Bret and Heather 96th DarkHorse Podcast Livestream\_ Finding ...

Sat, 10/9 12:09PM • 1:10:37

**SUMMARY KEYWORDS**

book, frontier, point, maya, world, question, caterpillar, people, state, resource, find, system, narrative, problem, podcast, conversation, very hungry caterpillar, harm, fact, feel

**SPEAKERS**

Bret, Heather

**Bret** 00:18

Hey folks, welcome to the Dark Horse podcast live stream number 96. I'm here with Dr. Heather hying. I am of course Dr. Brett Weinstein. We have

**Heather** 00:28

we got Madison Weinstein, we have Labrador Retriever here as

**Bret** 00:31

well, who I've just bought on the nose. She doesn't seem to care, but I feel bad doggy. All right.

**Heather** 00:40

So we're here it is. It is Episode 96. It is September 11. We will be talking some about that today we are going to be talking about the final chapter of our book, which is due to be released in three short days. So we're going to be talking about about that some two. We're very excited about this. Once again, it's a hunter gatherers guide to the 21st century, we have one and only one copy, which we had to beg for which we had to beg for and some of the people we've been talking to about it, which we'll talk to you about having talked to them about it a little bit here today have not received copies either. So it's apparently scarce, apparently

**Bret** 01:13

in high demand, which is why the copies are scarce. I do want to make one correction. Okay. You said it will be out in three short days. I expect them to feel like three very long days to us.

**Heather** 01:23

Yes. Well, reality being what it is, no matter how they feel, they will be the same length.

**Bret** 01:29

That's a very modernist laboratory focused kind of approach.

**Heather** 01:34

Yeah, I don't I don't see it as laboratory focus so much is like reality.

**Bret** 01:38

Clock reality. It's definitely there's a moment at which that's the way time starts progressing for people. And I'm not saying it's not real as we've talked about before, but

**Heather** 01:46

72 hours or 72 hours no matter how you feel about it.

**Bret** 01:51

We we should we should put a pin in this discussion and return to it because it is both what you say is true, but it's very much a laboratory clock perspective and not so much a an ancestral one.

**Heather** 02:05

Yes, but definitely not a postmodern one, which is what it felt like where you were going so ever. So we're going to be talking about all those things that we just said. So first, if you're watching on YouTube, consider trying it out on your Odyssey. It seems to be getting better all the time. We know that there are some issues that remaining but they are working hard on it. That's od YS II and the chat is enabled on Odyssey where we've got moderators ready and waiting to engage with you. You can for the second half of our podcast, write questions in when we will be doing the q&a that is at dub dub dub Darkhorse submissions.com consider joining our Patreon we have stuff available at Dark Horse podcast store that dark horse podcast.org I've got a a newsletter at natural selections dot substack calm and in homage to the book and and to this feeling like you know a big moment for us. I have asked that we not do any ads today so there are no there no paid ads. Everything we're talking about today is is completely from our hearts. Although as we've said before, we only take sponsors for ads for products that we actually stand behind. So before we get into the into talking about 911 and fourth frontier, which is the subject of the final chapter of our book, we want to mention when we were on we were on Joe Rogan this week, and as usual, he is he is charming and wonderful and smart and humble and all of that. Yes,

**Bret** 03:39

well I was going to say so this obviously took us to Texas, his new home and it was a whirlwind tour for us. Not only were we in Austin, but we were in Dallas and we got back yesterday and oddly flying and we had flown out of Portland where summer has been mostly lovely except for the heatwave that we had but we flew in and it was cloudy and it looked like winter there was snow on the ground well not snow but trash on the ground and anyway it's true no it's all true except the snow part which but anyway it is that nice and sunny here today I'm glad to see that that was a brief departure from our summer weather we're still do a few more weeks of this

**Heather** 04:22

yeah well this is usually your role but as you know Winter is coming.

**Bret** 04:25

Thank you Yes, this is an important point for our our listeners except those in the southern hemisphere to know about and to prepare for and we should at some point talk about how one might rationally prepare for such things.

**Heather** 04:37

That's what we're here for to introduce you to the concept of winter. No Actually I'm not this week. But you know, in a week and a half on my in my substack natural selections I'm going to be talking about the fact of the the fall equinox. Fall in the Northern Hemisphere Vernal spring in the southern hemisphere and a full moon happening at basically the same moment in 10 ish days. Time. And what what both of those things have met to ancestral peoples and to us today, but I just wanted to say that before so the Joe Rogan episode dropped on Thursday I think. And we had we had you know, the book had been doing okay for not being out and having basically no PR except for

**Bret** 05:18

what we're doing for it had been doing great enough that the copies were scarce that

**Heather** 05:22

right and so we were on Amazon top of the heap in these niche categories like human geography, and cultural anthropology. And then then we got there and evolution, and then in biology, and then even science and math. But then we slipped into the top 100. And that was pretty awesome. And then yesterday washed, climb, and we cracked the top 10 across across all books, and the sound is gonna oscillate around and all. As thrilling. This is totally thrilling for us we love this book is going to be out there in the world, we really hope that many many of you buy it, but more to the point that many, many of you read it, that it will be, you know, available in libraries for people who don't have the capacity or interest in buying it. But we really hope that it's very widely read. But as it is climbing into the into the top 10 where it's been now moving, you know, a slide or two, we've discovered a nemesis. And there's this one other book on Amazon's bestseller list that we're swapping positions with at least for these last many hours. A fierce battle. I think it's it's not a battle between good and evil so much. But I don't know I had something to say here in the show. But maybe you wanted to take us there. You want me to shell?

**Bret** 06:32

Well, I mean,

**Heather** 06:33

I think it does feel like a

**Bret** 06:35

battle a personal Yeah. Yeah. The Very Hungry Caterpillar is the book. We briefly surpassed it. And now

**Heather** 06:44

so Zack, can you show that since that didn't go as I was expecting to what?

**Bret** 06:53

Well, in any case, The Very Hungry Caterpillar, we briefly passed it. And then there was a turnaround and the The Very Hungry Caterpillar made a comeback and it has now raced past us which I strongly suspect the many haters that we have picked up to the podcast, I believe they're buying up copies of The Very Hungry Caterpillar. Do you? Yes, that is my suspicion.

**Heather** 07:19

I see. Okay, so here we go. I would not call this racing past us. We have been we've been neck and neck. We were ahead of it briefly and we are now but i do i mean i again, I don't think this is a battle between good and evil. Because you know we too as apparently the entire frickin world or fans, The Very Hungry Caterpillar wasn't the best children's book out there. But it was it was good. Look solid

**Bret** 07:43

that is racing past us for a caterpillar. They're not known for their speed. And but

**Heather** 07:50

I should point to all those people buying the caterpillar book that we mentioned Caterpillar sir caterpillars in our book.

