

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

Hi, I'm Erica Ramirez, founder of Ili and host of What About Your Friends, a brand new show on the Ringer podcast network dedicated to the many lives of friendship and how it's portrayed in pop culture.

Every Wednesday on the Ringer Dish Feed, I'll be talking with my best friend, Stephen Othello, and your favorites from within the Ringer and beyond about friendships on TV, in movies, pop culture, and our real lives.

So join me every Wednesday on the Ringer Dish Feed where we try to answer the question, the LCS, back in the day, what about your friends?

Sometimes on this show, we talk about the news.

This episode is about the diametric opposite of the news.

It's about thinking deeply about human history, trying to see all 250,000 years of it in a glance, trying to appreciate the awesome length of time and the finitude of our own lives.

This episode is an interview with Tim Urban.

Tim is a blogger at the mind-expanding site Wait But Why and the author of a new book called What's Our Problem, a self-help book for societies.

If you don't know Tim and his work, I would sum up his thing this way.

Tim is an alien.

He has an incredible talent for seeing our world as if from the perspective of a goofy, but smart extraterrestrial who takes not the 30,000-foot view of life, but the 300,000-foot view of life and history and human nature.

In this show, we talk about, I don't even know, I don't know how to summarize the next hour for you.

We talk about the most important day in human civilization, the meaning of life, the book of time.

There is absolutely no way to sum up the next hour of talk, so I'm going to stop trying and just give you Tim.

I'm Derek Thompson, and this is Plain English.

Tim Urban, welcome to the podcast.

Thanks for having me on.

I am so excited to talk to you about this book.

I feel like I was vaguely and sometimes specifically aware of the book being in progress for many, many years, and the fact of its arrival really filled me with joy.

There is so much going on here, and we only have about an hour.

Let me start with what might be the most mind-expanding image in a book filled with mind-expanding images.

You have a draft at the beginning entitled, If Human History Were a 1000 Page Book.

Just tell me, what does the 1000-page history of humanity look like?

Yeah.

So I first would say, okay, well, how long is human history?

And that's kind of a, you know, it's not like there was a day when it started, but historians go back to, or evolutionary biologists go back to, you know, 250,000, 300, 200,000 years ago.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

So I said, okay, let's say let's go 250 as a rough number.

And then if we wrote down everything that happened between 250,000 years ago and today in the world of humans, and we made that into a 1000-page book, okay, so what every page would cover 250 years, or, you know, a quarter millennium, a long time.

But a thousand of those pages, so I was like, okay, so like what does that look like?

Like if you're reading that book, picturing an alien's, you know, anthropologist who studies cosmic, you know, cosmic anthropologist who is reading about primitive species out there and we are, we're definitely would qualify for primitive species for an alien who can read about other species.

And what would it be like to read this book?

And so, I mean, the answer is that it would be incredibly boring.

This would get like a one-star review on Amazon, on alien Amazon, because 950 of the thousand pages is almost nothing going on.

It is hunter-gatherers.

And of course, like some things happen, you know, humans migrate across continents, but that takes, you know, about 180 pages to get through one migrate, you know, and, you know, because you hear about migrations and you're like, oh yeah, humans like went across the Bering Strait and moved down from North America into South America, it's like, no, no, like human did that, humans probably for 10 generations stayed in the same spot and then got forced out by some, you know, some flood or some other tribe coming in.

So then they, you know, they migrated for 15 miles and found a new spot and that's where they live for a thousand years before they're in, you know, and before, you know, at some point just, you know, all, you know, by accident, you know, humans end up in all the different places.

So anyway, they'd be reading about that, they'd be reading about, okay, well, look, the species is maybe getting a little bit better, a little bit more clever with how to use a fire and maybe their language capabilities are getting a little bit better and maybe they're innovating on, you know, oh, look, this one tribe developed a better bow and arrow, but nothing's happening. So now you might get to like 95960, it's like basically the epilogue of the book, it would be like epilogue, colon, like civilization.

And so now you have like 40 pages of, and even that's pretty like generous because the first, you know, we're talking about now like 10, 12,000 years ago, there's not much going on in civilization for a while.

I mean, even like the really ancient Sumerians, they, you know, the, they first came down from that, you know, the mountains of what's modern day Turkey and Iran in like, like 6,500 BC.

I mean, so we're talking about, you know, that wasn't even till like, I don't know, the page 970, 975, and, and then writing starts around page 975, right?

And so when we talk about history, the definition of history is recorded history when we have writing.

