horses are trying the bow string to meet me there in readiness for an assault on the Buckeye. This is all this is passed all bearing if we are to let women so defy us. At first, the place seems to take the gods side mocking the uptight pantheist and showing the community elders piously joining the men ads in their revelry. After all of the beautiful young strangers indeed a God it is incumbent on good citizens to observe his rights. But things end badly for both sides. pantheist is killed and dismembered by his own mother who in her God given x, ecstasy mistakes and for a lion. We've all been there. The ambivalence and hostility that's that was not Ehrenreich. That was my editorializing in case you want them to continue with airstrikes words. Actually, this is this is all fabulous. We're just gonna skip to this paragraph here. We have some evidence from a very different part of the ancient world. The dampening effect of civilization and social hierarchy on traditional rituals. Recent carbon 14 dating of an archaeological site and wahaca suggests that the earliest residents who were hunter gatherers living about 9000 years ago, met on a clear dance ground for rituals that included the entire community. Later with the rise of agriculture, rituals appear to have been enacted solely by initiates who were social achievers, or members of an elite and most likely men. Finally, with the emergence of organized and militarized states 2000 years ago, the archeological, the archaeologists deduce that, quote, many important rituals were performed only by trained full time priests using religious calendars and occupying temples built by korvia labor and the Hakan case, only a few 1000 years appear to have a lapse between the archaic dance to rituals appeal at the bands and the refinement into the formal rituals of the civilized state. And in the whole, the whole book I recommend, but it really is both an exploration of the history of excesses of ecstasy of finding ecstasy through movement to dance through, she doesn't go I think, if I remember too much into the use of exogenous substances, although there's those are certainly present in almost all of these cases, at least by some and, and the the orthodoxy the controlling part of society that says, actually, No, you shouldn't do that, because, well, you'll be less productive. And you know, the, the pushback comes with lots of words, and some of them are true, and some of them is just a cover story. But you know, you'll be more productive, if you don't do that, we're going to restrict that just to say karneval. But really, it's about control. And people experiencing status as experiencing these kinds of, you know, hyper conscious, perhaps entheogen. inflamed states are hard to control, they're hard to predict. And it's hard to know what they're going to do next. And what they're going to think next to

**Bret** 51:53

Well, it's a high noise, high creativity state. And the point, noise isn't good noise. In this case, I'm talking about statistical noise. And guess the short version of this would be in a complex system, there are a huge number of influences. And you may be interested in one particular parameter, and everything else that affects it is noise with respect to the change in that one parameter. So there's lots of noise in the cognition that comes along with things like entheogens. And that is not a positive thing. But it is part and parcel of the process that generates creativity. In other words, if your thinking day to day is high quality, it is also limited. In order to be high quality and low noise, it has to bar possibilities that could be but aren't worth investigation. And so in sort of, in one sense, it's like cognitive Carnival, right? You take some period of time, and you choose to reverse the normal priority, the normal priorities in perceiving the world accurately and behaving reasonably with respect to it. But if you suspend those rules for a day, and you say, actually, I'd prefer to tune in to things that ordinarily I would dismiss because some small fraction of them are actually useful, and I can't see them because my highly functioning mind blocks them from me,

**Heather** 53:20

tune in explore cross boundaries, know that those kinds of explorations within reason will be forgiven later.

**Bret** 53:28

Yeah, it's a little bit yeah, so that's that's the thing is you don't want to assume that it's insight because most of it's nonsense, but

**Heather** 53:35

nor nor can you, you know, if, if you have murderous instincts, you're not allowed to act on those, like there will be repercussions if you have rapey. instincts. No, right. But so you know, there are still it's a it's a matter of pushing boundaries and sin, where the boundaries could be sometimes, but are still within the realm that we can all get along with one another.

**Bret** 53:59

Yeah, where I would say, if you're the kind of person who doesn't have those things sufficiently locked down, that you can't be sure they will not rear their ugly head, then that's not an experiment for you, right? But if you are the kind of person who can handle relaxing the mental controls that usually keep madness at bay, and you can say, Well, I would like to try madness for a brief period of time and see if anything comes of it. Then it is an experiment with during and I would also, this may seem like a weird segue. It's a segue certainly to an earlier chapter in the book, but we are faced with very difficult challenges we ultra moderns, right, hyper novelty has thrown us for example, a puzzle about what to do with the relationships between the sexes, how to build a relationship when the stuff that used to make relationships coherent and necessary, has evaporated and how do you bootstrap the new version of this And one thing that's true is when you are trying to solve a problem that is outside the range of the toolkit you've got, you have no choice but to engage a higher mode of creativity, right? some way or other, you're going to have to experiment beyond the comfortable. And one way that is available, is certainly to, you know, I mean, I, I like better and better Huxley's idea of the doors of perception, because maybe doors is a little too binary. But the idea that one can actually adjust the permeability of consciousness, in order to see whether there are tools that are nearby, but not immediately available to the normally regulated conscious mind, that's as useful in the context of relationships as anywhere else, maybe even more useful. And the risk of saying too much, you and I had plenty of formative experiences together. And, you know, how powerful is that? To be able to, you know, step out of the normal world together with somebody and explore, it's really an amazing tool