**Bret** 07:54

Absolutely. I'm

**Heather** 07:54

sure they're hungry, because caterpillars tend to be hungry. Yeah, well,

**Bret** 07:57

and I also think the title of this book was something of a warning to us. And we just we read it to literally,

**Heather** 08:02

yes, yes. In fact, maybe The Very Hungry Caterpillar is the metaphor we've been looking forward to be using in, in, in fact, the fourth frontier chapter of our own book, which

**Bret** 08:12

we will be talking about. It's obvious in retrospect, it

**Heather** 08:14

is obvious in retrospect. So I guess there is somehow the email I sent to our wonderful 17 year old son and producer of the darker his podcast never reached him. But I will say we are one of Zach, we just show briefly, one of Amazon's hot new releases as well. So that's pretty exciting. All right. on to more serious topics.

**Bret** 08:38

Absolutely. Yeah. All right. I had a couple things I wanted to say about 911. The first thing I wanted to do was talk a little bit about something for those who are old enough to remember 911 as adults, and it seems so recent To me, it's very hard to accept them just 20 years ago. But in any case, for those who are old enough to remember it, as adults, there was a shocking pattern that emerged in the immediate aftermath of the attacks. And as I remember it, and it's a little bit hard to document actually, but as I remember it, the fact of the attacks caused a system, a very sophisticated system of journalism and all that had been captured and had become corrupt and feeble and unable to do the most basic jobs that journalism for example, does. That system suddenly didn't know what to do and started doing actual journalism. It seemed almost by accident. So this very slick product that was produced that you know, we were told was the news on any given day, actually emerged as a real phenomenon briefly in the aftermath of the attacks. And I think it was actually We connected, the attacks happen. And they were such a profound shock to the system that actually ads were taken off of television, it was understood that it was unseemly and out of place to have ads. And so suddenly what you effectively had was everybody drafted into a kind of, you know, public broadcasting mill, you suddenly people who were reporters doing whatever corporate wanted them to report, they were all in the same story. They had their microphones in hand, the cameras were right there already. And they did journalism, because it was the obvious thing to do, right? And it was so different from normal, right, you don't realize how abnormal things are under normal circumstances, or how at odds the narrative is from what's actually taking place, until an event like this causes people to suddenly wake up and start doing this job. And then I remember I mean, this went on for some time, my recollection is a couple of weeks,

**Heather** 10:56

I would have said, a little less than a week, I don't remember.

**Bret** 10:58

But in any case, at some point, the ads returned, and normalcy returned. And the narrative control

**Heather** 11:05

guys filled again, right there it was, it was something I would have said a week ish, where there are no planes in the sky. And there are no ads on the television. And when you walked onto the street, it both seemed quiet. And for many of us anyway, more more open. And of course, there were many people who were immediately targeted. So it was it was a less open time for some people immediately after 911. But many of us found an ability to reach across gaps that we hadn't seen before.

**Bret** 11:37

Yes. The I want to point to the last chapter, which we talked about last week, because at some level, the penultimate chapter, the penultimate chapter, yes. The last chapter, we discussed the penultimate chapter of our book, which talks about culture and consciousness, and about the moment at which we shift modes when we realize that something is not accounted for in our software, and that we have to bootstrap new routines in order to figure out how to move forward. And this was very, it's really, I think, the clearest example of this in our lifetimes that we've experienced that 911 was so far outside of our normal experience, that suddenly we all kind of woke up. And we saw each other for the first time that the camaraderie that was evident everywhere, as people who ordinarily might not have even spoken to each other, suddenly had the very same topic on their minds. And it was impossible for them not to interact, it was a very, as terrible as the event was, it was a very healthy response for a time. And then whatever it is, that happens, doesn't recognize this as a positive change and an opportunity, or it does recognize that as an opportunity, but it's a different sort of opportunity. And we ended up you know, in the aftermath of 911, as polarized as, as we've been, really. So I wanted to just call that out because the having lived through it. And then I can't remember the last person I've heard mentioned that odd period where there were no ads on television, for example, right? It's a very important fact, from the perspective of how it felt to be right but it somehow hasn't been recorded as an important part of the event the way you know, the falling man or the you know, the crash in Pennsylvania or any of these other things were right. But in some ways, it is an important story about how this got integrated into our into our fabric. And obviously the world is not the same world that we lived in prior to 911 in many ways, I mean, some of them structural, some of them cognitive, but it changed the world. And it's a pity that we at least in our, our common narrative of what happened haven't captured that aspect of it. I also wanted to read something that I wrote actually in the aftermath of the terrorist attack in France in 2015. Right so this is actually a couple years before you and I emerged into the public eye. I wrote something in the immediate aftermath of that attack and submitted it to salon which at the time was still a publication one could read and anywhere to my surprise they immediately accepted it and published it and anyway I when common dreams picked it up, is that right? Then common dreams rebroadcast. And anyway, I thought part of it was important. And so anyway, I'm gonna I'm going to take a read and we'll put the link it's still up on the web and we I'll put the link in the description Yeah, you want to show the article? Yeah, so as always, the title is not chosen by the author of the article, but it's let's not get this wrong this time, the terrorist one after 911 because we chose to invade Iraq and shredder constitution. All right, I'm going to start a paragraph in.

**Bret** 15:07

Terrorism is a tactic in which the primary objective is to produce fear rather than direct harm. terrorist attacks are first and foremost, most psychological operations designed to alter behavior amongst the terrorized in a way that the actors believe will serve them. The 911 perpetrators killed about 3000 people and did about $13 billion in physical damage to the United States. That's a lot of harm in absolute terms, but not relative to a nation of 300 million people. With a GDP of almost $15 trillion. It was a massive blow to many families and to New York City. But to the nation as a whole, that level of damage was about as dangerous as a bee sting. You may find that analogy suspect because bee stings are deadly to those with an allergy. But what kills people is not the sting itself. It is their own massive overreaction to an otherwise tiny threat that fatally disrupts the functioning systems of the body. And that is exactly what terrorists hope to trigger a muscular and reflexive response on the part of the victim state that advances the perpetrators interests, far beyond their own capacity to advance them. The 911 attack was symbolic. It was not designed to cripple us economically or militarily, at least not directly. It was designed to provoke a reaction. The reaction costs more than 6000 American lives in wars in Iraq and Afghanistan and more than $3 trillion in US treasure. The reaction also caused the United States to cripple its own constitution and radicalize the Muslim world, in a reign of terror that has killed hundreds of 1000s of Iraqi and Afghan civilians. The return on the terrorist investment was spectacular, assuming the official story is right, then al Qaeda got $7 million of effect for every dollar spent on the attack $7 million to one. The ratio of harm inflicted on the US targets by the 911 attacks to the financial harm the US inflicted on itself reflects the same amplification for every $1 of damage they did to us, we did $231 to ourselves. For every American that was killed in the attack, we sacrifice more than two on the battlefield. And that is all before we consider the instability we brought to the Middle East, the harm we did to our own freedoms and the spectacular cost of our to our reputation abroad. In any case,

**Heather** 17:21

extraordinary and so prescient and unrelated realms today.