And so these people, apparently there's like stories that, you know, there was a messenger, you know, if I'm the king needed to go and, and, and, and take a bunch of the king's orders and bring them somewhere, but he couldn't keep it all on his head.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

So he kind of like, you know, made markings on a, on a clay tablet.
And this is the beginning of writing, you know, things like this.
And they started making really basic writing.
And so that's the, the, the boundary between prehistory and history.
So anyway, so I'm looking at this 1000 page book and we get to page 975 and everything we call history happens after that.
And things like Buddha, which we think of this so long ago, that's like page 989.
We get to a, you know, Christianity starts at page like 993, you know, so the, you know, what, so what's interesting, I think this is just kind of interesting in general, but the thing that stuck out at me, that the reason I put it in the intro to my book, which is about society.
I mean, it's a, why is that in the intro of the book?
Because you, when you look at it this way, you realize it emphasizes this point that it seems kind of naive of, for humans to think that they are special, right?
You know, any generation thinks they're special.
So many different generations have thought these were the end of days.
These are the, you know, these, you know, this is the climax of the big movie.
And most times it wasn't, right?
But if you look at page 1000, which is, you know, in this, in this metaphor, I mean, we with the page 1000 is the page that ends with today.
So that's goes from like the early 1770s to today.
That is nothing like any other page.
It is, it is completely an anomaly in the book.
If you're reading, if you're this alien, this suddenly got incredibly interesting in the last like 10 pages, but especially on this page.
The alien is thinking, you know, okay, shit is going down suddenly out of nowhere.
Like every page is advancing in this crazy way and meet the page 1000.
And suddenly it looks nothing like the other pages.
And that should be this moment when you override this instinct to think, oh, it's naive.
Actually there's the instinct that your every generation thinks they're so important.
Then there's the thing that overrides that would think, no, no, no, that's naive because every generation thinks that.
And then I think this 1000 page book should override that.
And have you say, actually, no, this really is different and special.
You touched on the two implications that I found most important in this graph.
But before I get those implications specifically, you name the last 10 pages after a super famous person who lived on that page for reference.
So the last 10 pages of the book go Buddha, Aristotle, Cleopatra, Jesus, Constantine, Muhammad, Charlemagne, Genghis Khan, Joan of Arc, Shakespeare, and then it gets the last page.
And the last page of the book is, as every other page is, 250 years.
That is 1773 to 2023.
That's the last page of the book.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

Who do you think was the most influential person on that last page?

And I want to give you a few options.

Yeah.

James Y, inventor of the steam engine, which some people consider the machine that gave rise to the Industrial Revolution, this moment of exponential growth that you've alluded to.

Queen Victoria, George Washington, Karl Marx, Abraham Lincoln, Vladimir Lenin, Henry Ford, Adolf Hitler, Mao, Gandhi.

Do you have a confident vote about who the most important person on the last page of the book of human history might be?

Great question.

So my first instinct based on what you just said would be someone like James Watt, because if you think about all the other people you're talking about, their accomplishments and their impact all happened in the context of the suddenly industrialized world.

The suddenly industrialized world gave birth to all kinds of these powerful, basically we started to be able to do magic, electricity.

The power turned on for the first time, transportation, mass production, and vast improvements in prosperity and wealth and also vast improvements in scary things like weapons.

So to me, even Hitler, who big deal, basically this guy single-handedly started World War II.

There was a lot of context around that, but it's not one of those things that, oh, World War II was inevitable.

It's kind of like this dude made it happen.

So that's a pretty big impact.

But it's still, to me, is the World War II was such a big deal because it was an industrialized world.

So World War I and II are the scary product of what happens when the industrial world goes to war, which is very different than when the previous worlds were on all the other pages.

It's very different than were on the last page because of the industrial revolution.

Now the question is, if James Watt was suddenly, if you went back in time and plucked him as a baby and threw him off a cliff, now you come back to here, is suddenly we're living in the non-industrialized world?

We're still kind of, probably not, right?

So you could also say, well, he happened to be the one that gets credit for that invention, but someone was going to invent it anyway.

Yeah.

There's a concept in sports called VORP, V-O-R-P, Value Over Replacement Player, right?

And so James Watt, if you take him out of history, throw that unfortunate baby off a cliff, Thomas Newcombe was already inventing this dimension, you could say.

I think it's really interesting to think about, and this graph, I had so many daydreams just staring at this graph, and one of the many daydreams I fell into was about this concept of historical contingency.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

I think if Genghis Khan had died as a baby, the world would be different.

I truly think that Genghis Khan, he was a horrific human being, but from the standpoint of great man of history theories, of an individual being a lever on world history, Genghis Khan, as I understand it, and I've read some books and listened to some podcasts about ancient Mongol history, seems like a truly rare individual whose ability to unify tribes was unlike anything else that had existed in that particular part of the world, and it changed the course of history.

It's also the breadth of Genghis.

He changed not just Asia dramatically, and of course, changed the course of China, Chinese history, but he changed the Middle East, completely altered the course of history, and he changed the European history.

I mean, so if you can alter all three of those in the 1200s, yeah.

There was a great, the Atlantic once did a feature on the last page, literally the last page of the Atlantic used to be a question of, it was called The Big Question.

We would ask people a bunch of big, thinky questions, and one of them was, what's the most important date in human history?

And the two best answers that historians gave, one person said, it's the day that the meteor smashed into the Yucatan Peninsula, because if it didn't, we might still be dinosaurs.

And number two, the day that Ogadai Khan, I believe that was grandson of Genghis Khan, the day that he died, a Mongol general was about to invade and sack Vienna, and instead of invading and sacking Vienna, he had to turn back and go back to Ulaanbaatar, whatever the capital of the Mongol emperor was at the time, and have a meeting about who the next leader of the Mongol empire would be.

