The Great Simplification

PLEASE NOTE: This transcript has been auto-generated and has not been fully proofed by ISEOF. If you have any questions please reach out to us at info@thegreatsimplification.com.

[00:00:00] Daniel Schmachtenberger: It would be better if more people understood what is wrong with the progress narrative and understood what authentic progress actually entails and understood the caution and restraint that it requires, understood the emphasis on maintaining, understood that very often the best way to solve a problem is to remove its reversing some stuff rather than always create new stuff.

But the obviously market incentive is on create new stuff. The history books incentives on create new stuff. But as we think about how do we actually solve problems in a way that isn't a racket, right? That isn't solving a problem that was caused by the result of our previous problem solving. And that will in turn create more of that.

[00:00:46] Nate Hagens: Today, I am rejoined by Daniel Schmachtenberger, who is the The director of the Consilience Project and the co founder of Civilization Research Institute, where he and his colleagues have just written a new paper called Development in Progress, which is the topic of this long awaited Horizontally and vertically deep conversation with Daniel.

We talk about what is progress, the history of progress, who gets to write the progress narrative and whether progress itself actually means betterment for society, for the wellbeing of the human species and the natural world. You might not be surprised to hear that this episode raised more questions than answers.

And in fact, I didn't even get to my questions because we were unpacking his paper. Those are going to have to be discussed in a follow up conversation. I think we have to understand the problems, the generator functions, the dynamics, and start asking questions about where do we want to go? And how do we get there from here?

And I think these conversations with people like Daniel at least start to define the parameters of the conversation and where we need to go. Please welcome Daniel

Schmachtenberger. Daniel Schmachtenberger. Welcome back. Good to see you, my friend. Good to see you. Holy crap. You look different. One part.

Gandalf, one part Zeus, one part surfer dude.

[00:02:24] Daniel Schmachtenberger: You didn't mention Appalachia mountain guy. Oh, yeah. Just stopped cutting it when I moved to the mountains out here. All right. Well, you look, you look happy and healthy. I am happy. It's, the sun just came out. Like just a minute ago from where it was raining and storming.

And there's a huge rainbow over the mountains right out my window, right. As we're starting to talk.

[00:02:49] Nate Hagens: Wow. Yeah. The last podcast we did, we had a background of just bright, verdant green outside your window. And I know you have a new setup there, so we can't see it. Okay. Welcome back. We believe it or not, it was a year ago.

That we had our last podcast, which was on artificial intelligence and the superorganism. And, and this is kind of the first followup to that conversation. One of the core themes we talked about before we got to AI itself was the delineation between narrow boundary goals and wide boundary and wisdom.

And, and that brought you to talk about what you called then naive progress. versus real progress. And you have now written a paper which I've read on this concept. You're now referring to it as immature versus authentic progress. And that is going to be the theme of today's conversation. How would you like to start?

I played a role

[00:03:55] Daniel Schmachtenberger: in writing this paper is a our team wrote it. So multi authored. Yeah, the relationship between what progress actually is, how we think about it and what our goals are and how we go about achieving them. If we are having narrowly defined goals, as we discussed last time, that can be achieved while externalizing harm in other places, and we do a lot of that, and we look at all of the goal achieving and not all the externalities, we can call that progress.

And for those that happen to make it through. That process that are not the losers of the war and not the species that go extinct or not the animals that are in the factory farms or the cultures that are genocided or anything else. There's a survivorship bias of being able to say, you know, those narrow definitions, those narrow goals we are the beneficiaries of the progress of those narrow goals kind of differentially.

And so you can make a progress. Narrative, associated with effective achieving. of narrow goals, even if they are driving rivalry and driving externality. And you know, it's not a great definition of progress. It's generously, it's a naive definition of progress. Less generously, it's propaganda and apologism for winners.

And The way that humans think about what is progress, what is actual betterment of the world, what are our lives in service to in that way is pretty important because it's significant to how we orient ourselves individually and collectively. So that's why it's an interesting topic.