**Heather** 56:12

nuts, it's completely extraordinary. And yeah, so one of the corrective lens items from this chapter is considered engaging with psychedelics carefully. If there was anything in you that is curious. They are now legal in some places, but consider engaging them as the powerful cognitive tools that they are not as a form of recreation, that doesn't mean you can't have fun. And certainly, you know, we've had a lot of fun with them. And we've had some times that were not fun. And they were some more formative than others, but they were all impactful in a way that is impossible to describe. It's, it's maybe a little bit analogous to the idea of trying to talk trying to tell someone, what Parenthood is, like, if you don't have children, like, Oh, it's a different kind of love. Well, that just that falls flat. Everyone knows that that doesn't communicate, that doesn't convey it. And yet, it's true. Yeah, like the, the parents love for a child is unlike anything else. And, you know, at an experience with exogenous hallucinogens, or entheogens, that are that are strong enough that you really do have something, you know, the language used is ego death, and I'm not sure I totally, I totally like that language, but something strong enough such that you lose your desire to control your situation, or you lose rec, you know that you've just lost the ability to do so. And so you just are there is extraordinary with regard to opening up, you know, as you say, the doors and you own the doors of perception. And I will say, I don't know that I have a particular excerpt to share, but just another book, and we'll put these in the show notes as well, this book on on drugs, this book is on drugs. And I don't even I think that's just it, there's no Subtitle by David lanson. It's old sports from 1995, which is, it's fascinating to read a book that is so current and so modern, that exists before, practically before the internet, it's not before the internet, but certainly before social media, you know, before even, you know, 1998 before the.com bubble, but his descriptions, he explores just so much of what it is what what drugs are, what they do, how drugs are described in society by the orthodoxy as an uncivilized influence, especially on children. And you know, he specifically if if memory serves, talks about differences between what he calls drugs of desire, cocaine crack speed, and drugs of pleasure, which is a strange word, but what but it by which he is including marijuana and psychedelics, and the the first category being sort of short term, pretty uninteresting, and pretty much not valuable, and I'm editorializing here. But if memory serves has been a while since I've read this, that's his conclusion as well. Whereas the, whereas the latter ones allow for an opening of the doors of perception, that, that you can get other ways, right? Like you can people can get through extreme sport, through some kinds of sexual engagement through meditation through long, long, you know, periods alone without talking to anyone like sweat lodge, and you know, so a lot of the things that are rituals from other societies also do involve though some additional exogenous molecule that you're smoking or imbibing or whatever it is,

**Bret** 59:50

right? I mean it you know, in some sense, it's all endogenous, you're triggering circuits that are there and you're triggering them in some way that's novel enough that your conscious mind gets to tune in on it or However it works, but but the real point is it's all trade offs, right? It's not like that state doesn't come with downside. In fact, that state is mostly downside, you couldn't run your life that way. But borrowing from it a little, you know, diminishing returns being what they are, are you better off living your entire life, this side of that boundary, or would you know, a tiny periodic adventure across that boundary be worth a tremendous amount in terms of what you got to understand about, even what your own mind, you know, I mean, one of the things, he sort of inadvertent lessons that I got from it, is how little direct perception is really just you seeing the outside world, it's colored by numbers, and it's done very, very well. So that you do get a real sense of where the objects are, and what they're made of, and all of that, right. But, you know, the simple fact that what happens when you look in the mirror, right, tells you that it's not just a report of where the photons are going, it's an interpolation, right? And