**Bret** 17:27

Right. And this actually is one of the reasons I wanted to read that is because the idea that there are two things in play, there's the threat that you face, which is obviously real. And then there's the question of whether your reaction successfully diminishes the harm, does it amplify the harm? And this is something that we always have to keep in mind. And as you point out at this moment, we're not dealing with terrorism, we're dealing with other things, but the same question looms in a slightly different way, which is, what is the best reaction to this? And what are the chances that in an effort to to fix our system, we will actually do more harm to it and possibly harm we can't undo?

**Heather** 18:07

Exactly. And we are, you know, we're seeing other countries around the world begin to say, I believe, I believe Germany, I believe Denmark, I believe Iraq, Ireland, begin to say, you know, what, terrible disease, awful virus, we're going back to life, we're going back to normal life. Because we feel that we've done what we can do, we will hopefully continue to treat. And I think, because of laws in Europe, things like planes are still we still have people with masks on them and such. But for the most part, life is going back to normal even in countries that continue to have COVID. And, you know, this is a place you know, you and I think slightly disagree at this point of backup, you know, when we when we publish the substack piece that we did at the end of July, laying out what we understand to be our, you know, what we understand to be sciences, current understanding with regard to things like off label use of, you know, repurpose drugs for treatment and prophylaxis of, of COVID. And the vaccines and how, how universally effective response that can be. We said, and I think even the title the piece was, you know, we have to, we have to get rid of this virus, we have to eradicate it expect to drive it extinct. And I'm no longer convinced this is possible. I'm, I'm convinced and I think I will remain convinced that it was possible that it was possible and it was possible for a very long time and that we didn't do it. And it's not because some part of the population refused to comply. It's because our policies were bad. But given that it looks like it is an ever more impossible target to actually eradicate this thing and that we do live with far worse pathogens, things like things like rabies, things like yellow fever. And it's not that those that that I'm not saying I like those things right or that I think that we should encourage them, but that we live with them with plans in place to prophylaxis if we can and to treat and to vaccinate if it's possible. And, you know, the countries that are saying enough is enough, are well, let's do let's see how it works for them. But so far, so good.

**Bret** 20:32

Yeah, I think in some sense, the question about whether it is possible to drive it extinct has become politicized. And like, it's

**Heather** 20:41

not even possible to know the answer, because the data stream is so dirty. Right?

**Bret** 20:45

And, you know, I'm not saying I'm convinced it's possible, I am convinced it was possible. I have seen nothing that tells me it isn't possible. In general, the arguments that people Marshal that suggested isn't possible or not good arguments. And I think the real important point is it actually doesn't matter. Because if it is not possible, then the obvious objective is to control it as well as for example, we control rabies, right? Maybe he's still with us, we have no mechanism for getting rid of it. However, how many people die of rabies every year, you know, right in the US, for example.

**Heather** 21:18

And and you know, of course, there's a massive difference in that, you know, rabies has a case fatality rate close to one is why I think there may have been one or two cases, there's one case or someone's In my case, somebody survived well, surviving rabies without getting treatment very

**Bret** 21:35

quickly, surviving rabies with onset of symptoms, you can treat rabies having been infected. So

**Heather** 21:43

it's not gonna be the CFR. But yeah, at the point that you show symptoms, it's basically a death sentence, unless, unless you've gotten treatment. So it's, it's a totally different disease. And yet, we have figured out how to live with that and have decreased mortality to close to zero.

**Bret** 21:57

Now we're gonna take a lot of crap for analogizing, the two because obviously, they're very different diseases transmitted in a very different way. But nonetheless, the point is complete control of the disease has to be the objective if extinction is out of range, and I don't think anyone actually knows that extinction is out of range. And, you know, it's a discussion that we should be having, unfortunately, because this is a politicized question, depending upon whether various parties are interested in pretending that they have a plan to drive it extinct, or thwarting those who would point out that their plan is no good. You'll hear both answers. So in any case, it is what it is. But maybe, unless there's more to say, on this topic, we should move on to what the future might hold if we in fact, figure out how to bring ourselves into it in a useful fashion.

**Heather** 22:50

Let's do it. Yeah, so again, it's a 13 chapter book and there is an epilogue and and an afterwards so we may we may come back at you next week again, with with more but the 13th chapter is called the fourth frontier and indeed, on on Rogen, this week, we talked about this some so you, in fact summarized the frontiers that we were talking about having existed before and what the fourth frontier might be, but I'm just gonna read the section I'm starting a couple pages into the chapter. Again, the final chapter of our book hunter gatherers guide to the 21st century, humans thrive in almost every terrestrial habitat on Earth. We are a broadly generalist species with highly specialized individuals who have shaped shifted and niche shifted into nearly every environment on the planet. This has meant interacting with frontiers over and over and over again. Here we describe three types of historical frontiers, geographic, technological, and transfer of resource, then we'll propose a fourth geographic frontier is what we tend to think of when frontiers are invoked, the vast unspoiled VISTAs the abundant and yet uncounted resources, all of the New World, North and South America, the Caribbean, and every Island near the coasts, was a vast geographic frontier for the birth engines. The frontier of the new world was fractal so the descendants of the first Americans discovered even more to the Indians, Yosemite Valley, Yosemite Valley was a geographic frontier, to the title the Caribbean was a geographic frontier. To the south non people a far southern Chile. Tierra del Fuego was a geographic frontier. Technological frontiers are moments where innovation allows a human population to make more or do more or grow more than they did before the innovation occurred. Every human culture that is terrorist hillsides, decreasing runoff and increasing crop production was confronting technological frontiers from the Inca and the Andes to the mala Ghazi on the plateau of Madagascar. The first farmers in China, Mesopotamia and Mesoamerica, were doing so. And the first ceramicists who dug clay formed into useful shapes and fires and coals. Were doing so as well. Finally, there are transfer of resource frontiers unlike geographic and Technological frontiers. Transfer of resource frontiers are inherently a form of theft. When people from the old world came across the Atlantic and landed in the new, they may have at first imagined that they had stumbled upon a vast geographic frontier, but they hadn't. In 1491, the new world is estimated to have had between 50 and 100 million people in it with uncountable distinct cultures and languages. Some people were living in city states among astronomers, craftsmen and scribes, others as hunter gatherers, to Francisco Pissarro, the Inca Empire was a transfer of resource frontier, to the instigators of the rubber boom in western Amazonia. At the end of the 19th century. The Sapporo territory was a transfer of resource frontier and once the support was with us weakened their longtime competitors, the war Ronnie moved in as well. In modern times, transfer of resource frontiers are everywhere, oil drilling fracking and logging in ancestral lands. predatory lending is with subprime mortgages and much student debt. The Holocaust. One symptom of transfer of resource frontiers, is tyranny. Geographic frontiers represent the discovery of resources here to for unknown humans. Geographic frontiers are inherently zero sum. There is a finite amount of space on this planet of ours and we will reach the undeveloped technological frontiers of the creation of resource through human ingenuity. Technological frontiers are temporarily nonzero sum specifically positive sum, and this can appear to be a permanent state.