And if that death didn't happen, I think it happened that he was an alcoholic or something.

If Ogadai Khan hadn't been an alcoholic, Mongols might have spread into Europe, and truly the entire course of Western history might have been different.

So to connect it back to the last page question, who's the most important person in the last page, it got me thinking about historical contingency, about like, was George Washington such a good general that without George Washington, there might not be United States of America? Because Hitler's such a terrible person that without Hitler, there might not have been a World War II.

And I feel like technology, as important as it is, is also contingent.

There's a lot of simultaneous invention, like the telephone was invented by two people in the same day, the telegraph the same, the steam engine was being worked on by a lot of people at the same time.

But I wonder whether the truly historically contingent events have to do with war and unfortunately death more than they have to do with technology.

I think there's war and death, and literally like whoever has the more powerful weapons in the year 300 changes the course of everything.

But also, I would also argue like mind viruses, things that convince people for 18 centuries of a certain worldview, and that affects their behavior and affects how they organize and affects what they value.

So some candidates here would be, obviously you could say Jesus, but also Constantine

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

is maybe the one that gave Christianity its long life by anointing it the official religion of the Roman Empire.

You could also say that the people, because I'm not a religious, I think people wrote the Bible, I think humans wrote the Quran.

The people that the person who puts a certain clause or a certain value into writes that into one of those books, that is the impact of that person just deciding to do that.

So that's a big one, Muhammad himself, I mean, he was a general, in addition to being this religious leader, he was a great general who was able to conquer and convince a lot of people that dying for his cause was going to send them to heaven, which is a great way to conquer, he conquered a huge part of the normal world or his followers.

So I think some of the, think about, the main religions in the world today are so old.

So you go back to back then and it'll change a little thing about that.

And I think if you took, it seems like there might have been a time when the world or that the Middle East was prone to maybe someone who came along with an update to Christianity, but if it weren't for this one guy, it might have been a totally different kind of update.

That's just like all the implications there.

And that might lead someone to say, it's Karl Marx or it's Vladimir Lenin or even it's Adam Smith, right, someone who's writing in the last 250 years was mind virus-y enough or there's actually two categories here.

There's the writer and there's the advocate, right?

So Marx is the writer, Lenin is the advocate.

You could argue maybe.

Jesus versus the apostles.

Exactly.

Exactly.

And so there's, there's extraordinary contingency in the sort of writer-advocate du umphret here in terms of changing, doing a real hard fork on history.

Can I give one more fun, fun possibility for this page for the last 250 years?

And this is, you know, this is what Dan Carlin opens his World War I series with is the concept that Gavrillo Princip was the most important person because, you know, he is, it's, because, you know, with, there's obviously a couple theories about World War I. One is that the, you know, there were all these tensions and this wasn't going to happen anyway.

You know, Franz Ferdinand was, that was, was the match that lit it, but there was a lot of tinder and something was going to light it.

But I mean, Dan Carlin believes in a lot of other people that actually it didn't have to, things could have simmered over time and maybe it wouldn't have, and actually it really needed a specific kind of thing to happen.

And the cool thing about this story of Franz Ferdinand is that it wasn't inevitable.

He actually escaped the assassination attempt and his driver, you know, was taking him to I think the embassy and made a wrong turn and was backing up the car and happened to one of the assassins, Gavrillo Princip, happened to be standing there, kind of already, you know, resigned to having failed and said, you know, boom, shot him.

And so the reason that's so important is not just World War I was obviously, you know,

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

it's stoked this massive thing, but the entire, all the borders of the Middle East and many of the borders of other places, you know, the Ottoman Empire was, that was shaped into all these modern nations, Iraq and Syria and all these, these were created as a result of World War I. World War II was kind of the Empire Strikes Back, right, was kind of the part two of this, of one big war.

So in thinking about all the implications of World War II, if you imagine if you don't have the Holocaust, how different the world is with all of these, you know, just all of these Jews and their ancestors there, you know, and their descendants around, all the impact they would have made and things like al-Qaeda, it probably doesn't ever even happen if it's not for the Ottoman Empire getting divided in a certain way by France and England after World War I, probably all the communist revolutions, you know, you talk about Lenin, would Lenin have had a chance to make that kind of impact if it weren't for World War I, right?

And that's when, you know, Israel, the creation of Israel was so many things that I picked. So I love that just because it's this crazy thing where you, if you could go and stand in that corner and witness this and understand how it was going to, I think that if people in a thousand years might look back on today, because it's hard to see when you're in it, as still today is World War I aftermath.

We're still living maybe in World War I aftermath, the whole Cold War is part of World War I aftermath.

And so I think that's another fun candidate.

It's interesting to think about sort of a photo negative history of the world that's just a history of losers who changed the course of history.

So Gavrila Prinsip is the loser who changed the world, who we know a lot about, because we always know the names of political assassins, but we don't know the name of the loser general who lost to Muhammad in a war or battle that changed the fate of Islam.