**Heather** 1:01:03

no, and it brings some of you disparate, it can has the potential to bring some of the disparate parts of you into sort of awareness of one another such that you can, you can become more light hearted about your own self and like observe yourself with with with more mirth, that somehow I remember an experience of knowing very well, that it was not incumbent upon me to stand in a particular way to hold up the building that I was leaning up against, but I had the very distinct sense. And in fact, someone walked past me, I was like, You're welcome. Like, you're welcome, you're safe. Knowing that that's patently untrue. There's no way that this building that existed before I ever showed up, and would continue to exist after I left was in need of me, leaning up against the way I was, but something in my subjective experience as helped by in that case, I wasa led me to believe even though I knew logically, it couldn't be the case that I was necessary there at that moment. And you know, what, what's the lesson there? I don't know, you know, are there are there lessons to be had that are explicit or that can become conscious? And then, you know, usable from any one of these stories? Probably not, it's a little bit like sharing dreams, like probably mostly, the particular instances from particular trips are just gonna seem, you know, they're gonna fall flat for people. But the fact is that you can you can learn, learn from the tensions that are revealed.

**Bret** 1:02:28

All right. This leads me to something that's going to sound like a non sequitur, but I'm not sure it's the right place to go. Okay. Okay, you and I have been talking about the predicament that young people find themselves in with respect to finding a partner. And the fact that a lot of what passes for current wisdom about this is actually nonsense. And some of it's actually just downright pernicious. Think

**Heather** 1:02:51

I know where you're going, do you want someone who can hold up a building for you?

**Bret** 1:02:55

And I've found just the person as you have done?

**Heather** 1:02:58

I didn't get it right today?

**Bret** 1:02:59

No, you did not get it. Right. I want interrupting. All right, we have been talking about the fact that in terms in the context of mating and dating, humanity cannot go backwards, right? There's not there are places in the past where it worked. But you couldn't restore the conditions that made it coherent in the first place, you can't go back. And we can't stay here, you know, a free for all in which there are no rules, and we just dismiss everything. As you know, everything that involves any sort of limit is stodgy, that doesn't work at all, it makes people miserable. It does not result in lasting partnerships that matter. So we have to design something new, and that designing something new. I so far believe and will argue is going to involve people opting out of the current wisdom, but they have to opt into something else where two people who don't know each other who might be interested in being together can say Yeah, actually, I subscribe to those rules, too, because those rules make sense, right? All right. I think I think the name for the opt out movement should be carbon dating. Okay. Carbon dating. Now the reason it should be carbon dating, is because carbon leads in all the right directions. It's the alternative to Silicon dating, which hasn't worked out real well for carbon dating is the organic version. It's new, it's up to date, right? But carbon dating also involves things like real experiences, it could involve if it's your sort of thing using entheogens to change which, you know, sets of neurons are prone to fire in a given circumstance. So experimentation can generate the rules of carbon dating but saying carbon dating seems to me like a good shorthand for Yeah, I mean, on the idea that we're trying to find some new set of rules that make sense because no rules isn't working out.

**Heather** 1:04:53

Yeah, I'd like it. I like it very much. Okay, let's Let's go to our final excerpt from today. Literally false, metaphorically true again and just there's just a lot in this chapter on that book. Yeah, I did it's it makes me very I was doing it while you're working on the tech stuff. Yeah, so we actually just very very

**Bret** 1:05:15

we got it yesterday. Apparently, they have sold enough of them in advance that the copies that we were supposed to end up with got sent to other people. So anyway, we have just seen it we're kind of excited to just seen it, hold it in our hands very much.

