The following is a conversation with my dear friend, Andrew Huberman, his fourth time on this podcast. It's my birthday, so this is a special birthday episode of sorts.

Andrew flew down to Austin just to wish me a happy birthday,

and we decided to do a podcast last second.

We literally talked for hours beforehand,

and a long time after, late into the night,

he's one of my favorite human beings,

brilliant scientists, incredible teacher,

and a loyal friend.

I'm grateful for Andrew, I'm grateful for good friends,

for all the support and love I've gotten

over the past few years.

I'm truly grateful for this life,

for the years, the days, the minutes, the seconds

I've gotten to live on this beautiful earth of ours.

I really don't want to leave just yet.

I think I'd really like to stick around.

I love you all.

And now, a quick few second mention of each sponsor.

Check them out in the description.

It's the best way to support this podcast.

We've got Inside Tracker, for bio data,

AdSleeve for naps, AG1 for health,

Shopify for selling stuff,

and NetSuite for business management software.

Choose wisely, my friends.

Also, if you want to work with our amazing team,

we're always hiring, go to lexfreeman.com slash hiring.

And now, onto the full ad reads.

As always, no ads in the middle.

I try to make this interesting,

but if you must skip them,

please still check out our sponsors.

I enjoy their stuff, maybe you will too.

This show is brought to you by Inside Tracker,

a service I used to track biological data,

as data that comes from my own body.

It's really interesting to consider

all the different signals that we send from our body,

conscious to subconscious.

That's something I talked to Andrew in this podcast about.

Of all the thoughts and ideas and memories real or fabricated or morphed or modified or recycled that lurk somewhere in the unconscious, that one brought to the surface can bring a kind of relief or reinvigoration of the way we see the world around us. There's so many signals, and those little neurons firing together to construct the experience of the reality we see around us. And that's not just the brain. That is deeply rooted in all the different systems, including the immune system, the billions and billions and billions of organisms, half of which are cells, the other half of bacteria, all working together to create this experience that we humans call life. And it's so interesting that by collecting that data, by listening to the signal that this entire gigantic complex biological systems create, we can start to try to figure out how to improve the functioning of it. At first, top down in a centralized manner, sort of listening to the music that the orchestra creates and trying to maybe rewrite the music or adjust the music or edit the music. It's interesting, this whole journey we're on. And I'm glad there's people that turn that kind of journey into a company and try to help people by making the data from their body accessible and giving advice based on that data, making that advice accessible. So you can get special savings for a limited time when you go to insidetracker.com slash Lex. This episode is also brought to you by Eight Sleep in its new Pod 3 mattress. It is currently 100 plus degrees, 105, 106, 107 degrees in Austin. And boy, does a cool bed surface feel good, even with air conditioning. The air conditioning is holding on for dear life. And even then, the ability to have a cold bed surface when you go in for a power nap

with a little bit of a blanket, it's just heaven.

It's a refuge from the fire that burns outside the castle.

And that refuge for me is a biological one

and a psychological one.

It's kind of incredible in terms of just energy,

how much better you can feel after a nap.

And it's also incredible psychologically

in terms of the positivity,

the joy you can rediscover after a good nap.

Everything you can do,

you should put behind great sleep and great naps

because it could just do magical things to your mind.

Books like Man's Search for Meaning reveal

that it is indeed in the mind

where the interpretation of the world's catastrophes lie.

And so you have to equip your mind with the best tools

in order to interpret those catastrophes,

those tragedies, those hardships correctly.

Anyway, check it out and get special savings

when you go to atesleep.com slash Lex.

This show is brought to you by Athletic Greens

and it's AG1 Drink.

It's an all-in-one daily drink

to support better health and peak performance.

I've been drinking it every single day, twice a day,

for as long as I remember when I'm traveling,

when I'm home, it just makes me feel

like I have my life together.

Even when it feels like it is crumbling on the sides

or maybe shaken at the core

due to whatever things happen in life.

I make it such a damn interesting roller coaster.

Anyway, this is the one thing you can kind of control

is the nutrition you put in your body.

And so, you know, to do the vitamins and the minerals

and all that good stuff, I think there's like 75 of them,

to get that all in your body every single day,

make sure the foundation and the bases are all covered.

That's, I go to AG1, you should too.

They're great, they've been a really loyal

and a loving and an incredible sponsor.

So, if you just like this podcast, go support them.

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This show is also brought to you by Shopify,

a platform designed for anyone to sell whatever they want

anywhere and make it easy.

So easy that even I have opened a Shopify store,

but I haven't, I think, made it public yet.

I'm a huge fan of people's merch.

And so, a bunch of people requested

that I put some merch out there.

It's just fun to wear a cool thing on a shirt

and to celebrate the things you love in this world.

I love it when podcasts have merch,

especially when they kind of celebrate

the specific podcast and I could connect with people

on the street by saying,

hi, I read that too, or I listen to that too.

I love wearing Metallica shirts for that very reason.

I can connect with people that, you know,

have a similar love for Metallica as I do.

And there's just an endless number of band shirts

that I love wearing, because just for that,

you can connect with people.

They recognize that there's a smile

that comes over their face and that you can talk about it.

And that's the beginning of a conversation.

And the beginning of a brief moment

of exchanging the humanity that connects to all of us.

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to the next level today.

This show is also brought to you by Nutsuite

and all in one cloud business management software.

Running a business is difficult.

You should be using the best tools for the job.

And Nutsuite is definitely that 36,000 companies

have upgraded to Nutsuite by Oracle.

Not only that, since this is a birthday podcast,

Nutsuite is also celebrating a birthday.

They just turned 25 this year, so I congratulate them.

It's funny, I remember, I think it was Jeff Bezos

that said, no company lasts forever.

For some reason that shook me.

Like, wow, to understand that nothing really lasts forever.

And as somebody that runs a company,

you should deeply, maybe, internalize that truth.

And based on that truth, do everything you can

to maximize the lifetime of your company,

which means, first of all, making sure

that all the details, all the infrastructure,

all the financials and the inventory,

all the business related details, all are taken care of.

But also, continuously innovate and pivot

and adjust to the changing times.

Change is the only constant.

Anyway, download Nutsuite's popular KPI checklist

for free at Nutsuite.com slash Lex.

That's Nutsuite.com slash Lex for your own KPI checklist.

This is the Lex Friedman podcast.

And now, dear friends, here's Andrew Huberman.

I'm trying to run a little bit more.

Are you losing weight?

I'm not trying to lose weight,

but I always do the same fitness routine.

I have for like 30 years, basically,

lift three days a week, run three days a week.

But one of the runs is a long run,

one of them's medium, one of them's a sprint type thing.

So what I've decided to do this year

was just extend the duration of the long run.

And I like being mobile.

I never wanna be so heavy that I can't move.

Like, I wanna be able to go out and run 10 miles

if I have to, so sometimes I do.

And I wanna be able to sprint if I have to,

so sometimes I do.

And lifting in objects feels good.

It feels good to train like a lazy bear

and just lift heavy objects.

But I've also started training

with lighter weights and higher repetitions.

And for three month cycles,

and it gives your joints a rest.

And yeah, so it probably, you know,

I think it also is interesting to see

how training differently changes your cognition.

That's probably hormone related,

you know, hormones downstream of training heavy

versus hormones downstream of training a little bit lighter.

I think my cognition is better

when I'm doing more cardio

and when the repetition ranges are a little bit higher.

Which is not to say that people who lift heavy are dumb.

But there is a,

because there's real value in lifting heavy.

There's a lot of angry people listening to this right now.

No, no, no, but lifting heavy

and then taking three to five minutes rest

is far and away a different challenge

than running hard for 90 minutes.

That's a tough thing.

Just like getting in a nice bath, people say,

oh, well, how is that any different than working out?

Well, there are a lot of differences.

But one of them is that it's very acute stress

within one second you're stressed.

So I think subjecting the body

to a bunch of different types of stressors

in space and time is really valuable.

So yeah, I've been playing with the variables

in a pretty systematic way.

Well, I like long and slow for, like you said,

the impact that has on my cognition.

Yeah, the wordlessness of it,

the way it puts you in a,

the way it seems to clean out the clutter,

it can take away that hyper focus

and put you more in a relaxed focus for sure.

Well, for me, it brings the clutter to the surface at first,

like all these thoughts come in there and then they dissipate.

You know, I've been,

because I got knee bar pretty hard.

That's when somebody tries to break your knee.

Yeah, I was just, what's a knee bar?

They try and break your knee?

Oh, so you tap, so they...

Yeah, yeah, yeah.

So it's, you know, hyper extend the knee that direction.

It got knee bar pretty hard.

So in ways I don't understand, it kind of hurts to run.

I don't understand what's happening behind there.

I need to investigate this.

It basically this, the hamstring flex,

like curling your leg hurts a little bit.

Okay.

And that results in this weird doll,

but sometimes extremely sharp pain in the back of the knee.

So I'm working through this.

Anyway, but walking doesn't hurt.

So I've been playing around with walking recently,

like for two hours and thinking.

Cause I know a lot of like smart people throughout history

have walked and thought.

And you have to like, you know,

play with things that have worked for others,

not just to exercise,

but to like integrate this very light kind of

prolonged exercise into a productive life.

So they do all their thinking while they walk.

It's like a meditative type of walking.

And it's really interesting.

It really works.

Yeah. The practice I've been doing a lot more of lately

as I walk while reading a book in the yard,

I'll just pace back and forth or walk in a circle.

Audio book?

No, a hard, hard, hard copy.

Where you just holding?

I holding the book and I'm walking and I'm reading.

Yeah. And I usually have a pen and I'm underlining.

I have this whole system,

like underlining stars, exclamation points,

goes back to university of what things I would go back to,

which things I export to notes

and that kind of thing.

But from the beginning, when I opened my lab

at that time in San Diego.

before I moved back to Stanford,

I would have meetings with my students or postdocs

by just walking in the field behind the lab,

you know, and I'd bring my bulldog Costello,

bulldog master at the time.

And he was a slow walker.

So these were slow walks,

but I can think much more clearly that way.

There's a Nobel Prize winning professor

at Columbia University School of Medicine, Richard Axel,

who won the Nobel Prize,

co-won the Nobel Prize with Linda Buck

for the discovery of the molecular basis of olfaction.

And he walks and voice dictates his papers.

And now with Rev or these other.

maybe there are better ones than Rev,

where you can convert audio files into text very quickly

and then edit from there.

So I will often voice dictate first drafts

and things like that.

And I totally agree on the long runs, the walks,

the integrating that with cognitive work.

Harder to do with sprints.

And then the gym, you know, are you weight train?

You just seem naturally strong and like thicker jointed.

It's true.

It's true.

I mean, we did the one very beginner,

cause I'm a very beginner of Jiu Jitsu class together.

And yeah, as I mentioned then,

but if people missed it, Lex is freakishly strong.

I think I was born genetically to hug people like Costello.

Yeah, exactly.

You guys have a certain similarity.

He had wrists like, you know,

it's like you and Jaco and Costello

have these like wrists and elbows that are super thick,

you know, and then you look around,

you see tremendous variation.

You know, some people have like the wrist width of a Whippet

or Woody Allen, and then other people like you or Jaco

or you know, there's this one Jaco video

or thing on GQ or something.

Have you seen the comments on Jaco?

These are the best.

No.

The comments, I love the comments on YouTube

cause occasionally they're funny.

The best is when Jaco was born,

the doctor looked at his parents and said, it's a man.

It's like Chuck Norris type comments.

Oh yeah, those are great.

That's what I miss about Rogan being on YouTube

with the full length episode, other comment.

So this is technically a birthday podcast.

What do you love most about getting older?

It's like the confirmation that comes from

getting more and more data, which basically says,

yeah, the first time you thought that thing,

it was actually right because the second, third,

and fourth and fifth time, it turned out the exact same way.

In other words, there have been a few times in my life

where I did not feel easy about something.

I felt a signal from my body, this is not good.

And I didn't trust it early on, but I knew it was there.

And then two or three bad experiences later,

I'm able to say, ah, every single time

there was a signal from the body informing my mind,

this is not good.

Now, the reverse has also been true

that there've been a number of instances

in which I feel sort of immediate delight.

And there's this kind of almost astonishingly

simple experience of feeling comfortable with somebody

or at peace with something or delighted at an experience.

And it turns out all, literally all of those experiences

and people turned out to be experiences and people

that are still in my life

and that I still delight in every day.

In other words, what's great about getting older

is that you stop questioning the signals

that come from the, I think, deeper recesses

of your nervous system to say, hey, this is not good

or hey, this is great, more of this.

Whereas I think in my teens, my 20s, my 30s,

I'm 40, almost 48. I'll be 48 next month.

I didn't trust, I didn't listen.

I actually put a lot of work into overriding those signals and learning to fight through them, thinking that somehow that was making me tougher or somehow that was making me smarter when in fact, in the end, those people that you meet

that are difficult or there are other names for it,

it's like in the end, you're like,

that person's piece of shit.