We don't know the name of the general or the name of the politician who failed to arrest the career rise of Constantine and thereby his failure allowed for the flourishing of Christianity and the Holy Roman Empire.

There's probably a book to be written about the losers of history and how many people tried to thwart Caesar along the way, right?

How many people tried to assassinate Hitler and couldn't pull it off, right?

The loser generals of Gaul who failed to kill Caesar, right, before he crossed the Rubicon.

Yeah, there's got to be.

How about the fact that Genghis Khan, back to him for a second, he grew up as a dirt poor, he was a slave for a while of another tribe in Mongolia, in the outer reaches of the world.

He is a, from a hurting society and the amount of people that along his rise, just right, just forget the rest of the world, just consolidating Mongolia.

Imagine how many people tried to kill him along the way and how many battles, maybe, maybe someone threw a spear or shot an arrow and it went right over his shoulder and that person had had a little bit better aim in that moment.

We were living in a, well, all of our borders are different today, so yeah, which is why,

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

by the way, if you went back in a time machine and you were like, you know, back to the future style and you didn't want to mess with your own ability to be born, you couldn't touch anything.

The farther you go back, especially, the farther you go, by the way, while we're here, I mean, if you really want to get weird about it, all of us are descended from a common, you know, human ancestor, if you go way, way, way, way, way back, eventually there's some human mother who birthed the common ancestor of all people.

So she's the common ancestor as well.

And if you keep going back, you get to like a certain, certain ape that is the, are all of our lineage.

If you keep going back, this gets crazy.

You get to a lizard, a rodent, then a lizard, then a fish, like literally, if you go back of that fish, we're really off topic now, but if that fish, if that fish gets eaten in the year, I don't know, 300, you know, or I guess it would be, yeah, like 400 million BC, that fish gets eaten and maybe just barely, barely dodges that the genes that we're going to turn into the current modern evolutionary world disappear and there's all different creatures on the planet.

So yeah, I could do this forever.

I mean, it's just, but it also, by the way, I like this because it makes me feel, it's a good way to feel important because if you went in the past, you wouldn't want to touch anything because it's going to change the whole future, right?

Well, the same thing could apply.

If you're someone from 300 years from now, came back to 2023, they would be like, don't touch anything.

And meanwhile, we're touching stuff all the time in 2023, which means the things we do genuinely change the year 2,500 immensely.

So what you do matters.

It's kind of fun.

I want to go back to the book and not just your book, but the 1,000 page book of human history because there's two implications here that I find really, really fun and actually important to think about.

You look at the book and the way that you color code it shows so clearly that the vast majority of the book of humanity is hunter-gatherers.

And I was staring at this image and I had a thought that these ancestors probably shared almost all of our inner emotional experiences and almost none of our outer sensory experiences.

That is, they must have had hunger, thirst, love, hate, jealousy, satisfaction.

They probably had anxiety's dreams, like the dream that people can't stop having where they arrived to class in the last day and they haven't prepared for the test.

The details of that dream are incredibly page 1,000-D, but the emotional roots of that dream, that fear of being unprepared, that fear of anxiety, shame, that has to be 100,000 years old.

But then you think about the outer sensory experience, they didn't have phones, they didn't have HVACs, they didn't have the indoors, they didn't even have doors.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

Even when we're outside, you and I are typically wrapped in clothes that are so sophisticated that we couldn't make them ourselves if we had 50 years to try.

So modern life is this extremely new outer sensory experience being fed into this super ancient machine for processing all these experiences.

And that palimpsest, that overlay, was made so clearly in this book.

Yeah, I always think about that, like, first of all, no one thinks they're in the past.

So if you go back to, again, the 1,000-page book, go back to page 523, which is like, I don't know, 180,000 years ago, whatever.

And even if you want to go back a little less to make sure we're past kind of like the cognitive changes, like get to really, for sure, kind of modern humans, so go back 30,000 years.

30,000 years, you know, people are looking at the blue sky and it's raining and they're getting wet and they feel uncomfortable and they get under something and they dry off and they feel better.

And then they cuddle with someone and they get oxytocin going through their thing.

And then they, you know, they say they missed them when they were gone the last few days.

So that person's having a full human experience in the same world.

And it's the same primate, like if you raise that baby today, they'd be a pretty normal human.

I don't think there's that many chance.

I don't know if they, you know, some people think they would be, you know, you think maybe they'd be a little less intelligent, but some people think they'd be, actually, those people were more intelligent if you go back a while because they had to be more intelligent to survive in the hunter-gatherer world.

But either way, I think it's just crazy that the same baby, you know, a newborn today, like it doesn't know if it's in 30,000 BC or today, but the person is wired the same way, like you said.

And the thing that boggles me is that the much more normal human experience, again, on top of all of those common human experiences, it still feels really good to eat when you're hungry, satiated, and sex is the same concept, and hierarchy, feeling excluded, and feeling, you know, wanting status, right, and feeling jealous, and, you know, and raising your arms up like people do in sports stadiums now, well, people were doing that when they conquered tribe or took down a mammoth.