**Heather** 26:25

But there are physical limits. A single electron is the theoretical minimum near to flip from one state to another in a transistor for instance, transfer of resource frontiers or theft of resource from other human populations. Like all frontiers transfer resource frontiers are ultimately zero sum. Theft has its limits. Even thieves must obey physical laws. What choice do we have to continue seeking new frontiers and more growth? If our addiction is just a special human case of a pattern that characterizes all species that have ever lived? Are we not simply condemned to ride this destructive trajectory to the end? We have written this book in part because we believe the answer to that question is no. Humans are obsessed with growth because it engender is bigger populations that if nothing else have farther to fall before going extinct, but large populations also pose a hazard to themselves with the resources that are large them are finite or fragile. In such cases, moderation is the key, but it only works if our drive for growth, our individual perception of it is sustainably satisfied. We have run out of geographic frontiers or nearly so. Technological frontiers by turns dazzling and disappointing come with risks beware Chesterton's fence and are ultimately constrained by available resources. Transfer of resource frontiers are immoral and destabilizing. What then are we to do? Where to turn to find salvation? In simple terms, consciousness, consciousness can point the way to a fourth frontier. Once again, the human niche is niche switching and consciousness is the answer to novelty. Living sustainably on a finite planet is a hard sell. But we can and we must find a way we have no choice. These problems of novelty require humanity's urgent attention and cannot be solved by the goodwill or hard work of individuals. We moderns have become a threat to our own persistence, we are built to figure out how to move between modes of being It is time to rise to collective consciousness and prototype a way out of this, we face some significant obstacles. Humans, like other creatures are obsessed with growth. And we are capable of driving ourselves extinct, extinct in the pursuit of it. Even though it is logically obvious that we must accept equilibrium we are not built to be satisfied with it because being unsatisfied has been an excellent strategy for the last several billion years, there was a character trait of individuals that may be critical to finding the fourth frontier or rather its adaptive Foothill that could lead to a society wide solution. That is pride and craftsmanship and artisan who takes pride in the quality and durability of their work as enacting some portion of a fourth frontier mentality, one in which the lifespan of a product is as important as its function. A table or sideboard made by a local crafts person is not beloved merely because it is more beautiful than what can be assembled from a box bought at IKEA, but also because the person in possession of a lovely and functional piece has a chance of handing it down to their children or other kin, or friends. So to what we'd like to be able to deliver on to the next generations in lovely and functional world. The fourth frontier is a framework therefore that can be understood with an evolutionary toolkit. It is not a policy proposal. The fourth frontier is the idea that we can engineer an indefinite steady state that will feel to people likely live in a period of perpetual growth, but will abide by the laws of physics and game theory that govern our universe. Think of it like the climate control that allows the inside of your house to hover at a pleasant spring temperature as the world outside moves between unpleasant extremes. Engineering an indefinite steady state for humanity will not be easy, but it is imperative. Have one more to share about the Miam before we end today, but we've ended up we've done a fair bit of Media so far, most of which is not out there about the book. And at that, we'd end up talking a lot about the sex and gender chapter. And there have been a few podcasts that we've done. And we'll be talking about all of these that have specifically focused in on that. But it's been interesting how many of them have ended up being about about this about the society, level decoherence, and how it is that we can find our way out?

**Bret** 30:26

Well, I think it's a mirror actually for one of the errors that we point to about evolutionary theory as we find it today. And I guess I need a little, a little leeway here. But the idea is, that one has the sense based on what evolutionists typically say that evolutionary success is synonymous with reproduction, that producing more offspring is better. And of course, we can back that off slightly. But in general, that is the the conventional wisdom. And it's the conventional wisdom for a pretty good reason, which is that the real thing that selection is trying to accomplish, it's not really trying to do anything, but if it were, it would be trying to large jeans as deeply into the future as possible. And one way, so zero is what we call an absorbing boundary, if your population goes to zero, it doesn't rebound from it. So one way to not hit zero, and therefore fail to get into the entirety of the future is to have a lot of individuals, right. So reproduction is very closely tied to many of the things that make you evolutionarily successful, but in and of itself, it's pointless. So the point here is, there are a lot of problems that we face, right, that are in some way downstream of, of our perceptions, that selection has awarded us in order that we can navigate, but the purpose of it is all the same. The purpose is to get into the future. And so the reason that many of the things that we have talked about really ultimately, point to this question is no matter what problem you solve, it doesn't much matter if you don't solve this one, right? We have an obviously unsustainable trajectory, the hazard we now pose to ourselves is so immense, that if we don't solve it, there is nothing to do, right. You could turn hedonistic, and you could say, Alright, let's just have a party because there's nothing to be done about this. And, you know, there's a reasonable argument to be made. But I think, again, as with the question of, can you drive this pathogen to extinction? We don't know, there's nothing that has been provided yet, that tells us we can't get out of this. And in fact, we didn't the point, the one of the major themes of the book is that what we do, what our species does, what it is built for more than anything else, is getting out of jams, and figuring out what to do in the new situation that nobody knows anything about. That's, that's our niche, so good

**Heather** 32:55

at even when the jam is one that we are, ourselves have created. But we have now created a series of jams to use your word that we have not only created, but are modifying at such a rapid rate, that it's really hard to see our way up.

**Bret** 33:10

And we've done some things that make it less likely. So the problem that we have, as we have now taken what we have is tools, and we've put them in a system that has its own evolutionary dynamics, our political and economic system causes, for example, those who have done something that has created, let's say, a technological frontier and have therefore become very wealthy, have the power to prevent change. And so we talk about this need to rise to collective consciousness in order to begin problem solving to figure out how to get out of the pickle we find ourselves in. But the problem is, we now have an opposing force, which is for anybody who succeeded brilliantly, change is frightening, right? Because unless that changes under some kind of control, if you're a winner, change can turn you into a loser. So there is this natural tendency to frustrate change. And the problem is, it won't make It's of no value to anyone to preserve things in the state if the state is self terminating. But there's a game theory problem where those who oppose change, actually retain and concentrate their, their fraction of our collective or their disproportionate fraction of our collective well being. And, you know, cynically speaking, even if the world must be saved from these processes, somebody who opts not to participate in that saving phenomenon, right? They actually end up better off right so the the, the game theory, the free rider problem applies even within the category of elites who might group together and decide to point us in the right direction. So anyway, there, our final chapter is really about you know, what does this puzzle really look like if we free ourselves from the narratives that we are handed that in large measure frustrate our ability to see where we are and where we might go.