Or this person is amazing and they're really wonderful and I felt that from go.

So you've learned to trust your gut

versus like the influences of other people's opinions.

I've learned to trust my gut

versus the forebrain overanalysis, overriding the gut.

Other people often in my life have had great optics.

I've benefited tremendously from an early age

of being in a large community of what's been mostly guys

but I have some close female friends and always have

as well who will tell me that that's a bad decision

or this person not so good or be careful

or they're great or that's great.

So oftentimes my community and the people around me have been more aligned with the correct choice than not.

Really?

Yes.

Really?

When you were younger, like parents, parents and so on.

I don't recall ever really listening to my parents that much.

I grew up in a, you know,

we don't have to go back to my childhood thing

but my sense was that, thank you.

I learned that recently in a psilocybin journey.

My first high dose psilocybin journey, which was

Welcome back.

Done with a clinician.

Thank you very much.

Thank you.

I was worried there for a second at one point

it might not coming back.

But in any event, yeah, I grew up with some wild kids.

You know, I would say about a third of my friends

from childhood are dead or in jail.

About a third have gone on to do tremendously impressive

things, start companies, excellent athletes, academics, scientists and clinicians. And then about a third are living their lives as become more typical.

I just mean that they are happy family people with jobs that they mainly serve the function to make money.

They're not sort of career into their career for career sake.

But so some of my friends early on gave me some bad ideas, but most of the time my bad ideas came from overriding the signals that I knew that my body and I would say my body and brain were telling me to obey. And I say body and brain is that there's this brain region, the insula, which does many things, but it represents our sense of internal sensation and interoception.

And I was talking to Paul Conti about this, you know, who as you know, I respect tremendously. I think he's one of the smartest people I've ever met. I think for different reasons, he and Mark Andreessen are some of the smartest people I've ever met. But Paul's level of insight into the human psyche is absolutely astounding.

And he says the opposite of what most people say about the brain, which is most people say, oh, the supercomputer of the brain is the forebrain. It's like a monkey brain with a extra real estate put on there and the forebrain is what makes us human and gives us our superpowers.

Paul has said, and he's done a whole series on mental health that's coming out from our podcast in September.

So this is not an attempt to plug that, but he'll elaborate on what I'm about to say. Wait, you're doing a thing with Paul?

We already did.

Yeah, so Paul Conti shot, he and I sat down, he did a four episode series on mental health. This is not mental illness, mental health, about how to explore one's own subconscious, explore the self, build and cultivate the generative drive.

You'll learn more about what that is from him.

He's far more eloquent and clear than I am.

And he provides essentially a set of steps

to explore the self that does not require

that you work with a therapist.

This is self exploration that is rooted in psychiatry,

it's rooted in neuroscience.

And I don't think this information exists anywhere else.

I'm not aware that it exists anywhere else.

And he essentially distills it all down

to one eight and a half by 11 sheet,

which we provide for people.

And he says there, I don't wanna give too much away

because I would detract from what he does so beautifully,

but if I tried and I went to accomplish it anyway.

But he said, and I believe that the subconscious

is the super computer of the brain.

All the stuff working underneath our conscious awareness

that's driving our feelings and what we think

are the decisions that we've thought through so carefully.

And that only by exploring the subconscious

and understanding it a little bit,

can we actually improve ourselves over time.

And I agree, I think that,

so the mistake is to think that thinking can override it all.

It's a certain style of introspection in thinking

that allows us to read the signals from our body,

read the signals from our brain,

integrate the knowledge that we're collecting about ourselves

and to use all that in ways

that are really adaptive and generative for us.

What do you think is there in that subconscious?

What do you think of the younging in shadow?

What's there?

There's this idea, as you're familiar with too,

I'm sure that this younging idea

that we all have all things inside of us,

that all of us have the capacity to be evil, to be good,

et cetera, but that some people express one

or the other to a greater extent.

But he also mentioned that there's a unique category

of people, maybe two to 5% of people,

that don't just have all things inside of them,

but they actually spend a lot of time exploring a lot of those things.

The darker recesses, the shadows, their own shadows.

I'm somebody who's drawn to goodness and to light

and to joy and all those things like anybody else,

but I think maybe it was part of how I grew up,

maybe it was the crowd I was with.

But then again, even when I started spending more time $% \left(1\right) =\left(1\right) \left(1\right$

with academics and scientists,

I mean, you see shadows in other ways, right?

You see pure ambition with no passion.

I recall a colleague in San Diego who,

it was very clear to me, did not actually care

about understanding the brain,

but understanding the brain was just his avenue

to exercise ambition.

And if you gave him something else to work on,

he'd work on that.

And in fact, he did.

He left and he worked on something else.

And I realized he has no passion

for understanding the brain like all the,

I assumed all scientists do, certainly why I went into it,

but some people it's just raw ambition.

It's about winning.

It doesn't even matter what they win.

To me is crazy, but I think that's a shadow

that some people explore, not one I've explored.

I think the shadow parts of us are very important

to come and understand.

And look, better to understand them

and know that they're there and work with them

than to not acknowledge their presence

and have them surface in the form of addictions

or behaviors that damage us and other people.

So one of the processes for achieving mental health

is to bring those things to the surface.

So fish the subconscious mind.

And Paul describes 10 cupboards

that one can look into for exploring the self.

There's the structure of self and the function of self.

Again, this all be spelled out in this series

in a lot of detail.

Also in terms of its relational aspect between people, how to pick good partners and good relationship, it gets really into this from a very different perspective.

Yeah, fascinating stuff.

I was just sitting there just, I will say this, that four episode series with Paul is at least to date the most important work I've ever been involved in in all of my career.

Because it's very clear that we are not taught how to explore our subconscious.

And that very few people actually understand how to do that.

Even most psychiatrist, he mentioned something about psychiatrists, you know,

if you're a cardiothoracic surgeon or something like that and 50% of your patients die,

you're considered a bad cardiothoracic surgeon.

But with no disrespect to psychiatrists,

there are some excellent psychiatrists out there.

There are also a lot of terrible psychiatrists out there because unless all of their patients commit suicide or half commit suicide, they can treat for a long time without it becoming visible

that they're not so good at their craft.

Now, he's superb at his craft.

And I think he would say that, yes, exploring some shadows,

but also just understanding the self.

You know, really understanding like who am $\ensuremath{\mathrm{I}}$

and what's important?

What are my ambitions?

What are my strivings?

Again, I'm lifting from some of the things

that he'll describe exactly how to do this.

People do not spend enough time addressing those questions.

And as a consequence, they discover what resides

in their subconscious through the sometimes bad,

hopefully also good,

but manifestations of their actions.

We are driven by this huge 90% of our real estate

that is not visible to our conscious awareness.

And we need to understand that.

You know, I've talked about this before.

I've done therapy twice a week since I was a kid.

I had to as a condition of being let back in school. I found a way to either through insurance or even when I didn't have insurance, I took an extra job writing for Thrasher Magazine when I was a postdoc so I could pay for therapy at a discount because I didn't make much money as a postdoc.

I mean, I think for me, it's as important as going to the gym.

And people think it's just ruminating on problems or getting, no, no, no.

If you work with somebody really good, they're forcing you to ask questions

about who you really are, what you really want.

It's not just about support, but there should be support,

there should be rapport, but then it's also,

there should be insight, right?

Most people who get therapy, they're getting support,

there's rapport, but insight is not easy to arrive at

and a really good psychologist or psychiatrist

can help you arrive at deep insights

that transform your entire life.

Well, sometimes when I look inside and I do this often,

you know, exploring who you truly are,

you come to this question, do I accept once you see parts,

do I accept this or do I fix this?

Is this who you are fundamentally

and it will always be this way?

Or is this a problem to be fixed?

Like for example, one of the things,

especially recently, but in general,

over time I've discovered about myself,

probably has roots in childhood,

probably has roots in a lot of things,

is I deeply value loyalty, maybe more than the average person.

And so when there's disloyalty, it can be painful to me.

And so this is who I am.

And so do I have to relax a bit?

Do I have to fix this part?

Or is this who you are?

And there's a million, that's one like little...

I think loyalty is a good thing to cling to,

provided that when loyalty is broken,

that it doesn't disrupt too many other areas of your life,

but it depends also on who's disrupting that loyalty.

If it's a coworker versus a romantic partner,

versus your exclusive romantic partner,

depending on the structure of your romantic partner life.

I mean, I have always experienced extreme joy

and feelings of safety and trust in my friendships.

Again, mostly male friendships, but female friendships too,

which is only to say that they were mostly male friendships.

The female friendships have also been very loyal.

So getting backstabbed is not something I'm familiar with.

And yeah, I love being crewed up, you know?

Yeah, for sure.

And I'm with you.

And you and I very much have the same values on this,

but that's one little thing.

And then there's many other things,

like I'm extremely self-critical.

And I look at myself as I'm regularly very self-critical.

There's a self-critical engine in my brain.

And I talked to actually Paul about this,

I think on the podcast quite a bit,

and he's saying, this is a really bad thing.

Like you need to fix this.

You need to be able to be regularly very positive

about yourself.

And I kept disagreeing with him, no.

This is like who I am.

Like you, and it seems to work.

Don't mess with the thing that seems to be working.

It's fine.

Like I oscillate between being really grateful

and really self-critical.

But then you have to like figure out,

what is it?

Maybe there's a deeper root thing.

Maybe there's an insecurity in there somewhere

that has to do with childhood.

And then you're trying to prove something

to somebody from your childhood, this kind of thing.

Well, a couple of things that I think are hopefully valuable

for people here.

One is one way to destroy your life

is to spend time trying to control your

or somebody else's past.

So much of our destructive behavior

and thinking comes from wanting something that we saw

or did or heard to not be true.

Rather than really working with that

and getting close to what it really was.

And sometimes those things are even traumatic

and we need to really get close to them

and for them to move through us.

And there are a bunch of different ways to do that

with support from others.

And hopefully, but sometimes on our own as well.

I don't think we can rewire our deep preferences

and what we find despicable or joyful.

I do think that it's really a question of what allows us peace.

Like, can you be at peace with the fact

that you're very self-critical

and enjoy that, get some distance from it,

have a sense of humor about it?

Or is it driving you in a way that's keeping you awake

at night and forcing you back to the table to do work

in a way that feels self-flagellating and doesn't feel good?

Can you get that humility and awareness

of how you're one's flaws?

And I think that that can create,

this word space sounds very new agey, like get space from it.

It's that you can have a sense of humor

about how neurotic we can all be.

I mean, neurotic isn't actually a bad term

in the classic sense of the psychologists

and psychiatrists, the Freudians,

so that the best case is to be neurotic,

to actually see one's own issues and work with them,

whereas psychotic is the other way to be,

which is obviously not good.

So I think the question whether or not to work on something

or to just accept it as part of ourselves,

I think really depends if we feel like

it's holding us back or not.

And I think you're asking perhaps the most profound question

about being a human, which is,

what do you do with your body?

What do you do with your mind?

I mean, it's also a guestion we started off talking about

fitness a little bit, for whatever reason.

Do I need to run an ultra marathon?

I don't feel like I need to.

David Goggins does and it does a whole lot more than that.

So that for him, that's important.

For me, it's not important to do that.

I don't think he does it just so he can run the ultras.

There's clearly something else in there for him

and guys like Cam Haynes and that tremendous respect

for what they do and how they do it.

Does one need to make their body more muscular,

stronger, more endurance, more flexibility?

Do you need to read harder books?

Do you need to?

I think doing hard things feels good.

I know it feels good.

I know that the worst way to feel

is when I'm procrastinating and I don't do something

and then whenever I do something and I complete it

and I break through that point where it was hard

and then I'm doing it, at the end,

I actually feel like I was infused

with some sort of super chemical

and who knows if it's probably a cocktail

of endogenously made chemicals.

But I think it is good to do hard things

but you have to be careful not to destroy your body,

your mind in the process.

And I think it's about whether or not

you can achieve peace.

Can you sleep well at night?

Stress isn't bad if you can sleep well at night.

You can be stressed all day, go, go, go, go, go, go, go.

And it'll optimize your focus

but can you fall asleep and stay deeply asleep at night?

Being in a hard relationship.

Somebody will say, that's not good.

Other people like it.

Can you be at peace in that?

And I think we all have different RPM.

We all kind of idle at different RPM.

And some people are big mellow Costellos

and others are kind of like,

need more friction in order to feel at peace.

But I think ultimately what we want is to feel at peace.

You have been through some really low points

over the past couple of years.

And I think the reason could be boiled down

to the fact that I haven't been able

to find a place of peace.

A place or people or moments that give deep inner peace.

Yeah, I think you put it really beautifully.

It's you have to figure out, given who you are,

the various characteristics of your mind,

all the things, all the contents of the cupboards,

how to get space from it.