[00:05:44] Nate Hagens: Well. While I was waiting for you, I looked up progress in the dictionary, and it has different definitions depending on the context, but as a noun, it's described as gradual betterment, and as a verb, as to develop a higher, better, or more advanced stage.

So, so why don't you unpack a little bit on why the concept of progress in our, in our cultural goals, our aspirations, our narratives, the stories of modern human culture, why it's so important.

[00:06:19] Daniel Schmachtenberger: I think most everybody watching your show, this is kind of obvious, right? They don't think that the totality of things that are technological advancement or that drive GDP or, you know, other things aligned with primary civilizational metrics that we're optimizing, that we consider the metrics of progress are comprehensively good.

I think that people listening to your show know that what we consider progress by those definitions is not necessarily good for nature. And is something that is not good for nature that we depend upon a good definition of progress is not equally distributed good for across wealth classes, across global south, across, you know, so many things like that.

But we can just give a couple examples. So in your definition, it mentioned both advancement and betterment, which are different things, and it's kind of important to think about that because advancement could be purely a technological thing with no definition of good, right? So we can say that this.

Iteration of the iPhone is more technologically advanced, has more computer processing, more capabilities, et cetera, than the previous one. So it's definitely progress from the definition of advancement. Is the world better as a result? Better is a question that science actually can't answer on its own because it's a question of good, right?

Which is related to ought, not just is. And so now we get into moral philosophy. We get into something that is Connected to but outside of the domains of the philosophy of science itself, which is what is actually good. And so let's say that we look at the graphs that are very clear about how screen time associated with phones corresponds to teen suicide, suicidal ideations, and self harm.

You can watch that as cell phones started to become ubiquitous, and as people spend more hours per day on the cell phones, and it's easier to spend more hours on the ones that are more technologically advanced, because they do more things and end up being more addictive, that body dysmorphia and suicide and mental illness go up.

And so it's, it's more advanced. Is it better for the people that are using it? No. In a lot of metrics that really matter, right? And if you look at the total supply chain effects of making those, and you look at the conflict zones associated with those minds and supply chains and everything, that's all part of the story of, is the world better as a result of doing this thing?

There's no question that the, you know, better living through chemistry, right? Leading up to the world that Rachel Carlson wrote about in Silent Spring. Like leaded gasoline did stop engine knocking. So, it was absolutely better from the perspective of the efficiency of engine process, not knocking.

Now, DDT killed mosquitoes. Yeah, very effectively. So, from the narrow definition of kills mosquitoes and provide some convenience, Super effective. And it was a great act of technological progress to be able to figure out how to do this thing.

Now, did the DDT start kill, like, killing everything and causing ecocide at scale and human health effects at scale and pollinators and ecological collapse?

And did the leaded gasoline take a billion points off of global IQ and make us something like 4X more violent? Yes, it did that too. And so this is the thing is to think about. And again, everybody knows from who's listening here that GDP goes up with war, military spending, private contractors, you know, so if, if, if market size is a measure of civilizational progress, then war is also GDP goes up with addiction.

right? Because if someone is addicted to McDonald's, addicted to their smartphone and purchasing, addicted to whatever, it leads to more market activity. It goes up with diseases that are treated through for profit processes. And so there are a lot of ways and, you know, there are kids who do very well at the primary metrics of school, like SATs, but who are suicidal or sociopathic.

So from the narrow definition of did this way of raising kids and educating them do well, S. A. T., sure. From did we raise healthy human beings that can also contribute to a healthy society? It's a very different question.

[00:11:03] Speaker 3: And so

the idea

[00:11:09] Daniel Schmachtenberger: that humanity has been making if someone was trying to figure out math from scratch on their own and there hadn't been recorded knowledge, they'd never get as far as Roman numerals, right? They'd get like, maybe counting. And, but we can learn all of this knowledge and do things with it. So there is progress of stored knowledge.

There is progress Progress of capability of achieving things. Are we, are the goals well defined? You know, are they good goals is a, is a really important question. And progress narrative, the idea that technology in particular is advancing rapidly and is making everything better and better along with the market and democracy and science.