**Heather** 35:08

And part of what you were just alluding to is that the stable state will not be static that it is easy for people to conflate stable with static. And there will there can be no stable state for humanity in which humans are actually feeling a sense of purpose. And and, and progress and happiness and productivity, which is static kind of which can be also true that it therefore cannot be defined in advance. And that definition will remain the same,

**Bret** 35:40

right. And in fact, you know, it will be subtle to many readers. But what we say about the fact that this state cannot be blueprinted, we literally do not know enough to say what the state will look like what it must be is navigated towards, right that we will learn we will bootstrap, we will prototype our way to this new state, which also implies some other things. And this, you know, this may be unsettling to people. But this is a multi generational process of navigation, right, the amount of change necessary to reach a steady state that truly does fulfill the human desire for growth without needing to find new sources of growth. Right, that process. Let's say it takes three generations, right? That means we're not likely those who are old enough to be paying attention to this podcast, we're not likely to be in that world. Right? On the other hand, the process of going there, we have been falsely told, would be a matter of austerity, right? Oh, you want the world to function better and be safer, you're going to have to give up a lot of stuff. And I think this is complete nonsense, that actually, we lack meaning and useful things to do. And that a world in which we actually set them out, trying to figure out how the future should be would be a world in which there was plenty to do and lots of meaning. And you know, the fact that you don't live to see the final state doesn't make any difference, because it actually would be a better world almost immediately upon our setting about this journey.

**Heather** 37:09

Yeah, and asking people in the West, asking people in the weird world, to embrace a policy of austerity from from here on out, would seem like an obvious ask, given our, the relative wealth that we enjoy and the resources that we have. But it is also true, and we write about this in the book, and I've written about it elsewhere, that the meaning that we find in life is mostly not in our stuff, and our relative wealth, and that it is therefore not in the weird world where you tend to find the people who have the most sense of purpose and meaning and, you know, devotion to people and love and ideals that that do provide meaning. So giving up stuff feels really hard for people right now, not because we're a bunch of selfish, greedy jerks, but because most of us are actually recognizing at our heart that no matter how much luxury and comfort we may be surrounded with, there's actually something real missing. So we can do this with you and I argue, but without giving up a lot of the trappings but also argue that it's not the trappings, where we're actually going to find the meaning and what we need to do is create a way for people to redefine the connection and the meaning and of course, you know, the last I have to update my calendar but you know, the last 18 months 19 months now has taken away so many of the opportunities that people did have, you know, some of what you're talking about last time the the experiments and the opportunities for collective joy, the the parties and the festivals and the carnivals and sporting events and the intimate gatherings and the chance meetings on the sidewalk that turn into a long walk that turns into an evening that turns into a relationship right like these things are much harder to accomplish in an era of restrictions and lockdowns and requests for compliance with rules that have just been handed to us without an explanation for the justification honestly. And so what we have had our meaning taken from us, and that's hardly new, but it did accelerate over these last 1819 months. And before that, as we talked about in the book, some of the accelerators Are you know, the usual suspects, the screens and the junk everything the junk food, the junk sex, the junk entertainment, the the ability of advertisers to hook into our short term and technological systems and give us our dopamine hit or serotonin hit rather than us being able to resist the dopamine hit and the serotonin hit and look towards The joy and deeper pleasures to be found in the non junk versions of food and sex entertainment, and meaning making and adventure and creation and discovering all of these things.

**Bret** 40:12

I wanted to maybe refine one aspect of that, because I do believe that part of our problem with sustainability has to do with the amount of material and energy necessary to make the world work. And we are we are gonna have to cut back. But the point I want to make is that is not going to feel like austerity, if done well, right. So I want to raise this issue. Buckminster Fuller had a very ironic way of making this point, he had this term that he coined ephemeralization. And his definition for it was the process by which you can do more and more with less and less until eventually you can do everything with nothing. Which, you know, it's it's a beautiful filler ism. But in any case, the point is, think about something like it almost sounds like homeopathy. Well, the point is, the very last bit is an ironic twist, because it is not absolutely nothing that you can do it with. But the point is, it can be minimized. You know, nano material can have great strength with almost no atoms in it by virtue of geometry, right of the structures. And so anyway, I would just point out, this is an evil dangerous device. We all know that, right? But at a technological and material level, it is a Marvel, right? How many objects? What is this way it weighs, you know, three quarters of a pound or something, right? And it's a rather marvelous camera, it's a video camera. It's a telephone, it's,

**Heather** 41:42

it's a massive wayfinder.

**Bret** 41:43

It's a library, like none that has ever existed on Earth, right?

**Heather** 41:49

It's a lot of things that actually don't even have a name separate from, right, they were separate from the revolution that it accompanied,

**Bret** 41:54

right. And so the point is, it's not all the way to ephemeralization it's not a heads up display that emerges out of no material that you're carrying around God, well, right. But my point is, the number of atoms in this thing is many, but it's not many relative to the number of objects it replaces. And so

**Heather** 42:11

it's a lot fewer atoms than in ENIAC, which did a hell of a lot less. Yeah, did effectively

**Bret** 42:15

nothing. Right. I mean, it calculated things like trajectories for bombs and stuff that, you know, it's a trivial calculation by modern standards. But that's the question is, how do you deliver the animal, which is what we are? How do you deliver it, the somatic sensation of this is a good, safe, functional world in which I am liberated to do the things that actually make a difference to me, and allow me to make the world better, which is really what the the objective, you know, we have this cruddy system where, if it makes a profit, then we sort of imagine that you probably created wealth made us

**Heather** 42:52

value in that if,

**Bret** 42:55

but there's so much market failure where your profit was made. And it really wasn't that you made the world better, you just externalized harm on somebody

**Heather** 43:02

else. It's externalities all the way down all the way down. And

**Bret** 43:05

right, so many negative externality. So the question is what you know, you may not be able to instantiate it. But ideally, what you'd like is an economic system in which you got paid when you made the world better when you actually did create wealth, and you didn't get paid for creating negative externalities or any other exploiting market failure of any kind. And so the real mean, we have two levels of question. And in fact, I once I won't go into it, but I do think it's important to separate out the question of what structure would make the world function from the question of Is there any way to get there? Because the answer to Is there any way to get there could be no, it could be that the obstacles that those who oppose this because they find it threatening are too strong and you can't get there but it just doesn't change the importance of the question about what what would a functional system look like? And so anyway, we are we are, we need to recast this in the public mind so that people understand that they are not being told that they need to live like monks in order for us to get into the future because that's not it. They need to retool their expectations a bit. And you know, what we say in the book about the fact that it's always spring in your house. And that that's really what we're talking about. We're not talking about either anything that violates any known law, the spring in your house doesn't violate any known law because when it's hot out, we cool your house with an air conditioner that slightly heats your backyard right? It all makes sense. You just keep the coolness on one side of the wall.