And ultimately one good representation of that

is to be able to laugh at all of it.

Whatever's going on inside your mind

to be able to step back and just kind of chuckle at the

beauty and the absurdity of the whole thing.

Yeah, and keep going.

There's this beautiful, as I mentioned,

seems like every podcast lately.

I'm a huge rancid fan mostly

because I just think Tim Armstrong's writing

is pure poetry and whether or not you like the music or not.

And he's written on music for a lot of other people too.

He's not, doesn't advertise that much because he's humble.

But I-

And not by the way, I've went to a show of theirs

like 20 years ago.

Oh yeah, I'm going to see them in Boston September 18th.

I'm literally flying there for,

or I'll take the train up from New York.

I'm gonna meet a friend of mine named Jim Thiebaud

who's a guy who owns a lot of companies

in the skateboard industry.

We're meeting there like a couple of little kids

and go see them play.

Amazing people, amazing music.

Very intense.

Very intense, but embodies all the different emotions.

That's why I love it, right?

They have some love songs, they have some hate songs, they have some, but going back to what you said, I think there's a song, the first song on the indestructible album, I think it's sort of, he's just talking about like shock and disbelief of discovering things about people that were close to you and it's, I won't sing it, but nor I wouldn't dare. But there's this one lyric where that's really stuck in my mind for ever since that album came out in 2003, which is that nothing's what it seems.

So I just sit here laughing.

I'm gonna keep going on, I can't get distracted. There is this piece of like, you gotta learn how to push out

the disturbing stuff sometimes and go forward.

And I mean, I remember hearing that lyric

and then writing it down.

And that was a time where my undergraduate advisor,

who was like a mentor and a father to me,

blew his head off in the bathtub like three weeks before.

And then my graduate advisor, who I was working for that time,

who I loved and adored was really like a mother to me.

I knew her when she was pregnant with her two kids,

died at 50, breast cancer.

And then my postdoc advisor, first day of work at Stanford, as a faculty member sitting across the table like this from him had a heart attack right in front of me,

died of pancreatic cancer at the end of 2017.

And I remember just thinking like,

going back to that song there over and over,

and where people would, I haven't had many betrayals

in life, I've had a few, but just thinking like,

or seeing something or learning something about something,

vou just like, vou can't believe it.

And I mentioned that lyric off that first song

indestructible on that album,

because it's this, like just the raw emotion of like,

I can't believe this, what I just saw is so disturbing.

But I have to just keep going forward.

There are certain things that we really do need to push,

not just into our periphery,

but off into the gutter and keep going.

And that's a hard thing to learn how to do.

But if you're going to be functional in life, you have to.

And actually just to get at this issue of,

do I change or do I embrace this aspect of self

about six months, it was April of this last year,

I did some intense work around some things

that were really challenging to me.

And I did it alone and it may have involved some medicine.

And I expected to get peace through this.

I was like, I'm gonna let go of that.

And I spent 11 hours just getting more and more

frustrated and angry about this thing

that I was trying to resolve.

And I was so unbelievably disappointed

that I couldn't get that relief.

And I was like, what is this?

Like, this is not how this is supposed to work.

I'm supposed to feel peace.

The clouds are supposed to lift.

And so a week went by, and then another half week went by.

And then someone who's opinion I trust very much,

I explained this to them

because I was getting a little concern,

like what's going on, this is worse, not better.

And they said, this is very simple.

You have a giant blind spot,

which is your sense of justice, Andrew,

and your sense of anger are linked like an iron rod.

And you need to relax it.

And as they said that, I felt the anger dissipate.

And so there was something that I think is it is true.

I have a very strong sense of justice

and my sense of anger then at least

was very strongly linked to it.

So it's great to have a sense of justice.

I hate to see people wrong, I absolutely do.

And I'm human, I'm sure I've wronged people in my life.

I know I have, they've told me,

I've tried to apologize and reconcile where possible.

Still have a lot of work to do.

But where I see injustice,

it draws in my sense of anger in a way

that I think is just eating me up.

And but it was only in hearing that link

that I wasn't aware of before.

It was in my subconscious, obviously.

Did I feel the relaxation?

There's no amount of plant medicine or MDMA

or any kind of chemical you can take

that's naturally just going to dissipate

what's hard for oneself.

It needs, if one embraces that,

or if one chooses to do it through just talk therapy

or journaling or friends or introspection

or all of the above, there needs to be an awareness

of the things that we're just not aware of.

So I think the answer to your question,

do you embrace or do you fight these aspects of self is,

I think you get in your subconscious

through good work with somebody skilled

or and sometimes that involves the tools I just mentioned

in various combinations and you figure it out.

You figure out if it's serving you.

Obviously it was not bringing me peace.

It was undermining my sense of justice,

was undermining my sense of peace.

And so in understanding this link,

now I would say that in understanding this link

between justice and anger,

now I think it's a little bit more of like,

you know, it's not like a Twizzler stick bendy,

but it's at least it's not like an iron rod.

Like, you know, when I see somebody wrong,

I mean, it used to just like burst like immediately,

but you're able to step back.

Now, that's like to me,

the ultimate place to reach is laughter.

I just sit here laughing, exactly.

That's the lyric.

I like, I can't believe it.

So I just sit here laughing, like can't get distracted.

Just at some point,

but the problem I think in just laughing at something,

like that gives you distance.

But the question is,

do you stop engaging with it at that point?

Like I experienced this,

I mean, recently I got to see how,

sometimes I'll see something that's just like, what?

Like this is crazy.

So I just laugh,

but then I continue to engage in it.

And it's taking me off course.

And so there is a place where, you know,

I mean, I realized this is probably a kid's show too.

So I want to keep it, you know, G rated,

but at some point for certain things,

it makes sense to go, fuck that.

But also laugh at yourself for saying, fuck that.

Yeah. And then move on.

So the question is, are you,

do you get stuck or do you move on?

Sure, right?

Sure, but like there's a lightness of being

that comes with laughter.

I mean, I've gotten, like as you know,

I spent the day with Elon today.

He just gave me this burnt hair.

Do you know what this is?

I have no idea.

I'm sure there's actually,

there should be a human lab episode on this.

It's a cologne that's burnt hair.

And it's like supposedly a really intense smell.

And it is.

Smell.

Please, it's not going to leave your notes.

That's okav.

Well, that's okay.

I'll take a gentle, I'll whiff it as if I were whiffing

a chemical in the lab.

You have to spray it on yourself

because I don't know if you can.

So I'm reading an amazing book.

Yeah.

Called An Immense World by Ed Young.

He won a Pulitzer for We Contain Multitudes $\,$

or something like that.

I think it's the title of the other book.

And the first chapter is all about olfaction

and the incredible power that olfaction has.

That smells terrible.

I mean, it doesn't leave you.

For those listening, it doesn't quite smell terrible.

It's just intense and it stays with you.

This to me represents like just laughing

at the absurdity of it all.

So I have to ask, so you were rolling Jiu-Jitsu?

Yeah, we're training Jiu-Jitsu, yeah.

So is that fight between Elon

and Zuck actually going to happen?

I think Elon is a huge believer of this idea

of the most entertaining outcome is the most likely.

And he almost like there is almost the sense

that there's not a free will

and the universe has a kind of deterministic

gravitational field pulling towards the most fun.

And he's just a player in that game.

So from that perspective, I think it seems

like something like that is inevitable.

Like a little scrap in the parking lot

of Facebook or something like that.

Exactly.

Sorry, Metta.

But it looks like they're training for Elon.

Zuck has competed, right, in Jiu-Jitsu.

So I think he is approaching it as a sport.

Elon is approaching it as a spectacle.

And I mean, the way he talks about it,

he's a huge fan of history.

He talks about all the warriors

that has fought throughout history.

If you look, he wants to really do it at the Coliseum.

And the Coliseum is for 400 years,

there's so much great writing about this.

I think over 400,000 people have died

in the Coliseum, gladiators.

So this is this historic place that sheds so much blood,

so much fear, so much anticipation of battle, all of this.

So he loves this kind of spectacle

and also the meme of it, the hilarious absurdity of it,

the two tech CEOs battling it out on sand

in a place where gladiators fought to the death

and then bears and lions ate prisoners

as part of the execution process.

Well, it's also gonna be an instance

where Mark Zuckerberg and Elon Musk

has changed bodily fluids.

They bleed, there's one thing about fighting, you know?

I think it was in that book, it's a great book,

Fighters' Heart, where he talks about,

sort of the intimacy of sparring.

I only rolled Jiu-Jitsu with you once,

but there was a period of time where I boxed,

and which I don't recommend.

I got hit, I hit some guys and definitely got hit back.

I'd spar on Wednesday nights when I lived on San Diego.

And when you spar with somebody,

even if they hurt you, especially if they hurt you,

you see that person afterwards

and there's an intimacy, right?

It was in that Book Fighters' Heart where he explains,

you're exchanging bodily fluids with a stranger, right?

And you're in your primitive mind,

and so there's an intimacy there that persists.

You go together through a process of fear, anxiety.

Yeah, when they get you, you nod.

I mean, you watch somebody, you catch somebody,

not so much in professional fighting,

but if people are sparring and they catch you,

you acknowledge that they caught you,

like you got me there.

And on the flip side of that, so we trained,

and then after that, we played Diablo 4.

I don't know what that is.

I don't play video games, sorry.

But it's a video game, so it's like,

it's a pretty intense combat in the video.

You're fighting like demons and dragons.

Last video game I played was Mike Tyson's Punch Out.

There you go, that's pretty cool.

I met him recently, they went on his podcast.

You went, wait.

Hasn't come out yet.

Oh, hasn't come out yet, okay.

Yeah, I asked Mike, his kids are great.

They came in, they're super smart kids.

Goodness gracious.

They ask great questions.

Ask Mike what he did with the piece of a vander's ear

that he bit off.

Do you remember?

Yeah, he's like, get back to him.

Here you go.

Sorry about that.

He sells edibles that are in the shape of ears

with a little bite out of it.

Yeah, his life has been incredible.

He's, and I met, yeah, his family,

you get the sense that they're really a great family.

They're really...

Mike Tyson?

That's a heck of a journey right there of a man.

Yeah, my now friend Tim Armstrong, like I said,

he's here from Rancy, he put it best.

He said, you know, that Mike Tyson's life is,

you know, Shakespearean and you know, down, up, down, up.

And just that the arcs of his life are just like,

sort of an only in America kind of tale too, right?

So speaking of Shakespeare,

I've recently gotten to know Neri Oxman,

who's this incredible scientist

that works at the intersection of nature and engineering.

And she reminded me of this Anna Akhmatova line.

This is this great Soviet poet that I really love

from over a century ago,

that each of our lives is a Shakespearean drama

raised to the thousand degree.

So I have to ask, why do you think humans are attracted

to this kind of Shakespearean drama?

Is there some aspect we've been talking about

the subconscious mind that pulls us towards the drama,

even though the place of mental health is peace?

Yes, and yes.

Do you have some of that?

A draw towards drama?

Yeah.

If you look at the empirical data.

Yes, I mean, right, if I look at the empirical data,

I mean, I think about who I chose to work for

as an undergraduate, right? I was at, you know, barely finished high school, finally get to college, barely, I think this is really embarrassing and not something to aspire to. You know, I was, you know, thrown out of the dorms for fighting, barely passed my classes. You know, the girlfriend and I split up. I mean, I was living in a squad, got into a big fight, was getting in trouble with the law. Then she got my act together, go back to school, start working for somebody. Who do I choose to work for? A guy who's an ex-navy guy who smokes cigarettes in the fume hood, drinks coffee, and we're injecting rats with MDMA. And, you know, I was drawn to it, like the personality, his energy, but I also, he was a great, he was a great scientist, worked out a lot on a thermal regulation in the brain and more. You know, go to graduate school, I'm working for somebody and decide that, yeah, doing, working in her laboratory wasn't quite right for me. So I'm literally sneaking into the laboratory next door and working for the woman next door because I liked the relationships that she had to a certain set of questions. And she was a kind of a quirky person. So you're drawn to drama, but drawn to, I like characters, I like people that have texture. And I'm not drawn to raw ambition, I'm drawn to people that seem to have a real passion for what they do and a uniqueness to them, that I, you know, you can kind of, not kind of, I'll just say how it is, I can feel their heart for what they do and I'm drawn to that. And that can be good. The same reason I went to work for Ben Barris as a postdoc, it wasn't because he was the first transgender

member of the National Academy of Sciences,

that was just a feature of who he was.

I loved how he loved Glia.

He would talk about these cells,

like they were the most enchanting things

that he'd ever seen in his life.

And I was like, this is like the biggest nerd I've ever met

and I love him.

I think we're, I'm drawn to that.

This is another thing that Conti makes,

elaborates on quite a bit more

in the series on mental health coming out,

but there are different drives within us.

There's this, there are aggressive drives,

not always for fighting, but for intense interaction.