**Heather** 1:05:27

So we're not going to read on conformity or religion or ritual or sex, drugs and rock and roll on the sacred versus the shamanistic. We're saving that for those of you who actually get the book but we are going to read literally false metaphorically true. I am going to share that. Here three pages. cultural beliefs are often literally false, but metaphorically true. Consider farmers in Highland Guatemala who have a long standing tradition to both plant and harvest crops only when the moon is full. This they say allows the plants to grow stronger and resist insect damage. What possible protective capacity could the face of the moon have on crop health? Presumably none. But the face of the moon can synchronize the farmers. A full moon is effectively a giant sky clock, a keeper of time that everyone in the region can see. If all farmers in the region believe that a full moon has salutary effects on their individual crops that will likely restrict planting and harvesting to the full moon. And this will in fact benefit everyone's crops. Just not for the reason the farmers belief. A belief in the power of the moon to directly affect crops effectively associates predators. by concentrating the harvest into brief periods during which time crop predators cannot eat all of everyone's crops. It is easy to dismiss many myths and beliefs of all precisely because they are literally false. Indeed, doing doing so is almost a sport among some hard headed people. Take astrology, it is clearly beyond reason to imagine that the stars that we see many of which are 1000s of light years away, are having a direct impact on human behavior. Similarly, it is beyond reason to believe that a passel of angry Gods is the reason for tsunamis. Yet among the mogan, those who believe in those Gods survive at higher rates than those who don't, and is surely beyond reason to believe that a full moon is protective of crop health. Yet among Guatemalan farmers, precisely that belief results in more productive farming. In each case, the belief is literally false, but metaphorically true. This means that the cover story isn't true. But when people behave as if it were they prosper. This is how religion and other belief structures spread. Even if such things are not literally true, acting as if they are benefits people. Sometimes it even benefits the biodiversity and sustainability of the land in which they live. In its modern tabloid form, astrology is bunk. But astrology has probably not been so everywhere and for all time. If and this is a big F, you control for where a person was born, might not the time of year that they were born, have effects on how they develop and therefore who they become, in our art, astrological signs just an ancient way of keeping track of the months more or less. If we look at astrology this way, rather than as a modern indulgence that is to free of context and history to have meaning it begins to look promising. is a newborn in a Minnesota winter exposed to the same pathogens and activities as a newborn in a Minnesota summer? Surely not. And sure enough, there has been worked on to bear out this idea, calling ID calling data from over 1.7 5 million records at New York Presbyterian Columbia University Medical Center for people born between 19 102,000 researchers found clear correlations between birth month and lifetime disease risk for more than 55 different conditions. With affected systems ranging from cardiovascular to respiratory from neurological to sensory, the sheer number and breadth of medical conditions that vary and lifetime risk by birth month should be enough to make a thoughtful person rethink a wholesale rejection of careful astrological thinking. For if there are demonstrable differences in disease risk by birth month, why should we imagine that there are no differences in personality. As an aside, one prediction of this approach to astrology is that if you include both birthplace and date, astrology will have less power to predict lifetime disease risk, the closer you get to the equator, where seasonality is much reduced from that in the temperate zones. Another prediction is that the more a person moves around as a child, the less predictive astrology will be for them. And if you don't include birthplace, astrology should have no predictive power at all.

**Heather** 1:09:15

distortions that help you survive and thrive are adaptive. myths and taboos often make little sense to outsiders, and some of them are surely misguided even counterproductive for those who honor them. Some surprisingly precise taboos are likely over generalizations from an actual event. Among the coming year of the Brazilian Amazon the eating of scaleless fish is forbidden for both pregnant women and their husbands. It may well be that long ago a terrible fate befell a woman her unborn child or her entire family after eating a fish without scales. The fish was the only explanation that stuck. Similarly, on the plateau of Madagascar in the village of Matson Joe, there is a taboo against eating our cups at close relative of pelicans. This taboo is directly tied to villagers having seen one flyover just as a man died. Elsewhere in Madagascar it is taboo for young meant to eat mutton before wooing taboo for pregnant women to eat the meat of hedgehogs or to walk through fields a pumpkin taboo for a son to build his home to the north or east of his father's house. To our Western sensibilities, this seems like superstition, pure and simple. The word for taboo and mala Ghazi Fadi has a complex meaning as well, in that some asaka language of the people of northeastern Madagascar, it means both taboo and sacred. That which is funny is mandated by the ancestors Be it mandated that you don't do it or that you do. Despite the preceding examples, many beliefs myths and taboos are literally false metaphorically, true. mala Ghazi Fati has come cloaked in the language of gods and ancestors, but it is still easy to see the wisdom and many of them if you simply look at the prohibition, do not build a house over or against a new landslide. Do not step on a dead dog as you might get hydrophobia, rabies. Do not divorce your wife while she is pregnant. Good advice. We predict that those taboos that have lasted the longest are most likely to be hiding an important cultural truth in plain sight. Beware Chesterton's fatties, the old idea, sorry, we were Chesterton's bodies, the old ideas may have hidden truths. And those truths may be different, difficult to recover once they have been dismissed. Joseph Campbell observed that mythology is a function of biology, he was correct. As an evolved creature you were built to succeed. And sometimes that involves telling yourself stories, finding yourself in a raft at the top of a dangerously tall waterfall you might be about to die. If you believe that the shore is within reach and paddle like hell, you just might make it. Those deflated by long odds will leave no trace belief can be the difference between life and death.

**Bret** 1:11:37

I believe you have old you have angered both the old gods and the new.

**Heather** 1:11:42

Yes, I'm sure that will anger, at least some proponents of both the old gods and the new. But I mean, precisely because as is true of everything in the book, we are trying to weave our way carefully. down a road that understands the reality and importance of history and reveals a path forward or at least the beginning of a path forward that has that has the potential to reveal great things which we can't even yet imagine.