**Heather** 44:44

And and as we talked about on on Rogan, when you change your diet to something that is better for you, your your physiology and the gut microbiome that you have on board actually changes so that you come to appreciate the thing better and what he raised which hadn't occurred to me but the the way of marking progress in martial arts being a change of color in the in the belt that you have adds value without coming with much of a cost. And that's that those are the sorts of solutions. And the same thing with pride and craftsmanship that we also that we also talk about. And that section that I read from that finding, finding value, not just in the minimalist reductionist version of what the thing is, well, all I need is a chair, and therefore, I need something that holds me up when I try to sit. Okay, are there other things that a chair could offer you that would provide more value, and the construction of which would therefore also provide more value for the person constructing it? Of course, there are, we've all sat in garbage chairs, and, and better chairs, regardless of how you know of your surroundings, you've sat in variable quality chairs, and the quality isn't just about the comfort. It's also about the level of construction, and you can Intuit something about what the thought was that went into it.

**Bret** 46:00

Yeah, whether it's garbage chairs or garbage trucks. I mean, you know, the fact

**Heather** 46:04

some of us are not set in garbage trucks, except by that use of the term garbage, I guess, right? Yeah. One way or the other. It wasn't a garbage trip. But I had a not too awesome truck there for a while. Yeah, yeah. Back in grad school. It was okay.

**Bret** 46:19

All right. And, yeah, if we'd went from here, and often got to there, usually it

**Heather** 46:25

usually, yeah. f150. For those of you who wonder, anyway,

**Bret** 46:31

people used to say, friends don't let friends drive for it.

**Heather** 46:35

I do so but yeah, actually,

**Bret** 46:37

I have no idea whether that still applies. But yeah, for a while, we started hearing

**Heather** 46:41

that after we were literally in a Ford Bronco that caught fire in the middle of Nebraska in a snowstorm and we had to abandon it there. Which is a story for another time. But then much later, I ended up with this Ford f150 that was old and Rusty in Michigan and all this but it it it got me from here to there. Yeah. And it often got my bike there too. So it was it was fine. Okay. Let's talk a little bit about the Maya, the Maya beringian is the original Americans are a recurring theme throughout the book. And in fact, we open with it the very first chapter, the burn engines and the the original people in the Americas. And the mile loom very large in our thinking and, and are not as as frequent players in the book, as originally this is, you know this, we cover a lot of ground here. And this isn't that that good luck. But here's a little section on the Maya from this final chapter. in many regards, the problems we are facing now are ones we have faced before. Every culture in human history has engaged in both cooperation and competition and behaved both in ways that ought to make us proud to be human, and then those that make us ashamed, both glorious and ghastly actions have been widespread. When looking back on history, we have the responsibility to recognize that truth, and also to recognize when our ancestors wins, legitimate or very often not have provided us advantage that we did not ourselves earn. It is not However, our responsibility to subjugate ourselves to those histories. Europeans indeed stole land from Native Americans and often gruesome, despicable ways. The Native Americans who were the subjugated themselves had a history of warfare and conquest in the New World, taking land from one another. And of course, none of this was new. They brought it with them to the new world when they crossed over from kurinji many 1000s of years earlier. Let us not romanticize any people or period, let us instead understand humanity holistically and work to provide opportunity equally to everyone going forward. In this book, we have shared an evolutionary toolkit with which to understand the human condition not to justify it. We are not served by ignoring what we are brutal apes by one measure, we are not served by Oh, we're also not served by pretending that brutal apes are the only thing that we are. We are also generous, cooperative beings full of love. We have arrived in the 21st century with evolutionary baggage and a fair bit of intellectual confusion. Let us understand the baggage in order to reduce the confusion and increase our odds of moving forward with maximal human flourishing. As an aid to this end, let us consider the Maya. The Maya thrived for over two and a half millennia and Mesoamerica, surviving droughts and enemies and other unpleasant extremes. In the now ancient city states with the Maya including not just to call but also at Balaam chavan. And so many more. Stone pyramids and temples are still visible above the tops of the trees. on the forest floor footpaths run between ancient buildings as do a Goody's lizards and the occasional Ocelot. more substantial roads SOC Bay's Connect city states. Most of the mind, city states emerged as political, economic and cultural forces to be reckoned with long before the Roman Empire existed. wholly unaware of the other's existence, the Maya and the Romans were at their peak at the same time, in the early part of the first millennium, and both were in obvious decline by the beginning of the second. The Maya had enlightenment of their own, long before the European enlightenment. We will never know its extent. We will never know its extent, as the vast majority of their power were destroyed by Europeans. The Mayan civilization was spread widely across the Yucatan Peninsula extending south through modern Belize and Guatemala and just barely dipping into Honduras. The Maya were dominant in these landscapes for 2500 years, but they were not monolithic, and their successes waxed and waned over both time and space. city states collapsed, droughts caused the abandonment of one's fertile lands, and while some areas were repopulated by the Maya, others never were. The Maya were intensive agriculturalists who farmed on poor tropical soils, but managed to maintain soil fertility for a remarkably long time through successful land management. They dealt with the hilly slopes that are ubiquitous throughout much of their range with at least six types of terracing systems. They use complex reservoirs to conserve water during annual dry seasons, and during less predictable longer dry spells. It is also true however, there were they clean cleared forests, the land was generally degraded and soil quality fell. By the time the Spaniards arrived, the Maya were already in decline. They had had a long run and what exactly precipitated their collapse is up for debate. While the Mayan culture largely disappeared, the Mayan people persist. They were not a fragile people, their culture, they were robust and long standing. Long Lasting one indication of just how long a run they had that they had a unit of time, the buck tune equal to 144,000 days, almost 400 years. They were so long lived as a people and so accustomed to thinking across long time spans that use the buck tune to help keep track of time. The durability of the Maya suggests that the potential exists.

**Heather** 51:33

That the potential exists for conscious directed enlightenment in which we take ownership of our own evolutionary state. Like the Maya, we moderns need to find ways to flatten the boom bust cycle that has plagued all populations across time. We hypothesize that the Maya did this by creating a mechanism for not turning excess resources into more people or ephemeral things. Instead, they invested in giant public works projects. Many of these public works projects are visible today as temples as pyramids, they grew them like onions building more layers in times of abundance. And years of plenty, we posit when excess food could easily have been turned into more people, which would have expanded the population making hunger and conflict inevitable and Liniers. The Maya instead turned the extra food into pyramids, or into bigger pyramids, they created glorious and useful public spaces enjoyable by all an agricultural boom years inevitably seated to bustiers, the temples required no nourishment, and the population can withstand the leaner times. Western civilization has been dominant for nearly as long as the Maya were, their culture unraveled accelerated at the end by a hostile enemy from across an ocean. Our culture is unraveling as well. We need a new steady state and evolutionarily stable strategy, we need to find the fourth frontier. And then we talk about obstacles. And I should say before, I know you have things to respond to in that the obstacles that we talked about the fourth frontier come from both the left and the right. And this is this is an explicitly a political book in which we identify ourselves as politically liberal. But liberals who can identify the types of errors that liberals that people on the left side of the spectrum are more likely to make, and also identify the types of errors that people on the right side of the spectrum are more likely to make. And, and point out, as has been pointed out by many at other times, but many modern seem to have forgotten that we need the tension that we need people on both sides of a divide, as long as we share basic fundamental values and a belief in each other's humanity. The disagreeing about exactly where we are, and how to get to a better future makes for the possibility of progress. Whereas tamping down all dissent does not.