I mean, look at Twitter, look at some of the,

look at people clearly have an aggressive drive.

There's also a pleasure drive.

Some people also have a strong pleasure drive.

They want to experience pleasure through food,

through sex, through friendship, through adventure,

but I think the Shakespearean drama

is the drama of the different drives

in different ratios in different people.

I know somebody and she's incredibly kind,

has an extremely high pleasure drive,

loves taking great care of herself

and people around her through food and through retreats

and through all these things and makes space as beautiful

everywhere she goes and is gifts,

these things that are just so unbelievably feminine

and incredible, these gifts to people

and the kind and thoughtful about what they like.

And then, but I would say very little aggressive drive.

From my read and then I know other people

who just have a ton of aggressive drive

and very little pleasure drive.

And I think, so there's this alchemy that exists

where people have these things in different ratios

and then you blend in the differences in the chromosomes

and differences in hormones

and differences in personal history

and what you end up with is a species

that creates incredible recipes of drama,

but also peace, also relief from drama, contentment. I mean, I realize this isn't the exact topic of the question, but someone I know very dearly, actually an ex-girlfriend of mine, long-term partner, mine sent me something recently and I think it hit the nail in the head, which is that ideally for a man, they eventually settle where they find and feel peace, where they feel peaceful, where they can be themselves and feel peaceful. Now, I'm sure there's a equivalent or mirror image of that for women, but this particular post that she sent was about men. And I totally agree. And so it isn't always that we're seeking friction, but for periods of our life, we seek friction, drama, adventure, excitement, fights, and doing hard, hard things. And then I think at some point, I'm certainly coming to this point now, where it's like, yeah, that's all great and checked a lot of boxes, but had a lot of close calls, flew really close to the sun on a lot of things with life and limb and heart and spirit and some of people close to us didn't make it. And sometimes not making it means they're the career they wanted went off a cliff or their health went off a cliff or their life went off a cliff. But I think that there's also the Shakespearean drama of the characters that exit the play and are living their lives happily in the backdrop. It just doesn't make for as much entertainment. That's one other thing that's a benefit. You could say it's a benefit of getting older is finding the Shakespearean drama less appealing or finding the joy in the piece. Yeah, definitely. I mean, I think that, I think there's real peace with age. I think the other thing is this notion of checking boxes

is a real thing for me anyway.

I have a morning meditation that I do.
Well, I wake up now and get my sunlight,
I hydrate, I use the bathroom,
I do all the things that I talk about.
I've started to practice a prayer in the last year, which is new-ish for me, which is,
we could talk about it.
In the morning, can you talk about it a little bit?
Sure, yeah.
And then I have a meditation that I do

that actually is where I think through with the different roles that I play. So I start very basic.

I say, okay, I'm an animal.

Like we are like biologically animals, right?

Human, you know, I'm a man, I'm a scientist,

I'm a teacher, I'm a friend, I'm a brother, I'm a son.

I go through this, I have this list

and I think about the different roles that I have

and the roles that I still want in my life going forward

that I haven't yet fulfilled.

It just takes me, it's sort of an inventory $% \left\{ \mathbf{k}^{\prime}\right\} =\mathbf{k}^{\prime}$

of where I've been, where I'm at

and where I'm going, as they say.

And I don't know why I do it,

but I started doing it this last year,

I think because it helps me understand

just how many different contexts I have to exist in

and remind myself that there's still more

that I haven't done that I'm excited about.

So within each of those contexts,

there's like things that you want to kind of accomplish

to define that.

Yeah, and I'm ambitious.

So I think, you know, I'm a brother,

I have an older sister and I love her tremendously.

And I think I want to be the best brother I can be to her,

which means maybe a call, maybe just,

you know, we do an annual trip together for our birthdays,

our birthdays are close together,

we always go to New York for our birthdays

if we've gone for the last three, four years.

Like really like reminding myself for that role,

not because I'll forget,

but because I have all these other roles I'll get pulled into.

I say the first one, I'm an animal

because I have to remember that I have a body that needs care

like any of us, I need sleep, I need food, I need hydration.

I need that I'm human, that the brain of a human

is marvelously complex,

but also marvelously self-defeating at times.

And so I've been thinking about these things

in the context of the different roles.

And the whole thing takes about four, five minutes.

And I just find it brings me a certain amount of clarity

that then allows me to ratchet into the day.

The prayer piece, yeah, I think I've been reluctant

to talk about until now,

because I don't believe in pushing religion on people.

And I think that, and I'm not,

it's a highly individual thing.

And I do believe that one can be an atheist and still pray or agnostic and still pray.

But for me, it really came about through understanding

that there are certain aspects of myself

that I just couldn't resolve on my own.

And no matter how much therapy, no matter how much,

and I haven't done a lot of it,

but no matter how much plant medicine

or other forms of medicine or exercise or podcasting

or science or friendship or any of that,

I was just not going to resolve.

And so I started this because someone close to me said.

a male friend said, you know, prayer is powerful.

And I said, well, how, and I said, I don't know how,

but if you can allow you to get outside yourself,

let you give up control and at the same time take control.

I don't even like saying take control,

but the whole notion is that, and again, forgive me,

but there's no other way to say it.

The whole notion is that, you know,

like God works through us, whatever God is to you,

he, him, her, whatever, life force, nature,

whatever it is to you, right, that it works through us.

And so I do a prayer, I'll just describe it

where I make an ask to help remove my defects,

my character defects, I pray to God to help remove my character defects so that I can show up better in all the roles of my life and do good work, which for me is learning and teaching, learning and teaching.

And so you might say, well,

how is that different than a meditation?

Well, I'm acknowledging that there is something

that bigger than me, bigger than nature,

as I understand it, that I cannot understand

or control nor do I want to.

And I'm just giving over to that.

And does that make me less of a scientist?

I sure as hell hope not.

I certainly know, there's the head of our neurosciences

at Stanford until recently.

You should talk to him directly about it.

Bill Newsom has talked about his religious life.

For me, it's really a way of getting outside myself

and then understanding how I fit into this bigger picture.

And the character defects part is real, right?

I'm a human.

I have defects like, I got a lot of flaws in me, like anybody, and trying to acknowledge them and asking for help in removing them, not magically, but through right action,

through my right action.

So I do that every morning.

And I have to say that it's helped.

It's helped a lot.

It's helped me be better to myself,

be better at other people.

I still make mistakes,

but it's becoming a bigger, bigger part of my life.

And I never thought I'd talk like this,

but I think it's clear to me that

if we don't believe in something,

again, doesn't have to be traditional standardized religion,

but if we don't believe in something bigger than ourselves.

we at some level will self-destruct.

I really think so.

And it's powerful in a way that all the other stuff,

meditation and all the tools is not

because it's really operating at a much deeper and bigger level.

And yeah, I think that's all I can talk about

it mostly because I'm still working out,

the scientist in me wants to understand how it works

and I want to understand.

And the point is to just go,

for lack of a better language for it,

there's higher power than me and what I can control.

I'm giving up control on certain things.

And somehow that restores a sense of agency

for right action, better action.

I think perhaps a part of that is just the humility

that comes with acknowledging there's something bigger

and more powerful than you.

And then you can't control everything.

It's, I mean, that you go through life

as a hard driving person, you know, forward center of mass.

I remember being that way since I was little.

It's like in Legos, I'm like, oh, Legos.

I was like on the weekends, you know,

learning about medieval weapons

and then giving lectures about it in class

when I was five or six years old.

We're learning about tropical fish

and cataloging all of them at the store

and then organizing it and making my, you know,

my dad drive me or my mom drive me

to some fish store and then spending all my time there

until they throw me out and all of that.

But I also remember my entire life.

I would secretly pray when things were good

and things weren't good,

but mostly when things weren't good

because it's important to pray for me.

It's important to pray each morning regardless.

But when things weren't right,

I couldn't make sense of them.

I would secretly pray,

but I felt kind of ashamed of that for whatever reason.

And then it was once in college,

I distinctly remember I was having a hard time

with a number of things.

And I took a run down to San's Beach,

it was UC San Barbara.

And I remember I just, I was like,

I don't know if I even have the right to do this,

but I'm just praying.

And I just prayed for the ability

to be as brutally honest with myself

and with other people as I possibly could be

about a particular situation I was in at that time.

I mean, I think now it's probably safe to say

I'd gone off to college because of a high school girlfriend.

We'd essentially, she was my family,

frankly more than my biological family was

at a certain stage of life.

And we'd reached a point where we were diverging

and it was incredibly painful.

It was like losing everything I had.

And it was like, what do I do?

How do I manage this?

Do I, you know, I was ready to quit

and join the fire service just to support us

so that we could move forward.

And you know, it was just,

but praying, just saying,

I can't figure this out on my own.

It's sort of like, I can't figure this out on my own.

And how frustrating that is

that no number of friends could tell me

or, and inner wisdom couldn't tell me.

And eventually it led me to the right answers.

And she and I are friendly friends to this day.

She's happily married with a child and we're on good terms.

But I think, you know, it's,

it's a scary thing, but it's the best thing

when you, I can't control all this.

And asking for help, I think is also the piece.

You're not asking for some magic hand

to come down and take care of it.

You're asking for the help to come through you, right?

So that your body is used to do these right works,

right action.

Isn't it interesting that this secret thing

that you're almost embarrassed by

that you did it as a child is something you,

it's another thing you do as you get older as you realize like those things are part of you. And it's actually a beautiful thing. A lot of the content of the podcast is, you know, deep academic content. And we talk about everything from, you know, eating disorders to bipolar disorder to depression, you know, a lot of different topics, but the tools are the protocols, as we say, right? The sunlight viewing, all the rest, you know, a lot of that stuff is just stuff I wish I had known. When I was in graduate school, if I'd known to go outside every once in a while and get some sunlight, not just stay in the lab, I would have, you know, I might not have hit like a really tough round of depression when I was a postdoc and working twice as hard. And, you know, when my body would break down or I'd get sick a lot, I don't get sick much anymore. Occasionally, about once every 18 months to two years, I get something, but, you know, I used to break my foot skateboarding all the time. I couldn't understand what's wrong with my body. I'm getting injured. I can't do what everyone else can now. I developed more slowly at a long arc of puberty, but I, so that was part of it. I was still developing, but you know, how to get your body stronger, how to build endurance. Like no one told me the information wasn't there. So a lot of what I put out there is the information that I wish I had, because once I had it, I was like, wow, like A, this stuff really works. B, it's grounded in something real. You know, sometimes certain protocols are a combination of, you know, animal human and animal and human studies, sometimes clinical trials, sometimes there's some mechanistic conjecture. For some, not all, I always make clear which, but in the end, like figuring out how things work

so that we can be happier, healthier, more productive, suffer less, like reduce the suffering of the world.

And I think that, well, I'll just say thank you

and for asking about the prayer piece.

Again, I'm not pushing or even encouraging it on anyone.

I've just found it to be tremendously useful for me.

You know, I mean, about prayer in general,

you said information and figuring out how to get stronger,

healthier, smarter, all those kinds of things.

A part of me believes that deeply, you know,

you can gain a lot of knowledge and wisdom through learning,

but a part of me believes that all the wisdom I need

was there when I was 11 and 12 years old.

And then it got cluttered over.

Well, listen, I can't wait for you and Conti to talk again

because when he gets going about the subconscious

and the amount of this that sits below the surface

like an iceberg and the fact that when we're kids,

we're not obscuring a lot of that subconscious as much.

And sometimes that can look a little more primitive.

I mean, the kid that's disappointed will let you know.

The kid that's excited will let you know.

And you feel that raw exuberance or that raw dismay.

And I think that as we grow older,

we learn to cover that stuff up.

We wear masks and we have to be functional.

And I don't think we all want to go around

just being completely raw.

But as you said, as you get older,

you also get to this point where you kind of go,

eh, you know, what are we really trying to protect anyway?

I mean, I have this theory that, you know,

certainly my experience has taught me

that a lot of people

but I'll talk about men because that's what I know best,

whether or not they show up strong or not,

that they're really afraid of being weak.

Like they're just afraid, like sometimes the strength

is even a way to try and not be weak, right?

Which is different than being strong for its own sake.

I'm not just talking about physical strength.

I'm talking about intellectual strength.

I'm talking about money.

I'm talking about expressing drive.

I've been watching this series a little bit of a chimp empire.

Oh yeah.

So chimp empire is amazing, right?

They have the head chimp, he's not the head chimp,

but the alpha in the group and he's getting older.

And so what does he do?

Every once in a while, he goes on these vigor displays.

He goes and he grabs branch, he starts breaking,

he starts thrashing them and he's incredibly strong.

They're all kind of like watching.

I mean, yeah, I immediately think of people

like they're deadlifting on Instagram.

I just think they displays a vigor.

This is just the primate showing that displays a vigor.

Now, what's interesting is that he's doing that specifically

to say, hey, I still have what it takes to lead this troop.