So if you, but on top of all that, what one of the major differences like you're talking about is what they knew about reality.

So we, like, we look up at the stars and we take it for granted that we know that those are giant, soft suns really far away, and we know about the universe, and we know about how, you know, microbes work, and we know about how, you know, you know, just all the different parts of our body.

You go back only a couple of thousand years, Aristotle thought that the brain was like like useless head stuffing, and that the intelligence lay in the heart.

I mean, the, the app, like the lack of knowledge of these people, they were in a world that felt like a magical movie probably, and they thought that the mountain is cursing them or the omen in the sky, the comet has, imagine what that, for the same kind of primate that

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

we are, imagine what it would feel like to know so little, and to, and to instead, they didn't know they knew little, they thought that they had the answers probably through their myths and their other things.

The amount of different worldviews that have happened, you know, and just, you know, totally different outlook on everything they see, depending on the, the myth, the mythology of their time, just boggles me in that the fact that we're born today, and we just take it for granted that thousands of years of actual hypotheses and, and, and being proven and theory, scientific theories building upon each other and discoveries has us.

Now how about, look at old world maps.

I mean, forget, again, forget 30,000 years ago, and they probably thought that there, this was this little flat plane of land was, that was the whole thing.

Go back 700, 800 years, and they have this completely incorrect misconception of the world map.

People that, you know, Columbus thought that they didn't know that there was the Americas. That's so disorienting.

Imagine just knowing that, oh, in the far distance, we talk about the Mongols like, oh, the barbarians out in like the far, far, far lands away, and not knowing what that meant or how far they went or how far the ocean went.

So yeah, again, it's just like, it's crazy to me that it's, the anomaly is us who actually are pretty oriented.

Now, meanwhile, we feel the same way about the universe that a lot of them felt about the far lands of their, the far depths of the ocean, and that we don't know if there's a multiverse.

We don't know what the hell is going on there.

And we don't know about the Fermi Paradox.

We don't even know if we're alone or not in the universe.

You know, a thousand years from now, they're probably going to not understand that stuff way better.

And they'll see crazy that to them that these, that we didn't know if they were aliens other than us, but they didn't know if there was a multiverse or what the universe shape was or anything like that.

We're in the middle of it still.

The second implication that I thought was fascinating is that the story of humanity is so hyper exponential that if you stole the story, not as a thousand page book, but rather as a sort of thousand data point graph, 900 of those dots would be on a relatively flat line and then things would just zoom up around page 960, 970, 975.

And you have one chart in the book that you call fact one.

And fact one is this idea that growth is exponential and page 1000 is just so utterly different than pages one through 999.

Walk me through this chart because there's a couple of implications here that I think are worth spilling out.

Yeah.

But so that's like, I think the natural thing that follows from thinking about human history

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

is the thousand page book is to, is to, if you compare page 1000 to page 999 or any page before it, you realize that almost everything we think of as modern civilization is an anomaly of page 1000.

So population, right?

All it takes is just thinking about population to realize that we live in a very special, very anomalous time.

For 999 pages, there is under a billion people on earth.

In fact, most of them, there were way under a billion people.

We then on this final page of the book, we cross the 1, 2, 3, 4, 5, 6, 7, and now 8 billion person marks.

So like something's up, right?

Like if you're, again, if you're an alien reading this species and you're really reading, you've gotten through 999 pages and then suddenly you see the population multiply by 8 on this one page.

Something's about to happen, right?

Like, oh God, where is this heading?

I think about transportation.

I mean, everything we consider modern transportation trains, cars, airplanes, spaceships, but even the most basic kind of steamships and trains, this is page 1000 stuff.

Every page before that, you have horses and other kind of animals and you've got sailboats and rafts and canoes and running and walking.

And communication.

So these are the most basic things about life, right?

How you get around, how you communicate, communication, there was nothing besides basically writing letters.

And that was a pretty new thing, you know, the letters writing it all.

I mean, even that is, again, that's the kind of last 30, 40 pages.

When you go back further, you don't even have that.

But letters themselves, I mean, that was it for George Washington.

He wants to do long distance communication.

He's got to write a letter, right?

That's it.

We have newspapers, radio, TV, websites, YouTube, podcasts, social media.

I mean, the entire fossil fuels industry, thinking about energy, all the fossil, I mean, yes, there were burning coal in like small amounts, the actual fossil fuels era.

That's an entirely page 1000 phenomenon.

The electricity.

When New York experience is a power outage, everyone panics and it's like the whole, and if the world's power went out, we'd basically be set back to the Stone Age.

Everything would be, we wouldn't know what to do, right?

Even if just the internet went out, it would be a total disaster.

But imagine all the power goes out.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

No one before page 1000 ever had the power on.

Again, George Washington hit the power was always out in his life.

He never once experienced anything besides a power outage.

So you can keep going weapons, you know, the machine guns, tanks, missiles, torpedoes, nuclear drones, biological chemical weapons, these are all page 1000 only computers, right? How about the fact that one of the biggest ones that all there was was human intelligence until the end of page 1000 and the last few lines of page 1000, artificial intelligence starts like that's an absolutely seismic shift.