**Bret** 53:41

Yes. And in fact, I think it makes sense. I still don't know how to make the point. So people hear it, but we are liberals. But that is a a measure of where we believe we are in history, it's not a fundamental characteristic or a belief that progress is inherently good, right? It's a question of where we are, and a recognition that we cannot possibly stay here just in an even simple extrapolation of how much resource we are using and how many of us there are. And what that implies about the near term tells us this is not a evolutionarily stable strategy that we are currently engaged in, and therefore we have no choice but to change. But the The point is, and as you point out, and this is something enlightened conservatives agree on, which is that it is the tension between the impulse to solve problems and a healthy fear of the unintended consequences of solution making that results in a society that functions and does not constantly up end itself with naive errors. So, you know, are we at the place where we should all be progressive because progress is absolutely required? I think so. And maybe that's some thing, you know, it will be interesting to see whether that message from the book lands whether people see see that necessity.

**Heather** 55:09

But the those who would misunderstand, you intentionally might hear that any progress that is happening is therefore good, which, of course is absurd. And, and you know, we could we could, I think accurately argue that so much of the change that is happening now certainly does not look like what happened before, and therefore, could be semantically called progress, but is not actually progressing us to anything like a better future.

**Bret** 55:37

Yeah, it's like progressing through time isn't the same thing as progress in the way we mean it. And unfortunately, I think narrative plays two roles that we haven't really separated yet You and I both agree that the way you move people forward, the way history moves forward in the positive sense has to do with compelling narratives, not compelling analyses, nobody pays attention. Except for a, you know, a small number of people to Orwell's political philosophy, right, we pay attention to 1984, because it makes the point of that political philosophy in a way that's very visceral. So narratives, and

**Heather** 56:13

it's easier to confuse people with analysis and numbers and graphs, precisely because it's not native for many people. And I think many, especially like, intellectual elites, media, elites, and such, actually seem to agree with the widespread sentiment that just most people are dumb. Most people can't take it, most people aren't interested. And so you just need to hand them pre digested, pap. We don't we never have. And that was evident in our classrooms. But what I do, do believe and did see is that most people do not really think quantitatively very well. They don't think with numbers very well. And I believe that having that as a as a weakness is, is runs hand in hand with therefore being more easily confused and lied to with those sorts of tools,

**Bret** 57:09

right? People, I think they you know, if you're talking to an honest broker, who knows what they're talking about, and they present an analysis where you can't quite follow the math, but you can you understand what the conclusion of it is, you're not in no danger, but you're in less danger. But the problem is, when you have no idea who it is who's constructed the analysis, I mean, this is this was the point of how to lie with statistics, which is right for people who aren't in a position to check the underlying logic statistics are a place that you can bury a lot of bodies. So anyway, narrative, on the one hand, is the way you would move things forward positively. But we also live in a landscape where everything is basically subject to official narratives that do not appear to have our interests at heart. And so, you know, surrendering to the idea that narrative is perhaps the most important thing, but that it is also a landscape that is ripe for abuse, is maybe part of the the tension of of our of our moment.

**Heather** 58:13

Did you have more to say there?

**Bret** 58:14

Well, I did it did occur to me as you were reading that section of the book that may be one way to move at least one of our attentions forward is to write a sequel called something like the caterpillar who is unknowingly at fault for his own hunger that that book might actually bridge the divide between these two narratives. And we might be able to move forward from there.

**Heather** 58:43

Pick up some of the What's it even forgot what the caterpillar book is called? The Very Hungry Caterpillar. Like, picking up some of that audience?

**Bret** 58:53

Well, I just don't think that this Caterpillar is entitled to be freed from all responsibility for his predicament. You think his insatiability is his own doing in one way or another? I feel certain of that. Yes. I do not remember the plot of the book. So I can't really know that that I mean,

**Heather** 59:09

the plot is just that he eats everything, but I don't remember the conclusion.

**Bret** 59:13

All right, yeah, I have the feeling

**Heather** 59:15

it was it's kind of thin on plot, which is, you know, true for a certain style of children's books.

**Bret** 59:22

It's been on plot. Okay. I'm pretty sure it's going to end with him turning. I mean, I'd prefer it if it was a moth, right? Why? Because it's more surprising that I have the sense that that the caterpillar probably turns into a beautiful diurnal butterfly and lives happily ever after for the next two weeks. Something like that. Yes,

**Heather** 59:46

it's true. I'm actually I don't know. This is definitely the moment to get into what we do and do not know about lepidopteran biology right?

**Bret** 59:53

You and me or science, no, no. So I don't

**Heather** 59:56

know if if Actually, it's If any adult butterflies or moths lepidopteran live a long time or even if, if they will tend to live as long as they spent as as larva. The larval form is often longer.

**Bret** 1:00:16

Yeah, it varies a lot because the larval form has so much resource accumulation to make. I think certain things like spinosad moths are actually fairly

**Heather** 1:00:26

long lived. You know, we know a guy, we will ask our expert friend and absolutely, actually

**Bret** 1:00:31

we should we should do a thing on spinosad moths. Yes. are really finches are Sphinx moths.

**Heather** 1:00:36

Gorgeous. Yeah, they're

**Bret** 1:00:37

beautiful, sometimes mistaken for hummingbirds because of their flight agility.

**Heather** 1:00:44

Are you serious? Yeah. I didn't know that. Yeah, confer Hummingbird.

**Bret** 1:00:48

Sure. I think I may even have done it once or twice, you know, something flies by. But anyway, they're nocturnal. So it's not so easy to confuse them. But there are moments in the day when it can happen. Yeah. And there

**Heather** 1:00:59

is actually as I mentioned, at the top of the hour, some a section in the book in which we ask if butterfly remembers being a caterpillar? And the answer is presumably not and there wouldn't be much value

**Bret** 1:01:11

value there, presumably not because there would be so little value. Exactly, exactly.

**Heather** 1:01:18

So I guess I wanted just to finish, maybe finish by reviewing just, you know, repeating we've spent the last 13 weeks going, you know, doing a little bit from each chapter and saying what they are. And, and then also mentioning, just this week, I think I've got a, I've got an almost complete list of the various media appearances that are going to be dropping this week that I think people might be interested in, you know, some of them will appeal to some and some others. And I think you and I sort of agreed about a couple of them seeming particularly

**Bret** 1:01:55

insightful. I think one thing that has been interesting is how different they've all been, there haven't been two that have been alike. That's right.