Okay.

Then there are the ones that are subordinate to him,

but not so far behind.

It seems to be that there's a very clear,

like numerical ranking.

There is.

Like it's clear who's a number two, number three.

Oh yeah.

I mean, probably.

Who gets to mate first, who gets to eat first.

This exists in other animal societies too,

but Bob Sapolsky would be a great person to talk about this

because he knows obviously tremendous amount about it.

And I know just the top contour.

But yeah, so number two, three and four males are aware

that he's doing these vigor displays,

but they're also aware because in primate evolution,

they got some extra forebrain too, not as much as us,

but they got some and they're aware

that the vigor displays are displays

that because they've done them as well

in a different context, might not just be displays of vigor,

but might also be an insurance policy

against people seeing weakness.

Okay.

So now they start using that prefrontal cortex

to do some interesting things.

So in primate world, if a male is friendly

with another male wants to affiliate with him and say, hey, I'm backing you, they'll go over and they'll pick off the little parasites and eat them. And so the grooming is extremely important. In fact, if they want to ostracize or kill one of the members of their troop, they will just leave it alone, no one will groom it. And then there's actually a really disturbing sequence in that show of then the parasites start to eat away on their skin, they get infections, they have issues, no one will mate with them, they have other issues as well and can potentially die. So the interesting thing is is number two and three start to line up a strategy to groom this guy, but they are actually thinking about overtaking the entire troop, setting in a new alpha, but the current alpha did that to get where he is. So he knows that they're doing this grooming thing, but there might not be sincere about the grooming. So what does he do? He takes the whole troop on a raid to another troop and sees who will fight for him and who won't. This is advanced contracting of behavior for species that normally we don't think of as sophisticated as us. So it's very interesting and it gets to something that I hope we'll have an opportunity to talk about because it's something that I'm obsessed with lately is this notion of overt versus covert contracts, right? There are overt contracts where you exchange work for money or you exchange any number of things in an overt way, but then there are covert contracts and those take on a very different form and always lead to, in my belief, bad things. Well, how much of human and chimp relationships are overt versus covert? Well, here's one thing that we know is true. Dogs and humans, the dog-to-human relationship is 100% overt. They don't manipulate you. Now, you could say they do in the sense that they learn that if they look a certain way or roll on their back, they get food, but there's no banking of that behavior for a future date

where then they are going to undermine you and take your position. Okay, so in that sense, dogs can be a little bit manipulative in some sense, but now, okay, so overt contract would be, we both wanna do some work together, we're gonna make some money, you get X percentage, I get X percentage, it's overt. Covert contract, which is in my opinion, always bad, would be, we're gonna do some work together, you're gonna get a percentage of money, I'm gonna get a percentage of money. Could look just like the overt contract, but secretly, I'm resentful that I got the percentage I got, so what I start doing is covertly taking something else. What do I take? Maybe I take the opportunity to jab you verbally every once in a while. Maybe I take the opportunity to show up late. Maybe I take the opportunity to get to know one of your coworkers so that I might start a business with them, that's covert contracting. And you see this sometimes in romantic relationships, one person, we won't set the male or female in any direction here and just say, it's I'll make you feel powerful if you make me feel desired. Okay, great, there's nothing explicitly wrong about that contract if they both know and they both agree, but what if it's I'll do that, but I'll have kids with you, so you feel powerful, you'll have kids with me, so I feel desired, but secretly, I don't wanna do that. One person says, I don't wanna do that, or both don't, so what they end up doing is saying, okay, so I expect something else. I expect you to do certain things for me, or I expect you to pay for certain things for me. Covert contracts are the signature of everything bad. Overt contracts are the signature of all things good. And I think about this a lot because I've seen a lot of examples of this. I've, like anyone, we participate in these things,

whether or not we want to or not, and then the thing that gets transacted the most is, well, I should say, the things that get transacted the most are the overt things.

You'll see money, time, sex, property,

whatever happens to be, information,

but what ends up happening is that

when people, I believe, don't feel safe,

they feel threatened in some way.

Like, they don't feel safe in a certain interaction.

What they do is they start taking something else

while still engaging in the exchange.

And I'll tell you, if there's one thing

about human nature that's bad, it's that feature.

Why that feature?

Or is it a bugger feature, as you engineers like to say?

I think it's because we were allocated

a certain extra amount of prefrontal cortex

that makes us more sophisticated than a dog.

More sophisticated than a chimpanzee, but they do it too.

And it's because it's often harder

to deal with, in the short term,

to deal with the real sense of this is scary,

this feels threatening,

than it is to play out all the iterations.

It takes a lot of brain work.

You're playing chess and go simultaneously,

trying to figure out where things are gonna end up,

and we just don't know.

So it's a way, I think,

of creating a false sense of certainty.

But I'll tell you, covert contracts,

the only certainty is that it's gonna end badly.

The question is, how badly?

Conversely, overt contracts always end well, always.

The problem with overt contracts

is that you can't be certain

that the other person is not engaging in a covert contract.

You can only take responsibility for your own contracting.

Well, one of the challenges of being human

is looking at another human being

and figuring out their way of being, their behavior,

which of the two types of contracts it represents,

because they look awfully the same on the surface.

And one of the challenges of being human

is that the decision we all make

is, are you somebody that takes a leap of trust

and trusts other humans that are willing to take the hurt?

Are you going to be cynical and skeptical

and avoid most interactions

until they over a long period of time prove your trust?

Yeah, I never liked the phrase history repeats itself

when it comes to humans,

because it doesn't apply if the people or the person

is actively working to resolve their own flaws.

I do think that if people are willing to do

dedicated introspective work, go into their subconscious,

do the hard work, have hard conversations

and get better at hard conversations,

something that I'm constantly trying to get better at,

I think people can change, but they have to want to change.

It does seem like deep down,

we all can kind of tell the difference

between over and covert.

Like we have a good sense.

I think one of the benefits of having this

characteristic of mine where I value lovalty,

I've been extremely fortunate to spend most of my life $\,$

in overt relationships.

And I think that creates a really fulfilling life.

But there's also this thing that maybe we're in this

portion of the podcast now, but I've experienced this.

I should say that this is late at night, we're talking.

That's right, certainly late for me,

but I'm in two hours, I came in today on,

I'm still in California.

And we should also say that you came here

to wish me a happy birthday.

I did, I did, and the podcast is just like

a fun last minute thing I suggested.

Yeah, some close friends of yours have arranged a dinner

that I'm really looking forward to.

I won't say which night, but it's the next couple of nights.

You know, your circadian clock is one of the most

robust features of your biology.

I know you can be nocturnal or you can be diurnal.

We know you're mostly nocturnal at certain times of the year, Lax, but there are very, very few people can get away with no sleep.

Very few people can get away with a chaotic sleep wake schedule.

So you have to obey a 24 hour, aka circadian rhythm if you want to remain healthy of mind and body.

We also have to acknowledge that it's aging is in linear.

Right, so.

What do you mean?

Well, I mean, the degree of change between years $35\ \text{and}\ 40$

is not going to be the degree of change

between 40 and 45, but I will say this, I'm 48

and I feel better in every aspect of my psychology

and biology now than I did when I was in my 20s.

Yeah, sort of quality of thought, time spent.

Physically, I can do what I did then,

which is probably says more about what I could do then

than what I can do now.

But if you keep training, you can continue to get better.

The key is to not get injured.

And I've never trained super hard.

I've trained hard, but I've been cautious to not,

for instance, wait train more than two days in a row.

I do a split, which is basically three days a week

and the other days a run, take one full day off,

take a week off every 12 to 16 weeks.

I've not been the guy hurling the heaviest weights

or running the furthest distance,

but I have been the guy who's continuing to do it

when a lot of my friends are talking about knee injuries.

Hey, hey, hey, I'm just,

but of course, with sport, you can't account for everything

the same way you can with fitness.

And I have to acknowledge that,

unless one is powerlifting, weightlifting and running,

you can get hurt, but it's not like skateboarding

where if you're going for it, you're gonna get hurt.

That's just you're landing on concrete

and with jiu-jitsu, people are trying to hurt you

so that you say, stop.

So with a sport, it's different.

And these days, I don't really do a sport any longer.

I work out to stay fit.

I used to continue to do sports,

but I kept getting hurt and frankly now like a rolled ankle.

I may put out a little small skateboard part in 2024

because people have been saying,

we wanna see the kick flip.

Those say, well, I'll do a heel flip instead, but okay.

I might put out a little part

cause some of the guys that work on our podcast are from DC.

I think by now, I should at least do it

just to show like I'm not making it up and I probably will.

But I think doing a sport is different.

That's how you get hurt overuse and doing an actual sport.

And so, hat tip to those do an actual sport.

And that's a difficult decision.

Like a lot of people have to make.

I have to make Ujjica, for example.

Like if you just look empirically,

I've trained really hard from all my life

in grappling sports and fighting sports

and all this kind of stuff.

And I've avoided injury for the most part.

And I would say, I would attribute that to training a lot.

Sounds counterintuitive, but training well and safely

and correctly, keeping good form,

saying no when they need to say no,

but training a lot and taking it seriously.

Now when this training is kind of a side,

really a side thing,

I find that the injury becomes a higher and higher probability.

But when you're just doing it every once in a while.

Every once in a while.

Yeah, I think you said something really important

that the saying no.

I mean, the times I have gotten hurt training

is when someone's like,

hey, let's hop on this workout together

and it becomes a let's challenge each other

to do something outrageous.

Sometimes that can be fun though.

I went up to Cam Haynes' gym

and he does these very high repetition weight workouts

that are in circuit form.

I was sore for two weeks,

but I learned a lot and didn't get injured.

And yes, we ate bow hunted elk after.

Nice.

But the injury has been a really difficult

psychological thing for me.

Cause so I've injured my finger, pinky finger,

injured my knee.

Yeah, your kitchen is filled with splints.

Splints.

I'm trying to figure out.

I'm sorry.

It's like, if you look in last discussion,

there's some really good snacks.

I had some right before.

He's very good about keeping cold drinks in the fridge.

And all the water has element in it, which is great.

I love that.

But then there's a whole like hospital's worth of splints.

Yeah, I'm trying.

I'm trying to figure out.

So here's the thing.

My finger like pop out like this, right?

Pinky finger.

I'm trying to figure out how do I splint in such a way

that I can still program, still play guitar,

but protect this kind of torque motion

that creates a huge amount of pain.

That's what you have a Jiu-Jitsu injury.

Jiu-Jitsu, but it's a, it's not the kind of,

it's probably more like a skateboarding style injury,

which is, it's unexpected and a silly,

and a silly thing.

That's the thing that happens in a second.

I didn't break my foot doing anything important.

I broke my fifth minute dart by stepping off a curb.

So it's, that's why they're called accidents.

You know, if you get hurt doing something awesome,

that's a trophy that you have to work through.

It's part of your payment to the universe.

If you get hurt stepping off a curb

or you're doing something stupid,

it's called a stupid accident.

Since we brought up Chimp Empire,

let me ask you about relationships.

I think we've talked about relationships.

Yeah, I only date homo sapiens.

It's the morning meditation.

The night is still young.

You are human.

No, but you are also animal.

Don't sell yourself short.

No, I would say, listen, any discussion

on the Hebrew and Lab podcast

about sexual health or anything,

or the critical force, consensual, age-appropriate,

context-appropriate, species-appropriate.

Species-appropriate, well,

can I just tell you about sexual selection?

I've been watching Life in Color with David Edinburgh.

I've been watching a lot of nature documentaries.

Talking about inner peace,

it brings me so much peace to watch nature

at its worst and at its best.

So Life in Color is a series on Netflix

where it presents some of the most colorful animals

on earth and kind of tells their story

of how they got there through natural selection.

So you have the peacock with the feathers

and it's just such incredible colors.

Like the peacock has these tail feathers, the male,

they're like gigantic and they're super colorful.

And there are these eyes on it, it's not eyes,

it's like eye-like areas and they wiggle their ass,

like to show the tail, they wiggle the tails.

The eye spots.

The eye spots, yes, thank you.

You know this probably way better than me.

I'm just quoting it.

No, no, please continue.

But it was, it's just, I'm watching this

and then the female is as boring looking as pot,

like she has no colors or nothing,

but she's standing there bored,

just seeing this entire display.

And I'm just wondering like the entirety of life on earth,

or not the entirety, post-bacteria, is like,

at least in part, maybe in large part,

can be described through this process

of natural selection, of sexual selection.

So dudes fighting and then women selecting.

It seems like just the entirety of that series

shows some incredible birds and insects and shrimp.

They're all beautiful and colorful.

Mantis shrimp.

Mantis shrimp, they're just, they're incredible.

And it's all about getting laid.

It's fascinating.

Like I just, there's nothing like watching dad

and Champ Empire to make you realize,

we humans, that's the same thing.

That's all we're doing.