And That this is the best time to be alive. And that the Hobbesian view that, you know, the state of man and nature, their life is brutish, short, nasty, and mean. We

have civilized ourselves. Everyone is literate. You know, et cetera. Nobody would want to go back to the days before Novocaine. We have so much more wealth now, et cetera, et cetera.

And we're right about to develop, you know, AI's that will usher in a phase of so much more rapid exponential progress that it will bring about you know, abundance and utopia for everybody.

[00:12:34] Speaker 3: That

[00:12:35] Daniel Schmachtenberger: narrative really took off following kind of what we call modernity, the enlightenment, the scientific revolution leading to the industrial revolution and the rapid changes that have happened in the world.

And that corresponds with what you talk about of the carbon spike, and it changed everything radically and rapidly in a way that. You know, there was no precedent for that much change that quickly, going from half a billion people to 8 billion people in 200 years, where it had taken 200, 000 years to get to half a billion people of humans being

[00:13:05] Nate Hagens: here.

I'm just wondering if, if the carbon pulse and the related economic growth. Enabled people to follow this idea of progress. And if we wouldn't have had growth, they would have complained or we would have thought of different ways, but as long as it was possible for them to, to be part of the winners then this was all accepted, but now things are becoming too obvious to deny what's happening to the planetary ecological situation inequality lots of pollution, and other things.

So has there always been a critique of progress? And it's just the last century or so it's been diminished because everyone could ride this wave or, or historically, what, what do you think about that?

[00:13:57] Daniel Schmachtenberger: Okay, so I want to come back to how the progress narrative kind of formalized in modernity. But let's go back before that.

Well before

[00:14:05] Speaker 3: that, well before the carbon pulse.

It's a pretty simple thing to state that history is written by the winners of wars.

The Losers of Wars don't get to write history books.

[00:14:22] Daniel Schmachtenberger: And the history that is written by the continuous, continuously written by the next winner of war creates a progress narrative because the winner typically says it was a good thing that they won. It wasn't a bad thing that they won. And so they will say things like, We are civilizing the savages with our colonialism, and it's actually a great act of benevolence that these you know, naked barbarous savages are getting taught English and Christianity and literacy.

They were all illiterate, you know, and so we will gruesomely straw man their civilization or culture, if not totally villainize it. And then, you know, paint a story of what we did that goes along with the power conferred by doing it. And so the, If you one view, kind of a realpolitik, a real view of history is just study conquerors for a minute, right?

Just study the history of conquerors. Genghis Khan killed roughly 50 million people in

[00:15:37] Speaker 3: his life.

[00:15:39] Daniel Schmachtenberger: And the estimates vary. 50 million is a pretty standard estimate. But like this was well before industrial technology. There were no tanks. There was no air force, right? Like, this was cavalry. And he and his men killed 11 percent of the entire global population.

Mind blowingly brutally, unnecessarily. And, you know, to then also recognize this, that something like 10 percent of the population of Asia are all believed to be his descendants now, because in addition to the amount of killing, the amount of raping that happened. So, then you look at Attila the Hun, and then you look at Alexander the Great, you look at Caesar, you look at Ivan the Terrible, you look at the progressive history of that, and there were cultures that were way more

peaceful, that lived in more harmony with nature, that were not focused on growth of empire at all costs.

If you actually look at indigenous culture, it's a very interesting thing, the thing we call the beginning of civilization. It's such a funny thing, right? Like, typically somewhere around Babylonia, Mesopotamia, early Egypt, we call the beginning of civilization. Maybe now we say Gobleki Tepe, but like, it's very recent, like some, you know, 10, 000 ish years.

And it has to do with animal husbandry, agriculture, and growing large populations and permanent settlements and the written word and a few things like that. But humans have been here for a couple hundred thousand years. Before that, they had, they had worldviews and systems of medicine and systems of music and art and poetry and dance.

And, you know, like a lot of things there, they had the same genetic brains we have and wisdom and, and they didn't live. Old people didn't live to be 30 years old. That's just utter gibberish, right? Like, yes, infant mortality was high. But old people were old people throughout history. And Um, you'll notice that there's a reason why all those cultures stayed pretty small, right?