**Heather** 1:02:01

Yeah. Which is a good sign. Yeah. And so this list I'm going to read is not all the ones that we've done and include some we haven't yet done. But it's just the ones that I understand will be released this week or already have been. So you know, Joe Rogan is is out. We were in Dallas, meeting Glenn Beck, and I believe he is putting that out today. And tomorrow, our conversation with Derrick Jensen of deep green resistance is going to be out and then on launch day, Mind and Matter with Nick catacombs. And I do want to come back to those three because those three were really remarkable conversations. And you know, Glenn Beck is obviously on the right. Famously conservative and Derrick Jensen is a radical environmental leftist and and so and we've got you know, we've we've just got the sort of gamut of, of political ideology represented among people who we are interested in talking to, you know, our politics are closer to Derek's. But we find all of these people just extraordinary to talk to. So also Megyn Kelly, on launch date will be live with her. The unspeakable podcast will make and Dom will be out this week. I believe you're going to be broke very briefly on Tucker Carlson on launch date. The Michaela Peterson podcast will be out this week, the Federalist, the skeptic with Michael Shermer, and it was also very conversation Impact Theory with Tom bill, you also really good conversation will be live with trigonometry. And the Deborah's. So podcast, very good conversation, and there's going to be a lovely interview and excerpt published in root quarterly in their forthcoming issue. So did you want to say anything about glenn beck? Derrick Jensen, or nectar comes with mind matter? three very different?

**Bret** 1:03:52

Well, and he is I think, you know, your grouping is an interesting one. And I think it

**Heather** 1:03:56

certainly enjoyed all of them. And they've all been very different for all those three

**Bret** 1:03:59

excellent conversations. And, you know, there was no, there was no sense with, you know, Glenn Beck was very clear about what the political distinctions between us likely were and how little it matters in light of the kinds of questions that we are faced with. And, you know, he did give the sense of being a very genuine, deep, caring person feels bad for certain features of his history and is very interested in making the world better as he sees that possibility. So anyway, I think people are going to enjoy that conversation.

**Heather** 1:04:39

Even though I wildly flubbed his question about our deep history chapter. So this was a this I just say before you go on talking about the other two, the chapter that actually we wrote first, and that I just loved and loved writing the deep history chapter which basically says, Okay, here's where life started, and let's do a quick run through through the human lineage back from 3.5 billion years. To go, and it was, you know, 6000 words isn't much to write that history. And then he basically said, you know, you want to summarize that. And I was like, Oh, I promise not to take three and a half billion years to summarize it, but I sort of got lost around animals, and then you picked it up and start talking about something else. So we never got back to it. We didn't even get to talk about the origin of, you know, bones and heart and brains. But anyway,

**Bret** 1:05:21

it was a very difficult question, which, you know, it's a little bit like, yeah, could you summarize what happened at evergreen in five minutes? And, you know,

**Heather** 1:05:30

fair enough, okay. Anyway. But

**Bret** 1:05:34

I'm not sure how much there is to say I think people should listen to these conversations. Well,

**Heather** 1:05:38

so Derrick Jensen, is an it's an hour ish long conversation. And he, you know, he like Glenn Beck, like, I think they have very little in common at one level, except I think the both of them could actually talk to each other, just as we can talk very easily to both of them. Appreciate it appreciated the book, you know, he's got a background, I think, an undergraduate degree in physics, and is an active environmentalist. But, but he doesn't consider himself a scientist. And he, he reported that he felt like we really went deep on important scientific theories and principles and explained it in a way that he could understand and relate them. So I really appreciate that. And then Nick trichomes, is himself a scientist. And we had like a three hour conversation with him, in which he went almost point by point, you know, obviously, you can't do all the points in the book, but we did really sort of a thorough review of many of the salient points in the book.

**Bret** 1:06:33

Yeah, it was great in it. Yeah, I think that that is a good point, sort of a continuum between a technical exploration of the book and a generalist survey. And you know, one thing that we were shooting for in writing the book was a book that was accessible at all these levels, that actually does contribute new ideas that are significant and change the way we should view ourselves and our evolutionary nature. But that is accessible to people who don't have any background and want to dive in and, you know, figure out what the, the toolkit that we generated and taught to students really allows you to see and you know, it has very practical advice about how you should change your approach to various things. So anyway, yeah, it's a little early to know whether we've succeeded but those conversations are suggestive that maybe maybe we did,

**Heather** 1:07:23

yeah. And then there will be more so I intend to say who, where else, you can see conversations about the book as as it continues, and you know, as it is, as it comes out this week, maybe just these last three paragraphs, sure of the final chapter, before the epilogue before the afterward, acknowledgments, glossary, etc, etc. From the moment when our ancestors achieved ecological dominance, competition, competition between populations has been our dominant selective force. millions of years of evolution ever find our circuitry for such competition, and it has become the default of the human software level. Now, though, three things conspire to make the inclinations that brought us to this moment, an existential threat to our future, the scale of the human population, the unprecedented power of the tools at our disposal, and the interconnectedness of the systems on which we depend global economy, ecology and reach of technology. The importance of understanding human software is urgent. The problem we face is the product of evolutionary dynamics. All plausible solutions involve awareness of those dynamics. The problem is evolutionary. So is the solution

**Bret** 1:08:40

All right. Are we there? I think we are there next time we return on our next live stream the book will be actually out in the world

**Heather** 1:08:51

Yeah, so so please consider consider buying it and definitely, definitely consider reading it. And we look forward to continuing to talk about this for a long time to come there may even be an opportunity to have like in person events in which we discussed this at some point although that's not going to happen this fall for obvious American COVID reasons. So we're gonna take for those of you watching now if you want to stay tuned, we will take your questions as many of them as we can get to in about 15 minutes on separate stream on both policy and YouTube. And you can ask those questions at Dark Horse submissions calm. Mostly, please consider looking, getting the book and reading it this week. But we also of course, a Patreon. We have stuff at store dot darcars podcast.org. We I have substack, in which I'll actually be having an excerpt a very small excerpt from the book this Tuesday at natural selections.substack.com you can email logistical questions to Darkhorse moderator@gmail.com, including we've been getting requests for Hey, you know, the audio book doesn't seem to be available in New Zealand. Is it going to be published in French, this sort of thing. And we are forwarding those things to the relevant people so that hopefully we get answers soon. And please can consider subscribing to the channels both on Odyssey and on YouTube, the main channel, Brett Weinstein and the clips channel there courts, podcast clips, anything you want to end with. I don't think so. All right, be good to the ones you love, eat good food and get outside.

**Bret** 1:10:24

Be well, everyone