And all the beautiful variety,

all the bridges and the buildings and the rockets

and the internet, all of that is at least in part,

this kind of a product of this kind of

showing off for each other and all the wars and all of this.

Anyway, I'm not sure what I'm asking.

Oh, relationships, yes.

Well, right.

Before you ask about relationships,

I think what's clear is that every species,

it seems, animal species wants to make more of itself

and protect its young.

Well, the protect this young is non-obvious.

So not destroy enough of itself

that it can't get more to reproductive competent age.

I mean, I think that, you know, we have a natural,

I mean, healthy people have a natural reflex

to protect children.

Well, I don't know that.

And those that can't.

Wait a minute, wait a minute, wait a minute.

I've seen enough animals that are murdering the children

Sure, there's even cyblicide.

First of all, I just want to say that I was delighted

in your delight around animal kingdom stuff

because this is a favorite theme of mine as well.

But there's, for instance, some fascinating data on,

for instance, for those that grew up on farms,

they'll be familiar with free Martins.

You know about free Martins?

This is their cows that have multiple calves inside them.

And there's a situation in which the calves will secrete,

if there's more than one inside will secrete chemicals

that will hormonally castrate the calf next to them

so they can't reproduce.

So already in the womb, they are fighting

for future resources.

That's how early this stuff can start.

So it's chemical warfare in the womb against the siblings.

Sometimes there's outright cyblicide.

Siblings are born, they kill one another.

This also becomes biblical stories, right?

There are instances of cuttlefish,

beautiful cephalopods, like octopuses,

and that is the plural as we make clear.

Yeah, with the meme, the internet.

Oh yeah, that became a meme or a little discussion.

Yeah, it spread pretty quick.

And now we just resurfaced it.

That's great.

The dismay in your voice is so amusing.

In any event, the male cuttlefish will disquise themselves

as female cuttlefish, infiltrate the female cuttlefish group,

and then mate with them, all sorts of types of covert operations.

So I think that it's like a drinking game

where every time we say covert in a contract in this episode,

you have to take a shot of espresso.

Please don't do that, you'd be dead by the end.

So actually just a small tangent,

it does make me wonder how much intelligence covert contracts require.

It seems like not much.

If you can do it in the animal kingdom,

there's some kind of instinctual, it is based perhaps in fear.

Yeah, it could be a simple algorithm.

If there's some ambiguity about numbers

and I'm not with these guys,

and then flip to the alternate strategy.

I actually have a story about this that I think is relevant.

I used to have cuttlefish in my lab in San Diego.

We went and got them from a guy out in the desert.

We put them in the lab, it was amazing.

And they had a postdoc who was studying prey capture in cuttlefish.

They have a very ballistic, extremely rapid strike and grab of the shrimp.

And we were using high-speed cameras to characterize all this.

Looking at binocular, they normally have their eyes on the side of their head.

When they see something they want to eat,

the eyes translocate to the front, which allows them stereopsis.

Death perception allows them to strike.

We were doing some unilateral eye removals they would miss, et cetera.

Okay, this has to do with the eye spots.

This was during a government shutdown period where the ghost shrimp

that they normally feed on,

that we would ship in from the Gulf down here, weren't available to us.

So we had to get different shrimp.

And what we noticed was that the cuttlefish normally

would just sneak up on the shrimp.

We learned this by data collection.

And if the shrimp was facing them,

they would do this thing with their tentacles

of enchanting the shrimp.

And if the shrimp wasn't facing them, they wouldn't do it.

And they would ballistically grab it and eat them.

Well, when we got these new shrimp,

the new shrimp had eye spots on their tails.

And then the cuttlefish would do this kind of attempt to enchant,

regardless of the position of the ghost shrimp.

So what does that mean?

Okay, well, it means that there's some sort of algorithm in the cuttle fish's mind

that says, okay, if you see two spots, move your tentacles.

So it can be, as you pointed out, it can be a fairly simple operation.

But it looks diabolical.

It looks cunning.

But all it is is strategy B.

Yeah, but it's still somehow emerged.

I mean, I don't think that calling it an algorithm doesn't...

I feel like...

Well, there's a circuit there that gets implemented in a certain context.

But that circuit had to evolve.

You do realize Super intelligent AI will look at us humans

and we'll say the exact thing.

There's a circuit in there that evolved to do this algorithm A and algorithm B.

And it's trivial.

And to us humans, it's fancy and beautiful where I poetry about it.

But it's just...

Because we don't understand the subconscious.

Because that AI algorithm cannot see into what it can't see.

It doesn't understand the underworkings of what allows all of this conversation stuff to manifest.

And we can't even see it.

How could AI see it?

Maybe it will.

Maybe AI will solve and give us access to our subconscious.

Maybe your AI friend or coach like I think Andreessen and others are arguing is going to happen at some point.

It's going to say, hey, Lex, you're making decisions lately that are not good for you.

But it's because of this algorithm that you picked up in childhood.

That if you don't state your explicit needs upfront, you're not going to get what you want. So why do it?

From now on, you need to actually make a list of every absolutely outrageous thing that you want no matter how outrageous and communicate that immediately.

And that will work.

We're talking about co-efficient sexual selection.

And then we went into some, where do we go?

And you said you were excited.

I was excited.

Well, you were just saying, what about these covert contracts and animals do them? I think it's simple contextual engagement of a neural circuit, which is not just nerdspeak for saying they do a different strategy.

It's saying that there has to be a circuit there, a hardwired circuit, maybe learned, but probably hardwired, that can be engaged.

You can't build neural machinery out of, in a moment, you need to build that circuit over time. What is building it over time?

You select for it.

The cuttlefish that did not have that alternate context-driven circuit didn't survive when all the shrimp that they normally disappear and the eye-spotted shrimp showed up. And there were a couple that had some miswiring.

This is why mutation, X-Men type stuff is real, they had a mutation that had some alternate wiring and that wiring got selected for it became a mutation that was adaptive as opposed to maladaptive.

This is something people don't often understand about genetics is that it only takes a few generations to devolve a trait, make it worse, but it takes a long time to evolve an adaptive trait.

There are exceptions to that, but most often that's true.

A species needs a lot of generations.

We are hopefully still evolving as a species and it takes a long time to evolve more adaptive traits, but it doesn't take long to devolve adaptive traits so that you're getting sicker

or you're not functioning as well.

That's perhaps the good segue into sexual selection in humans.

I could tell you're good at this.

Why did I bring up sexual selection as a relationship?

Sexual selection in humans.

I don't think you've done an episode on relationships.

No, I did an episode on attachment, but not on relationships.

The series with Conti includes one episode of The Four that's all about relational understanding and how to select a mate based on matching of drives.

All the demons inside the subconscious, how to match demons, that they dance well together.

How generative two people are.

What does that mean?

It means how, the way he explains it is how devoted to creating growth within the context of the family, the relationship with work.

Let me ask you about mating rituals and how to find such a relationship.

They're really big on friendships, on the value of friendships.

And that I think extends itself into one of the deepest kinds of friendships you can have, which is a romantic relationship.

What mistakes, successes, and wisdom can you impart?

Well, I've certainly made some mistakes.

I've also made some good choices in this realm.

First of all, we have to define what sort of relationship we're talking about.

If one is looking for a life partner, potentially somebody to establish family with, with or without kids, with or without pets, families can take different forms.

I certainly experienced being a family in a prior relationship where it was the two of us and our two dogs, and then it was family, like we had a little family.

I think based on my experience and based on input from friends who themselves have very successful relationships, I must say I've got friends who are in long-term, monogamous, very happy relationships where there seems to be a lot of love, a lot of laughter, a lot of challenge, and a lot of growth.

And both people, it seems, really want to be there and enjoy being there.

Just a pause on that.

One thing to do, I think, by way of advice, is listen to people who are in long-term successful relationships.

That's like, it seems dumb, but like, we both know and our friends with Joe Rogan, who's been in a long-term, really great relationship.

And he's been an inspiration to me.

So you take advice from that guy.

Definitely.

And several members of my podcast team are in excellent relationships.

I think one of the things that rings true over and over again in the advice and in my experience is find someone who's really a great friend, like build a really great friendship with that person.

Now, obviously not just a friend if we're talking romantic relationship, and of course sex is super important, but it should be a part of that particular relationship alongside or meshed with the friendship.

Can it be a majority of the positive exchange?

I suppose it could, but I think the friendship piece is extremely important because what's required in a successful relationship clearly is joy in being together, trust a desire to share experience, both mundane and more adventurous, support each other, acceptance, a real maybe

even admiration, but certainly delight in being with the person.

Earlier we were talking about peace, and I think that that sense of peace comes from knowing that the person you're in friendship with or that you're in romantic relationship or ideally both, because let's assume healthy relationship, the best romantic relationship includes a friendship component with that person, it's like you just really delight in their presence, even if it's a quiet presence, and you delight in seeing them delight in things, that's clear.

The trust piece is huge, and that's where people start, we don't want to focus on what works, not what doesn't work, but that's where I think people start engaging in these covert contracts.

They're afraid of being betrayed, so they betray.

They're afraid of giving up too much vulnerability, so they hide their vulnerability, or in the worst cases they feign vulnerability.

Again, that's a covert contract that just simply undermines everything, it becomes one plus one equals two minus one to infinity.

Conversely, I think if people can have really hard conversations, this is something I've had to work really hard on in recent years that I'm still working hard on, but the friendship piece seems to be the thing that rises to the top when I talk to friends who are in these great relationships.

They have so much respect and love and joy in being with their friend, it's the person that they want to spend as much of their non-working, non-plotonic friendship time with, and the person that they want to experience things with and share things with.

It sounds so canned and cliche nowadays, but I think if you step back and examine how most people go about finding a relationship, you're like, oh, am I attracted?

Of course, physical attraction is important in other forms of attraction too, and they enter through that portal, which makes sense.

That's the mating dance, that's the peacock situation, that's hopefully not the cuddle for situation, but I think that there seems to be a history of people close to me getting into great relationships where they were friends for a while first or maybe didn't sleep together right away, that they actually intentionally deferred on that.

This has not been my habit or my experience, I've gone the more, I think, typical, like, oh, there's an attraction like this person, there's an interest, you explore all dimensions of relationship really quickly except perhaps the moving in part and the having kids part, which ideally, because it's a bigger step, harder to undo without more severe consequences, but I think the whole take it slow thing, I don't think is about getting to know someone

slowly, I think it's about that physical piece, because that does change the nature of the relationship, and I think it's because it gets right into the more hardwired primitive circuitry around our feelings of safety, vulnerability, there's something about romantic and sexual interactions where it's like assets and liabilities, where people are trying to figure out how much to engage their time and their energy and multiple, I'm talking about it from both sides, male, female or whatever, it sides, but where it's like assets and liabilities and that's where it starts getting into those complicated contracts early on, I think, and so maybe that's why if a really great friendship and admiration is established first, even if people are romantically and sexually attracted to one another, then that piece can be added in a little bit later in a way that really just seals up the whole thing, and then who knows, maybe they spend 90% of their time having sex, I don't know, that's not for me to say or decide, obviously, but there's something there about staying out of a certain amount of risk of having to engage covert contract in order to protect oneself. But I do think love at first sight, this kind of idea is in part realizing very guickly that you are great friends, like I've had that experience of friendship recently, it's not really friendship, but like, oh, you get each other with humans, not in a romantic setting. Right, friendship. Yeah, just friendship. But not... But dare I say, I felt that way about you when we met, right? But we also... I was like, this dude's cool, and he's smart, and he's funny, and he's driven, and he's giving, and he's got an edge, and like, I want to learn from him, I want to hang out with him. Like, I mean, that was the beginning of our friendship was essentially, you know, that set of internal realization. Just keep going, just keep going. And a sharp dresser, yeah, yeah, just looks great shirtless on a horseback, yes. No, no, no, listen, I mean, despite what some people might say on the internet, it's a purely platonic friendship. Somebody said, somebody asked if Andrew Cuban has a girlfriend, and somebody says, I think so. And

then the third comment was, this really, like, breaks my heart, like, that Alex and Andrew are not an item. We are not, we are great friends, but we are not an item. That's true, it's official. I hear over and over again from friends that have made great choices and awesome partners, and have these fantastic relationships for long periods of time that seem to continue to thrive. At least that's what they tell me, and that's what I observe. Establish the friendship first, and give it a bit of time before sex. And so, you know, I think that's the feeling, that's the feeling. And these are, we're talking micro features and macro features, we're talking, you know, and this isn't about perfection, it's actually about the imperfections, which is kind of cool. I like guirky people, I like characters. I'll tell you where I've gone badly wrong, where I see other people going badly wrong. If there is no rule that says that you have to be attracted to all attractive people, by any means, it's very important to develop a sense of taste in romantic attractions. I believe what you really like in terms of a certain style, you know, a certain way of being, and of course that includes sexuality and sex itself, the verb. But I think it also includes there's just general way of being, you know, and when you really adore somebody, you like the way they answer the phone. And when they don't answer the phone that way, you know something's off and you want to know. And so, I think that the more you can tune up your powers of observation, not looking for things that you like, and the more that stuff just kind of washes over you, the more likely you are to quote unquote