They stayed within one of the Dunbar numbers. And it's not that they couldn't grow, it's that they had very strong reasons not to. And we discussed last time a little bit that Pretty much any definition of wisdom that anybody offers usually has restraint as an embedded concept. Wisdom involves what not to do, where you could have personal advantage, where you could have some near term advantage, but it's actually not the right thing to do.

And so if you think about the Dunbar number, right, kind of the, the first one What do you mean by first one? Well, the original Dunbar number proposed was roughly something about 150, 150 to 220, somewhere in there. And then other people have done kind of progressive Dunbar like numbers, which are different numbers of people where different coordination systems are possible up to that number.

And there are some that are smaller than that and some that are larger than that. But let's just take that one because that was a very significant one.

[00:18:53] Speaker 3: Up to that number,

[00:18:56] Daniel Schmachtenberger: everybody can fit around a tribal council and all be in a single conversation without amplification, right? They can all hear each other and possibly all contribute to a really significant choice that's going to affect everybody's life.

Everybody can know everybody. So if I'm making sacrifices for other people, they're not anonymous strangers that I think are assholes. They're like people that have saved my life. They're people that helped raise me. They're people who I helped raise there. And so at the scale where everybody can know everybody, everybody can love everybody, everybody has some connection with everyone, and where we can all have a say in that which our life will be bound to, there's a lot of reason to not get bigger than that.

If it gets bigger than that and there's a decision to make and there's not time or capacity to hear everyone's voice. Some people will have to subordinate. And now my life is subject to things I

[00:19:41] Nate Hagens: don't

[00:19:41] Daniel Schmachtenberger: have a choice

[00:19:42] Nate Hagens: in. So, so in some senses, there's a negative feedback to progress and because of so much social reciprocity potentially informs wisdom and restraint at that scale.

Well,

[00:19:56] Daniel Schmachtenberger: it's that they had some insight that a larger number of people was not progress. And it was not betterment in the definition that they were interested in, because it meant actually less having a say in your own life and less intimacy with everybody that you are in engagement with, right?

[00:20:17] Nate Hagens: Well, but for a lot of part, a lot of those millennia, they were running up against limits like They couldn't support larger populations necessarily because of the natural resources and food and such.

[00:20:32] Daniel Schmachtenberger: No, I think there were a lot of places where they could. And you had multiple tribes in the same place that ended up creating tribal relationships with each other. You can see this in the recent parts that we have in writing with the Iroquois Confederacy and like that. And yet, rather than all make one giant city, they actually stayed in these separate bands or tribes and had relationships with each other.

And they actually had things about restraint that were very. clear and actually kind of amazing. So, for instance, when you look at the Indians of the Pacific Northwest, where the kind of caloric abundance was really high, right, because of the salmon and, you know, other things like that, when they made technological advances, like in better fishing hooks and longer lines, there were rules To spend less, to use that efficiency to spend less time fishing, not catch more fish.

[00:21:21] Nate Hagens: So it was like an embedded anti Jevons paradox rule. Yes. And that's wisdom,

[00:21:27] Daniel Schmachtenberger: right? It, that's a way to think about what the Sabbath is, right? We've talked about this before. The Sabbath. Amongst other things, I'm not reducing it to only this, is a binding of a multipolar trap. It's a binding of a maximum power principle, right?

Which is, if anybody works on Sunday, they can get enough differential advantage and get ahead that they will end up You know, beating everybody else. So then everybody has to work on Sunday. So now we have a world where everybody works all the time. Nobody enjoys it, but everyone has to do that. And it's miserable.

No one can connect with their families, restore, regenerate themselves, connect with the divine or anything else. So you just force nobody is allowed to do that. They made it punishable by death, right? In Leviticus. But what it meant was it bound a multipolar trap for everybody. It was actually using law to bind that thing.

There's wisdom in that and that came from a wisdom tradition. And the thing about the potlatch and let's get rid of this surplus, let's not keep the surplus and grow our population. Let's not keep the surplus and have a reason for another group to come war with us to take the stuff. Let's actually get rid of the surplus and come back into depending upon nature and being in kind of that relationship.