That is one of the biggest paradigm shift is you can have again, so you can just name a thing and it is nothing like the other pages on page 1000.

And so this, of course, the reason this is important is if we are actually living in an anomaly, maybe this really is the climax of the movie.

Maybe we're not being naive and arrogant to think that we are actually living in either the beginning or the middle or hopefully not the end of the climax of this epic 250,000 year movie and where are we headed now?

We are turning the page to page 1001, right, which is going to go for that.

And we're about to all live on page 1001 and like, if page 1000 was such an anomaly, wouldn't page 1001 be even more of a crazy anomaly, wouldn't it make, wouldn't it put page 1000 to shame as far as crazy exponential magic?

And then what do you do with that?

I want to add some texture to the idea that we should expect page 1001 to be even crazier than page 1000.

You mentioned a really interesting framework for technology in a podcast interview that you did with Lex Friedman.

You said that technology today gives us a greater lever for doing good and it gives us a greater lever for doing bad.

And I think that is a seemingly obvious but surprisingly nuanced way to think about what technology does.

It not that it points us inevitably in any direction, but it raises the magnitude of the vector, the magnitude of the vector is higher in all directions.

Yeah.

I mean, it just, it just means that, because it really is, I mean, I look at the 20th century, it was the best and in some ways, other ways, the worst century ever.

And that's not a coincidence.

It was the best by lots of prosperity means, GDP per capita, life expectancy, you know, just medicine and health and poverty, disease, right?

It was the best century ever.

It also introduced, it was, it was the, by far the scariest century ever in terms of existential risk.

So you have climate change, there's no way humans of previous centuries or previous pages in this book had any kind, even if they wanted to, they don't have the power to change the climate.

They're way smaller than that.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

They're just an animal on earth.

20th century people actually could, they can mess with the climate.

They can invent, like I said, nuclear weapons, they can invent something where the wrong people in power with those weapons can set us back to the Stone Age.

There was nothing anyone in the year 1700 could do to set humans back to the Stone Age.

There was the biggest genocides in history, you know, there was nothing on the scale of the Holocaust, at least not in the short amount of time in the systematic way before that.

You know, there are obviously lots of people died in other times, but like the bad things on page, on the 20th century were really bad, really, really, really bad.

And so again, apply that forward.

And what you have is like a 20th, a 20, you know, I always think about how today would seem like utopia to people of the past.

They'd come here and they just would be so mind blown by the magical world here and all the incredible things.

And you know, they go to the grocery store and they see all the different kinds of fresh food from all over the world ready.

I mean, it would just seem, you know, the medicine and the life expectancy and cars and communication

and the internet, they would just be like, this is, this is a magical fantasy one.

And I think that there's no reason this is the end of that trend, the 20, 2100, 20, maybe 2050.

I think if you could just go in a time machine and just get out there, you probably would feel like you're living in a magical utopia, perhaps, because of the magical things that technology is going to continue offering.

Maybe get out in the year 2100 and you say, oh my God, there's no such thing as poverty.

Climate change totally figured out.

We can control the climate with a snap of our fingers.

There's no disease, you know, we, you know, cancer are long gone.

And not just that, by the way, we figured out how to preserve human bodies and back up your consciousness.

And there's no such thing as involuntary death.

People die now when they want to.

You might say, this is utopia, right?

Like, this is the best thing I could possibly imagine.

Okay.

On the other hand, if the existential risks are exploding too, you get to the 20 page 2001, and at some point you're going to hit the kind of power in our hands that bad people or people with bad intentions or just people with, you know, like, you know, with bad incentives can truly like, again, if the Holocaust is the biggest genocide or you've got, if you've got nuclear weapons or maybe the biggest existential threat or the ones in the future, at some point you hit one that actually doesn't just kill 6 million people or 20 million people, but actually just killed everybody, right?

Or enough that sets us truly back to the Stone Age.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

It doesn't take, you know, there's a great book, Station 11, about, you know, it's a fiction book about, you know, potential pandemic that, and she makes the point in the book, the author, that you don't need to have nuclear war, all you need is something where people stop going to work.

If people stop going to work, the entire civilization evaporates and we're back in the Stone Age and we're back in the raw state of nature where there's warlords and there's no one to protect you and the most powerful, most ruthless, vicious people probably end up in power and no one is safe, right?

And that's all, people stop going to work and everything goes, the power goes out.

All the grocery stores disappear, right?

All the lines of delivery and communication, all of that industry, all of this stuff.

It's so interconnected and actually fragile and it relies on things being pretty good.

If people stop going to work, that all falls apart.

So, you know, what needs to happen?

Some kind of awful biological weapon.

Suddenly everyone stops going to work and suddenly everything starts falling apart and chaos reigns and all the rules of civility go out the window and people start hoarding and taking things and murdering you for your resources because they have to protect their family and the whole thing goes, that could happen to us.

And so, the stakes, all I can say when I look at that future is I say the stakes are really, really, really high because if we do it right, we could be in something that would seem like a utopia to us and if we get it wrong, if we're not wise enough to figure out how to do it safely, it can go the other direction and the problem is that the bad gets bad enough.