**Bret** 1:12:17

Yep, I mean, in fact, you know, as we present this in the book, and as we have mentioned periodically here, this activity, whether it's writing the book, and having people read it and discuss it, or us talking about ideas from it and other things, is effectively a modern version of the campfire around which consciousness would have been practiced. And I think maybe we did not say up front, that one of the implications of the model of consciousness and culture that we present is that it reverses the natural expectation about why consciousness emerged. So and while consciousness has been famously resistance to explanation, if you think of it primarily as, and we argue that it would initially have evolved as a mechanism for individuals to pool their cognitive strengths and come up with an emergent, some that is greater than the, or an emergent whole that is greater than the sum of the parts. Then individual consciousness which we all take to be primary because we experience individual consciousness and inter subjective consciousness is something that we only have in direct access to the idea that we may share a thought is not as vivid as any thought that either of us would have, it's much more powerful, because there are two minds involved in creating it. But it is much less visceral. And so our argument is that we have studied consciousness incorrectly in science. And in fact, this is reinforced just by the practicality, you can put an individual into an fMRI machine, you cannot put a group of people into an fMRI machine and see what is shared in their cognition. At least not simply,

**Heather** 1:14:00

one of the big drumbeats of the book, of course, is a rejection, that recognition of the value of the reductionism in modern science and medicine, and also a rejection of its ubiquity of mistaking that which can be easily measured. For that, which is the most important thing in a system.

**Bret** 1:14:16

Absolutely. And so in in in this case, it's not that we deny the existence and the importance of individual consciousness, but we argue that it is likely to have come second that you build a model that allows people to pool their consciousness together. And then once you have the tool that involves knowing what is likely in someone else's mind, maybe because you placed it there, you now have a tool in which you can have an argument with yourself, you can hold two ideas and compare them as if you were two different minds comparing notes. And in any case, we regard this as likely a solution to many of the most difficult issues surrounding consciousness just simply by getting the evolutionary order of operations correct.

**Heather** 1:14:56

That's right. Well, that's it That's what I've got for today. Do you have anything else that you want to wrap up with?

**Bret** 1:15:04

No, I think we've more or less covered the territory. All

**Heather** 1:15:08

right. So we will be back next week. For those of you listening or watching and wanting to go, you know, outside or to sleep depending on where you where you're watching from, or whatever it is that you might want to do. For those of you who are watching live, we will be taking a break, hopefully just 15 minutes depending on the technical stuff, and then be back with our q&a. And you can ask questions at the q&a at Darkhorse solutions.com. And we enjoin you to join our Patreon ads. Brett is having another conversation on his tomorrow. You can get some stuff that has Darkhorse branding on it at store dot darker his podcast.org. You can email logistical questions, like how did I do that? Again, not I want them to address this in the q&a but logistical questions to Darkhorse moderator@gmail.com. And please consider if you like this, actually liking it and sharing it and, and subscribing both of this channel wherever you're watching it. But it's its mirror channel on YouTube or Odyssey depending on where you're watching it. And also Darkhorse podcast clips, which are amazing clips guy pulls what he views as the most salient things for each week's episodes and puts them on the clips channel. So if you have any suggestions that you think would be particularly make particularly good clips this week, things that you would like to share in a smaller form than the whole podcast. You can email those suggestions as well to Darkhorse moderator@gmail.com.

**Bret** 1:16:42

Have you suggested that maybe given that the book is going to emerge on the 14th of September that it would be a great time for people who haven't already ordered it to order their own copies so that arrives and they can get in on the discussion?

**Heather** 1:16:57

That's right, it is available for pre order now everywhere. Apparently, it's at pals one of our neighbors just just pre ordered at pals. So that's our local amazing independent bookstore. But it's you know, it's available at all the usual all the usual suspects, and will be available in audiobook as well. UK and UK like colonial territories, I guess. It'll be available maybe two days later, I think publication is September 16. But yes, please, please consider doing that. And before we see you again next week, there will be we will be talking to some other people about the book some other podcasts will be beginning to emerge. Is the title

**Bret** 1:17:35

in the UK a hunter gatherers guide to the 21st century or is it a warm beer drinkers guide? I know they considered that briefly.

**Heather** 1:17:42

They shared it but we pushed by right back Yeah, push right back. It does have a different cover, but it's it's the same title. Alright, until we see you next we go to the ones you love, eat good food and get outside

**Bret** 1:17:55

while everyone