fall in love. As a mutual friend of ours said to me, you know, listen, when it comes to romantic relationships, if it's not 100% in you, it ain't happening. And I've never seen a violation of that statement, where it's like, yeah, it's mostly good. And there this is like the negotiations, already you're, it's doomed. And that doesn't mean someone has to be perfect. The relationship has to be perfect. But it's got to feel 100% inside, like yes, yes, and yes. I think Diceroth when he was on here, your podcast mentioned something that, you know, like, I think the words were, maybe it was in his book, I don't recall, but that love is one of these things that we story into with somebody. We create this idea of ourselves in the future. And we look at our past time together, and then you story into it. I mean, there are very few things like that. I can't story into, you know, building flying cars, I have to actually go do something. I mean, yeah, and love is also retroactively constructed. I mean, anyone who's gone through a breakup understands the grief of knowing, ah, like, this is something I really shouldn't be in for whatever reason, because if it only takes one, if the other person doesn't want to be in it, then you shouldn't be in it. But then missing so many things. And that's just the attachment machinery really at work. I have to ask you a question that does somebody on our amazing team wanted to ask, he's happily married. Another, like you mentioned, incredible relationship. Are they good friends? Are they amazing friends? There you go. But Oaksa said, I'm not saying who it is. So I can say some stuff, which is they, it started out as a great sexual connection. Oh, well, there you go. But then became very close friends after that. Listen, there you go. So speaking of sex, he has a wonderful son and he's wanting to have a second kid and he wanted to ask the great Andrew Huberman, is there like sexual positions or any kind of thing that can help maximize the chance that they have a girl versus a boy? Because they're a wonderful boy, they want a girl. Is there a way to control the gender? Well, this has been debated for a long time. And I did a four and a half hour episode on fertility. And the reason I did a four and a half hour episode on fertility is that first of all, I find that reproductive biology fascinating. And I wanted a resource for people that were thinking about or struggling with having kids for whatever reason. And it felt important to me to combine the male and female components in the same episode. It's all timestamps. So you don't have to listen to the whole thing. We'll talk about IVF and mutual fertilization. We'll talk about natural pregnancy. Okay, the data on position is very interesting. But let me just say a few things. There are a few clinics now, in particular some out of the United States, that are spinning down sperm and finding that they can separate out fractions, as they're called, that can spin the sperm down at a given speed. And they'll separate out at different sort of depths within the test tube that allow them to pull out the sperm on top or below and bias the probability towards male or female births. It's not perfect. It's not 100%. It's a very costly procedure. It's still very controversial. Now, with in vitro fertilization, you can extract eggs, you can do introduce a sperm directly by pipette in a process called ICSI, or you can set up a sperm race in a dish. And if you get a number of different embryos, meaning the eggs get fertilized, they duplicate and start form a blastocyst, which is a ball of cells, early embryo, then you can do karyotyping. So you can do look for XX or XY, select the XY, which then would give rise to a male offspring and implant that one. So there is that kind of sex selection. With respect to position, there's a lot of lore that if the woman is on top, or the woman's on the bottom, or whether or not the penetration is from behind, whether or not it's going to be male

or female offspring. And frankly, the data are not great, as you can imagine, because those would be interesting studies to run, perhaps. There is study. There is paper. There are some, but I guess there's more lore than science. And there are a lot of other variables that are hard to control. So for instance, if it's ejaculation during intramission, during sex penetration, etc., then you can't measure, for instance, sperm volume as opposed to when it's IVF, and they can actually measure how many milliliters, how many forward motile sperm, it's hard to control for certain things. And it's just going to vary between individuals and even from one ejaculation to the next. And okay, so there's too many variables. However, the position thing is interesting in the following way. And then I'll answer whether or not you can bias towards a female. But as long as we're talking about sexual position, there are data that support the idea that in order to increase the probability of successful fertilization, that indeed, the woman should not stand upright after sex, and should, right after the man has ejaculated inside her, and should adjust her pelvis, say 15 degrees upwards. I mean, some of the fertility experts, MDs, will say, that's crazy, but others that I sought out, and not specifically for this answer, but for researching that episode said that, yeah, what you're talking about is trying to get the maximum number of sperm, and it's contained in semen, and yes, the semen can leak out. And so keeping the pelvis tilted for about 15 degrees, for about 15 minutes, obviously tilted in the direction that would have things running upstream, not downstream, so to speak, gravity, it's real. So for maximizing fertilization, the doctors I spoke to just said, look, given that if people are trying to get pregnant, what is spending 15 minutes on their back, this sort of thing. Okay, so then with respect to female getting a female offspring or XX female offspring

Okay, so then with respect to female getting a female offspring or XX female offspring selectively, there is the idea that as fathers get older, they're more likely to have daughters as opposed to sons. That's a, from the papers I've read is a significant, but still mildly significant result. So with each passing year, this person increases the probability they're going to have a daughter and not a son. So that's interesting.

But the probability difference isn't probably tiny.

I mean, it's not, you know, it's a significant, it's not trivial. It's not a trivial difference. But if they want to ensure having a daughter, then they should do IVF and select an XX embryo. And when you go through IVF, they genetically screen them for karyotype, which is XXXY. And they look at mutations, genotypic mutations for things like trisomies and aneuploidies, all the stuff you don't want. But there is a lot of lore if you look on the internet. Sure, different foods. So there's a lot of variables.

There's a lot of error, but there haven't been systematic studies. So I think probably the best thing to do unless they're going to do IVF is just roll the dice. And I think with each passing year, they increase the probability of getting a female offspring. But of course, with each passing year, the egg and sperm quality degrade. So, you know, get after it soon. So I went down a rabbit hole. There's like sexology. There's journals on sex. Sure. Okay. And some of them, some of them, not all, quite reputable. And some of them really pioneering in the sense that they've taken on topics that are considered outside the main frame of what people talk about, but they're very important. We have episodes coming out soon with, for instance, the head of male urology, sexual health, and reproductive health at Stanford,

Michael Eisenberg, but also one with a female urologist, sexual health, reproductive health, Dr. Rina Malik, who's on, has a quite active YouTube presence. She does these really like dry, like scientific presentation, but very nice. She has a lovely voice and she, but she'll be talking about, you know, erections or squirting or like, oh, is it like she does like very kind of internet type content. But she's a legitimate urologist, reproductive health expert. And in the podcast, we did talk about both male and female orgasm. We talked a lot about sexual function dysfunction. We talked a lot about pelvic floor. One interesting factoid is that only 3%, only 3% of sexual dysfunction is hormonal endocrine in nature. It's more often related to some pelvic floor or vascular blood flow related or other issue. And then when Eisenberg came on the podcast, he said that far less sexual dysfunction is psychogenic in origin than people believe that far more of it is pelvic floor, neuro, and vascular. So, you know, there are the myths of, I mean, it's not saying that it's that psychogenic dysfunction doesn't exist, but that a lot of the sexual dysfunction that people assume is related to hormones or that is related to psychogenic issues are related to vascular or neural issues. And the good news is that there are great remedies for those. And so both those episodes detail some of the more salient points around what those remedies are and could be. I mean, one of the kind of, again, factoids, but it was interesting that a lot of people have pelvic floor issues and they think that their pelvic floors are quote-unquote messed up. So they go on the internet, they learn about kegels, kegels that, you know, and it turns out that some people need kegels, they need to strengthen their pelvic floor. Guess what? A huge number of people with sexual and urologic dysfunction have pelvic floors that are too tight and kegels are going to make them far worse. And they actually need to learn to relax their pelvic floor. And so seeing a pelvic floor specialist is important. I think in the next five, 10 years, we're going to see a dramatic shift towards more discussion about sexual and reproductive health in a way that acknowledges that, yeah, the clitoris comes from the same origin tissue as the penis. And in many ways, the neural innervation of the two, while clearly different, has some overlapping features that, you know, that there's going to be discussion around kind of anatomy and hormones and pelvic floors. And in a way that's going to, you know, erode some of the kind of like cloaking of these topics, because they've been cloaked for a long time. And there's a lot of like, well, let's just call it what is, there's a lot of bullshit out there about what's what. And now the hormonal issues, by the way, just to clarify, can impact desire. So a lot of people who have lack of desire as opposed to lack of anatomical function, that's going to be male or female, that can originate with either things like SSRIs or hormonal issues. And so we talk about that as well. So it's a pretty vast topic. Okay, you're one of the most productive people, I know. What's the secret to your productivity? How do you maximize the number of productive

in a day? You're a scientist, you're a teacher, you're a very prolific educator.

Well, thanks for the kind words. I struggle like everybody else, but I been pretty relentless about meeting deadlines. I miss them sometimes, but sometimes that means cramming, sometimes that means starting early. But has that been hard? Sorry to interrupt with the podcast. There's certain episodes, I mean, you're like taking just incredibly difficult topics, and you know, there's going to be a lot of really good scientists listening to those, with a very skeptical and careful eye. Do you struggle meeting that deadline sometimes?

Yes, we've pushed out episodes because I want more time with them. I haven't advertised this, but I have another fully tenured professor that started checking my podcast and helping me find papers. He's a close friend of mine. He's an incredible expert in neuroplasticity, and that's been helpful. But I do all the primary research for the episodes myself, although my niece has been doing a summer internship with me and finding amazing papers. She did last summer as well. She's really good at it. Just sick of that kid on the internet, and she gets great stuff. Can I ask you, just going on tangents here, what's the hardest? Finding the papers or understanding what a paper is saying? Finding the best papers. Because you have to read a bunch of reviews, figure out who's getting cited, call people in a field, make sure that this is the stuff. I mean, I did this episode recently on ketamine, about ketamine. I wasn't on ketamine. And there's this whole debate about S versus R ketamine, SR ketamine. And I called two clinical experts at Stanford. I had a researcher at UCLA help me. Even then, a few people had gripes about it. I don't think they understood a section that I was perhaps could have been clearer about. But yeah, you're always concerned that people won't either won't get it or I won't be clear. So the researching is mainly about finding the best papers. And then I'm looking for papers that establish a thoroughness of understanding that are interesting, obviously, it's fun to get occasionally a look at some of the odder or more progressive papers that are what's new in a field and then where there are actionable takeaways to really export those with a lot of thoughtfulness. I mean, I think that going back to the productivity thing, I do, I get up, I look at the sun, I don't stare at the sun, but I get my sunshine, it all starts with a really good night's sleep. I think that's really important to understand. So much so that if I wake up and I don't feel rested enough, I'll often do a non-sleep deep rest, yoga, knee draw or go back to sleep for a little bit, get up, really prioritize one, you know, the big block of work for the thing that I'm researching. I think a little bit of anxiety and a little bit of concern about deadline helps. Turning the phone off helps. Realizing that those peak hours, whenever they are for you, you do not allow those hours to be invaded unless there's a, you know, a nuclear bomb goes off. And nuclear bomb is just a, you know, a phraseology for, you know, it could be family crisis would be, you know, would be good justification if there's an emergency, obviously. But it's all about focus. It's all about focus in the moment. It's not even so much about how many hours you log. It's really about focus and how much total focus can you give to something. And then I like to take walks and think about things and sometimes talk about them in my voice recorder. So I'm just always churning on it all the time. And then, of course, learning to turn it off and engage with people socially and, you know, not be podcasting 24 hours a day in your head is key. But I think I love learning and researching and finding those papers and the information and I love teaching it. And these days I use a whiteboard before I start, I don't have any notes, no teleprompter. Then the whiteboard that I use beforehand is to really sculpt out the different elements and the flow, get the flow right and move things around. The whiteboard is such a valuable tool, then take a couple of pictures of that when I'm happy with it, put it down on the desk. And these are just bullet points and then just churn through and just churn through and nothing feels better than, you know, researching and sharing information. And as you did, you know, grew up writing papers and it's hard and I like the friction of like, I can't, you know, I want to get up when I was in college. I was trying to make up deficiencies from my lack of attendance in high school

so much so that I would set a timer, I wouldn't let myself get up to use the bathroom even. Never had an accident but I was, you know, I mean, I was like, I listened to music, classical music, rancid, a few other things, some Bob Dylan maybe thrown in there and just study. And it felt, and then you know, hit the two hour mark and you're in pain and then you get up and you're like, use the bathroom like that, felt so good. There's something about the human brain that likes these kind of friction points and working through them and you just have to work through them. So, yeah, I'm productive and my life is arranged around it. And, you know, that's been a bit of a barrier to personal life at times, but my life's been arranged around it. I've set up everything so that I can learn more, teach more, including, you know, some of my home life and, but I do, you know, still watch Chimpeh Empire, still got time to watch Chimpeh Empire. Look, the great Joe Strummer, right, Clash or my favorite mescaleros, he said, you know, this famous Strummer quote, no input, no output. So you need, you need experience, you need outside things in order to foster the process. But yeah, just nose to the grindstone, man. I don't know. And that's what, and that's what I'm happy to do with my life. I don't think anyone should do that just because. But this is how I'm showing up. And, you know, like me, then scroll. Why do they say swipe left? So, I don't know. I'm not on the apps, the dating apps. So that's the other thing I keep waiting for when Listen to Lex Freeman podcast is a checkbox on, like, Hinge or Bumble or whatever it is. But I don't even know, are those their field? Is I don't know what the, what are the apps now? I've never used an app. And I, I, I always file trouble some how little information is provided on apps. Well, they're the ones that are like a stocked lake, like, like Raya, you know,

Well, they're the ones that are like a stocked lake, like, like Raya, you know, it's like, they, like, they sort of like companies will actually fill them with, you know, people that look a certain way and. Well, soon it'll be filled with AI. Oh, yeah. That's the way you said, oh, that's a heartbreak within that. Well, I, you know, I'm guilty of liking real human interaction.