It doesn't matter how good the good is, if we're extinct, that's the end, right?

There's a tripwire down there.

If we hit it, the whole thing's over.

So, yeah.

That Lenin said every society is three meals away from chaos and that seems very close to what you're pointing out, that you can have a world that is getting better along most material fronts at the same time that the risk of existential disaster is also rising.

And so, progress can exist in sort of one plane while a shadow ledger can find that the risks are getting higher, higher, higher, higher.

It's a little bit like, I mean, a bank just collapsed last week.

So it's a little bit like if you're a bank and your stock value is going up, but your unrealized losses are also going up and you are just 48 hours away from a bank run that destroys your business even as your stock price might be near and all time high.

Tim, this is a book about thinking and you have a lot of reverence for thinking like a scientist.

You quote Carl Sagan who said, science is a way of thinking much more than it is a body of knowledge.

What do you think that means and how would you evaluate society's ability to think scientifically today?

Yeah.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

I think, right, I'm not talking about when I say thinking like a scientist, I'm not talking about like actual career scientists who sometimes think like a scientist and sometimes they think like zealots and, you know, whatever.

Yeah, I'm talking about, I mean, it's just one of the great insights of the last 500 years is that there is a method that flawed human brains working together can use that can basically allow a bunch of individual, not that smart people, because none of us are that smart, allow a bunch of flawed people to kind of connect their brains like neurons in a larger super brain and discover everything as if we are way smarter species than we actually are.

I mean, the way that happens is this really controlled system of the scientific method, right, you know, hypotheses and then, you know, lots of people trying to disprove them and the best theories, the soundest ones rise to the top and then people can build upon those and disprove them and one person in the 1950s can build upon something that someone in the 1780s came up with and they had built upon something that someone in the 1560s had come up with and it could happen worldwide.

Someone in Japan can work on something that someone in Namibia was working on and then someone in New York can improve upon that, whatever.

It's this incredible thing and it allows for collective intelligence and so the question is what are the things that enhance that ability or actually diminish it?

And I think one of the big enemies of this method and this kind of storyline of humans getting better and better at this is orthodoxy, you know, or orthodoxy is the opposite.

You know, science says is inherently humble.

It says everything could be wrong and changing your mind about things as progress and disagreement

is the engine of progress, right, and trying to disprove each other.

Christy is the opposite and says something like these are the correct ideas and anyone who, you know, disagreement is not okay and anyone who disagrees with these ideas is going to be punished because these are the sacred ideas and actually anyone who tries to disprove them is a bad person, right?

It's the exact opposite of what Carl Sagan described as the scientific way of thinking and whether it's because of the changes in the media landscape or just, you know, who knows, there's a lot of different things that I talk about potentially in the book as ways there seems to be a rise in orthodoxy or a rise in, you know, there's always groups who want to impose orthodoxy upon the rest of society.

And it seems like that is going in the wrong direction that those groups are getting more power and that as a society we are becoming less collectively intelligent, which is going back to the other topic, really bad timing because we want to have our wits about us.

The best we can do if we're going into a future with higher and higher stakes is enhance our collective intelligence, you know, really collaborate, put our minds together.

And the worst thing we can do is be going in the other direction where that collective intelligence kind of evaporates in the face of scary orthodoxy from different groups.

And so, yeah, I think that that's why, you know, when we talk about a culture of free speech and keeping discourse open, it's not just a nice thing.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

It is actually the way we can save ourselves going into the future.

I'm not a hundred percent sure that I agree that our collective intelligence has gotten significantly worse in part because I don't know that I can point to any decade in history or certainly any page from the Thousand Page Book of Humanity where I would say that is a golden age of collective intelligence.

I think collective intelligence is naturally sensitive to idiocy because we've spent so much of the history of humanity thinking as families, as tribes.

I want to read a footnote from your book that connects back to this, I think.

You reference a 2016 study that presented people with arguments that contradicted their strongly held political and non-political views.

And it found that not only were participants unlikely to change their political beliefs, but fMRI data actually revealed that people processed challenges to political beliefs with a different part of their brains than they used to process non-political contradictions.

And I read that and I was like, why does politics make us so stupid?

And then I went back to the first page of the book.

I went back to the first graph, the Thousand Page History.

It's like we survived as families.

We made it to page 990, to page 999 as groups of families, as clans in what was an inherently violent and mostly zero-sum world.

Again, the world only became non-zero-sum from an economic standpoint, like three-quarters of a page ago when it comes to the Industrial Revolution.

And it seems to me that, tell me if you disagree with this, scientific thinking is profoundly anti-tribal.

It is a faith in the idea that truth isn't zero-sum, it is collective intelligence.

What is true for me about the effect of a molecule on my body is, therefore, true for you, assuming we have these similar bodies.

And so I thought that there was really a lovely marriage of these two ideas, again, the deep history of humanity and the fact that scientific thinking asks us, in fact demands to a certain extent, that we shuck off many, if not all, of the instincts that the first 999 pages left us with.