Have you tried AI interaction?

No, but I have a feeling you're going to convince me to.

One day. Yeah, I've, I've also struggled finishing projects that are new. There are some, something new, like for example, some, one of the things I've really struggled finishing is something that's in Russian that requires translation and overdub and all that kind of stuff. The other project I've been working out for like over at least a year and off and on, but trying to finish is something we've talked about in the past is I'm still on it project on Hitler and World War II. I've written so much about it and I just don't know why I can't finish it. I have trouble like really, I think I'm terrified being in front

of the camera. Like this? Like this? Or solo? Well, actually, no, no, no, solo. Well, if you want to do solo and seriously, because we've done this before, right? Our, Clint Dustin study missions. I'll, I'm happy to sit in the corner and work on my book or do something if you want to, if it feels just for the feeling of somebody else. Definitely. What do you, I mean, how do you, you don't seem to, you seem to have been fearless to just sit

in front of the camera by yourself to do the episode. Yeah, it was weird. I mean, the first year of the podcast, it just spilled out. I mean, it was just, I had all that stuff. I was so excited about it. I've been talking to everyone and who would listen and anyone, even when they run away, I'd keep talking, you know, before there was ever a camera, wasn't on social media. 2019,

I posted a little bit, 2020, as you know, start going on podcasts. But yeah, I had so, I just, I just, the zest and delight in this stuff is like circadian rhythms. I'm going to tell you about this stuff. I just felt like here's the opportunity and just let it burst. And then as we've gotten into topics that are a little bit further away from my home knowledge, you know, it's like, I still get super excited about it. It's music in the brain episode I've been researching for a while now. I'm just so hyped about it. It's so, so interesting. There's so many facets, singing versus improvisational, excuse me, music versus listening to music versus learning music. I mean, it just goes on and on. There's just so much. That's so interesting. I just can't get enough. And I think, I don't know, you put a camera in front of me, I sort of forget about it. And I'm just trying to just teach. Yes, that's the different. That's interesting. I mean, I forget the camera. Maybe I need to find that joy as well. But like for me, a lot of the joy is in the writing and the camera, there's something. Well, the best lecturers, as you know, and you're in a phenomenal lecture, so you embody this as well. But when I teach at Stanford, I was directing this course in neuroanatomy and neuroscience and for medical students. And I noticed that the best lecturers would come in and they're teaching the material from a place of deep understanding, but they're also experiencing it as a first time learner at the same time. So it's just sort of embodying the delight of it, but also the authority over the, not authority, but the sort of mastery of the material. And it's really the delight in it that the students are linking on to. And of course, they need and deserve the best, accurate material. So they have to know what they're talking about. But yeah, just tap into that energy of learning and loving it. And people are long for the ride. Or, you know, I get accused of being long-winded, but you know, things get taken out of context. That leads to greater misunderstanding. And also, I look at, listen, I come from a lineage of three dead advisors, three, all three. So I don't know when the Reaper's coming for me. I'm doing my best to stay alive a long time, but whether or not it's a bullet or a bus or cancer or whatever, or just old age, I mean, I'm trying to get it all out there. It's best I can. And if it means you have to hit pause and come back a day or two later, like that seems like a reasonable compromise to me. I'm not going to go longer than I need to. And I'm trying to shorten them up. But again, that's kind of how I show up. It's like Tim Armstrong would say about writing songs. I asked him, do you write, how often do you write? Every day. Every day. Does Rick ever stop creating? No. Does Joe ever stop preparing for comedy? Are you ever stopping to think about world issues and technology and who you can talk to? I mean, it seems to me you've always got a plan. The thing I love about your podcast the most, to be honest, these days, is the surprise of like, I don't know who else is going to be there. It's almost like I get a little nervously excited about when a new episode comes, no idea. No idea. And I have some guesses based on what you told me during the break. I mean, you've got some people where it's just like, whoa, Lex's went there. Awesome. Can't wait. Click. I think that's really cool. You're constantly surprising people. You're doing it so well. It's such a high level. I think it's also important for people to understand that what you're doing, Lex, there's no precedent for it. Sure, there've been interviews before, there've been podcasts before, there are discussions before, but it's not like, how many of your peers can you look to to find out how best to do the content like yours? Zero. There's one peer, you. That should give you great peace and great excitement.

Because you're a pioneer. You're literally the tip of the spear. I don't want to take an unnecessary tangent, but I think this might thread together two of the things that we've been talking about, which are, I think, of pretty key importance. One is romantic relationships and the other is creative process and work. And this, again, is something I learned from Rick, but that he and I have gone back and forth on and that I think is worth elaborating on, which is earlier we're saying, the best relationship is going to be one where it brings you peace. I think peace also can be translated to, among other things, lack of distraction. So when you're with your partner, can you really focus on them and the relationship? Can you not be distracted by things that you're upset about from their past or from your past with them or their... And of course, the same is true for them, right? They ideally will feel that way towards you too. They can really focus. Also, when you're not with them, can you focus on your work? Can you not be worried about whether or not they're okay because you trust that they're an adult and they can handle things or they will reach out if they need things? They're going to communicate their needs like an adult, not creating messes just to get attention and things like that, or disappearing for that matter. So peace and focus are intimately related and distraction is the enemy of peace and focus. So there's something there, I believe, because with people that have the strong generative drive and want to be productive in their home life, in the sense of have a rich family life or partner life, whatever that is, and in their work life, the ability to really drop into the work and like, okay, you might have that sense like, I hope they're okay or need to check my phone or something, but just know we're good. So peace and focus, I think, and being present are so key. And it's key at every level of romantic relationship from certainly presence and focus, everything from sex to listening to raising a family to tending to the house. And in work, it's absolutely critical. So I think that those things are kind of mirror images of the same thing, and they're both important reflections of the other. And when you start to just, when work is not going well, then the focus on relationship can suffer and vice versa. And it's crazy how important that is. How incredibly wonderful it could be to have a person in your life that kind of enables that creative focus. Yeah. And you supply the peace and focus for their endeavors, whatever those might be. I mean, that symmetry there, because clearly, people have different needs and the need to just really trust, like when Lex is working, he's in his generative mode, and I know he's good. And so then they feel sure they've contributed to that, but then also what you're doing is supporting them in whatever way it happens to be. And I think that sometimes you'll see that people pair up along creative creative or musical musical or computer scientists. But I think, again, going back to this Conti episode on relationships is that the superficial labels are less important, it seems, than just the desire to create that kind of home life and relationship together. And as a consequence, the work mode, and for some people, both people aren't working, and sometimes they are, but I think that's the good stuff. And I think that's the big learning in all of it is that the further along I go with each birthday, I guarantee you're gonna be like, what I want is simpler and simpler and harder and harder to create, but oh, so worth it.

The inner and the outer piece, it's been over two years, I think, since Costello passed away. Still tears me up. I cried about him today. I cried about him today. It's proportional to the love. But yeah, I'll cry about it right now. It wasn't putting him down,

it wasn't the act of him dying, any of that. Actually, that was a beautiful experience. I didn't expect it to be, but it was in my place when I was living in Topanga during the pandemic where we launched the podcast, and I did it at home, and he hated the vets. I did it at home, and he gave out this huge right at the end. And I could just tell he had been in just not a lot pain, fortunately, but he had just been working so hard just to move at all. And the craziest thing happened. It was unbelievable. I've never had an experience like this. I expected my heart to break, and I've felt a broken heart before. I felt it, frankly, when my parents split. I felt it when Harry shot himself. I felt it when Barbara died, and felt it when Ben went. So as well. And so many friends, like way too many friends. I mean, the end of 2017, my friend Aaron King, Johnny Fair, John Eichelberry, Stomach Cancer, Suicide, Fentanyl. It's like, whoa, all in a freaking week. And I just remember thinking like, what the, but when it costs like, and you just heartbreak, and you just carry that, and it's like, but and that's just a short list, you know. And I don't say that for sob stories, just for a guy that wasn't in the military or didn't grow up in the inner city, like it's an unusual number of like deaths, like close people. When Costello went, the craziest thing happened. My heart warmed up, like heated up, and I wasn't on MDMA, and I wasn't, I was just, just the moment he went, he just went, whoosh. And I was like, what the hell is this? And it was just, it was like a supernatural experience to me. I just never had that. I put my grandfather in the ground. I was a pallbearer at the funeral. I've like done that more times than I'd like to have ever done it. And it just heated up with Costello. And I thought, what the fuck is this? And it was almost like, and you can make up these, we make up these stories about what it is, but it was almost like, he was like, all right, I have to be careful because I will cry here. And I don't want to. It was almost like he was like, all that effort because I put in putting so much effort into him. And I was like, all right, you get that back. It was like the giant friggin thank you. And it was incredible. And I'm not embarrassed to shed a tear or two about it if I have to. I was like, holy shit, that's how close I was to that end. Where do you think you can find that kind of love again? Man, I don't know. I mean, excuse me for welling up, but it was just, I mean, it's a friggin dog, right? I get it. But for me, it was the first real home I ever had. But when Costello went, it was like we'd had this home in Topanga, we'd set it up and we're like, and he was just so happy there. And I think it just, I don't know, it was like this weird like victory slash massive loss like we did in 11 years. We can did everything, everything to make him as comfortable as possible. And he was super loval, beautiful animal, but also just funny and fun. And I was like, I did it. Like, I gave as much of myself to this being as a human I felt I could without making it like detracting from the rest of my life. And so I don't know. When I think about Barbara especially, I well up and it's hard for me, but I mean, I talked to her before she died and that was a brutal conversation saying goodbye to someone, especially with kids and that was hard. I think that really flipped a switch in me where I'm like, I always knew I wanted kids. I'd say, I want kids, I want a lot of kids, that flipped a switch in me. I was like, I want kids. I want my own kids. You might be able to find that kind of love. Yeah, I think it because it was the care taking. It wasn't about what he gave me all that time. And the more I could take care of him and see him happy, the better I felt. It was crazy. And I don't know. So I miss him every day, every day.

I miss him every day. You're, you got a heart that's so full of love. I can't wait for you to have kids, for you to be a father. Yeah, well, when I'm ready for it, when, you know, when God decides I'm ready, I'll have him. And then I will still beat you to it, as I told you many times before. I think you should absolutely have kids. I mean, look at the people in our life because we're kind of the, in case you haven't realized it already, like we're the younger of the podcasters. But, you know, like Joe and Peter and Segura and, you know, and the rest, right? They're like the tribal elders, right? And we're, you know, we're not the youngest in the crew, but we're, if you look at all those guys, they all have kids. They all adore their kids. And their kids bring tremendous meaning to their life. Like we'd be, we'd be morons if, you know, if you didn't go off and start a family, I didn't start off, start a family. And yeah, I think that's, that's the goal. I mean, I think of the goals, that's one of them. The kids not only make them, their life more joyful and brings love to their life. It's also makes them more productive, makes them better people, all that. It's kind of obvious. Yeah. I think that's what Costello wanted. I think I have this story in my head that he was just like, okay, like, take this. Like, yeah. Yeah. And don't fuck this up. And Lord knows, don't fuck this up. Andrew, I love you, brother. This is incredible. I love you too. Thank you. I appreciate you. Let's, we will talk often on each other's podcasts for many years to come. Yes. Many, many years to come. Thank you. Thanks for, for having me on here. And there are no words for how much I appreciate your example and your friendship. So love you, brother. Love you too. Thanks for listening to this conversation with Andrew Hueberman. To support this podcast, please check out our sponsors in the description. And now let me leave you with some words from Albert Camus. In the midst of winter, I found there was within me an invincible summer. And that makes me happy for it says that no matter how hard the world pushes against me, within me, there's something stronger, something better, pushing right back. Thank you for listening and hope to see you next time.