Yeah.

I think that's definitely right.

Politics.

Anything that was important to people on the first 990 pages is going to light up a very primitive part of our brains that might not be the wisest part.

So sometimes religion thoughts about the supernatural.

And politics, politics meant life and death for most people, and it still does for some people, but for way fewer, but our brains don't know that.

The dumb parts of our brains have not figured that out.

People get really tribal about nutrition, right?

If I write something about how, oh, this is healthy, I'm going to get a lot of shit on Twitter for that.

And that's because nutrition mattered for life and death back then.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

So yeah, politics is one of these.

And when that part of our brain lights up, those parts, they know the default mode network and the amygdala and a lot of the limbic system is what lights up when people have their political views challenged.

When that's happening, reason goes out the window.

The scientific method goes out the window and we end up with dueling orthodoxies and people getting really in a lot of taboo and a lot of people getting really scared to say the wrong thing.

And so we lose all that ability for collective intelligence.

One easy example is one of the biggest threats, existential threats, I think, is biological weapons, right?

What if someone unleashed intentionally a COVID type thing that was 100 times more deadly?

I think that might set us back to the Stone Age, maybe, right?

You never know.

Now, right now, we should be having such vigorous, open debates about things like the lab leak hypothesis and about what is the US's role and how are we working with other countries to manufacture and to work on virology and epidemiology and what's going on here.

But look what happened, because it's gotten political, and this shouldn't even be political, but everything right now in the US gets political because of this orthodoxy kind of rise of orthodoxy that we're living in.

Because of that, I wouldn't want to go and write, I mean, I probably would, but it's not a pleasant thing to go tweet about this stuff because you're going to get a lot of people telling, basically, trying to punish you for talking about this openly.

People who disagree with you will try to say, this person shouldn't be trusted anymore, don't listen to them.

They'll try to hurt your reputation.

That's when orthodoxy has conquered this.

So now, this existential risk, the thing that we should be talking about, virology, what's the deal with it?

We can't have those intelligent discussions.

We don't have our wits about us on this topic because group intelligence can't happen because people are scared to talk because of a lot of very intense political orthodoxy.

So this is what's scary is so many of the most important topics get quickly swallowed up by this whirlpool of political tribalism right now.

And I think that has really bad implications.

As I was finishing the book, I was thinking about some of the other graphics that you've made that have this sort of aliens-eye view of life.

And it made me think, what if life were the thousand-page book?

And for Americans who live to retirement, the average age for men is about 83.

So for those individuals, every month is almost exactly one-one-thousandth of their life.

So life for someone who lives to 83 years old is 1,000 months.

I am on page 442 right now.

And I was thinking about major moments in my life.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

I met my best friend on page 65.

I met my wife on page 353.

I lost my dad on page 356.

It is usefully disorienting to apply this thousand-page template to one's own life.

And I just wonder, because you have this really extraordinary ability to essentially visit the exosphere in your mind and look down onto human relations as if we're another species.

And how does this usefully disorient you to think about your life in this same kind of one-thousand-page template?

Yeah.

I mean, it is a really interesting way to think about it.

I think it can do two things.

One, it can remind you that life is short, that we do not have this endless book of pages.

Actually, there's a few thousand weeks.

And many of us, most of us have used at least 1,000 or 2,000 of those.

And so we're talking about, if you could turn those weeks into little marbles or peas, you could put them in a little bowl.

And that's it.

Each week, you take one of them.

So that's scary.

It can give us some urgency, and it can make us not want to waste time.

On the other hand, I think it's a reminder that the most incredible people in history, they only had that number, too.

And it's like, you can do a lot in that time.

That is enough time to change the world if you want to.

It's enough time to also completely evolve as a person.

I have this visual that I like to use where your life in the past is, if you could trace it back, it's like a single connect the dots today.

And you can think back to all the different routes you could have taken that would have led you to different places, all the regrets, all the roads not taken, and the opportunities missed along the way.

But I think then we think about the future, and we think, well, here's now I'm on this path.

This is where I am.

And actually, you have the same kind of spidering web of potential paths ahead of you that you had in the past.

And in 20 years, you look back to today and see all the things you could have done and all the different ways you could have gone.

It's just useful to remember that you have all that same agency that you always had, that you're not on a single life path.

You can use these weeks and take them in so many different directions.

So these are the kind of things I think about.

I mean, it can be both depressing, and it can also, I think, be really empowering.

But either way, it's more realistic.

[Transcript] Plain English with Derek Thompson / Tim Urban on Thinking Deeply About Human History and the Meaning of Life

You're looking at reality, as opposed to having the delusion that we have endless amounts of time and that you can't change anything, and that's not true.

And if you have that delusion, that's what leads to regrets, I think, more likely.

Tim Irvin, thank you very much.

All right, thanks.

Thank you for listening.

Playing English is produced by Devon Manzi.

If you like the show, please go to Apple Podcast or Spotify.

Give us a five-star rating.

Leave a review.

And don't forget to check out our TikTok at Plain English Underscore.

That's it at Plain English Underscore on TikTok.