Similarly, with the, we got better fishing hooks, we could catch a lot more fish and then we'll collapse the fishing, the fishing The fish population and create problems for our social structure and et cetera. So let's just spend less time fishing. And now we have more time for art and lovemaking and meditation and other things.

Right. And so the technological advance didn't lead to a Jevons paradox because in the same reason, the same way that we talk about knowledge, Jevons paradox, if you have more efficiency, that could lead to using less only if you create law that binds that that's what it must be. Otherwise, it, you just get return on investments of efficiency and maximum power principle, right?

Maybe we'll explain that briefly for anyone that is coming in this time who hasn't come in before.

[00:23:27] Nate Hagens: Well, maximum power principle is that we don't necessarily need. energy, but energy per unit time is what we're trying to maximize and that in nature, organisms and ecosystems self organize so as to better access energy because energy is needed for movement for, for anything, cellular metabolism, digestion, all things relate to energy.

So historically those organisms and ecosystems that had more access to energy per unit time had an adaptive advantage. But I have deep questions about the relationship of authentic versus naive progress as it pertains to maximum power as this conversation unfolds. But does that suffice for for your question?

[00:24:18] Daniel Schmachtenberger: The thing I want to add is the just if anyone's hearing about Jevons paradox for the first time and what maximum power principle at the level of civilization means.

[00:24:26] Nate Hagens: Well, it the more technology that we invent, like LED light bulbs, then they become so cheap and ubiquitous that we actually use more lighting in the world.

So there's a rebound effect as we develop more technology that actually uses more energy globally. And this you see in so many different ways. I'll just add the, for the

[00:24:55] Speaker 3: people who kind of understandably think.

[00:24:59] Daniel Schmachtenberger: Couldn't technological advancement create more efficiency such that we could use less stuff and still have, you know economic equality in our life?

The Jevons Paradox is a really key thing to understand, which is if you make, if you figure out how to get copper more efficiently, Or you figure out how to get nitrogen more efficiently or energy more efficiently. It also means that that the cost of that thing goes down, which also means that now the market input to a whole bunch of areas that weren't quite profitable open up.

And so now you get a whole bunch of new market areas. And the net result is that when a thing becomes more efficient rather than using less, you use more. Use more of that plus all the other things that are industrially connected to it.

[00:25:41] Nate Hagens: And as a consumer, as an individual, if I save money on some new technology, I'm going to spend that money at Home Depot or Walmart on, on something else that requires energy and resources.

So if, if we had the equivalent of the Indians in the North West that you were mentioned before the native Americans that we had some wisdom, some Sabbath equivalent, some we can't fish more hours. If we had that in our system, then this technological innovation that we have might not be a result in immature progress.

[00:26:20] Daniel Schmachtenberger: So let's talk about You know, I think it's pretty clear that making the leaded gasoline and making the DDT are definitions of progress that for a narrow purpose are, but are like, obviously pretty terrible. And the same is true when it comes to advances in weaponry and making, I mean, there's so many examples, like making food that isn't perishable, great technological achievement.

If you consider food perishing a problem to solve technologically as opposed to a feature of life we're supposed to relate with that keeps us living close to the living ecosystem and aware of biological things break down, which also keeps us aware of our own death, which keeps us aware of the meaningfulness of life and, you know, so many things like that.

So if you look at the emergence of fast food, And convenience store foods that have much more addictiveness and much less micronutrients and are comprehensively bad for the population, physiologically, psychologically, you know, et cetera. There's still progress. And so I think that kind of progress everybody can probably get.

All right. There's a problem with that. But even let's say that we're talking about things that don't seem to be market driven, but are even like trying to make progress on solving global problems. Okay. So let's look at climate

[00:27:41] Speaker 3: change for a minute.

[00:27:43] Daniel Schmachtenberger: So the first paper on climate change, scientific paper was published in 1938.

UNEP was created, United Nation Environmental Program was created in 1972 to look at major global environmental issues and have international coordination. Obviously, climate change had a U. S. vice president. Popularize. It has had almost every kind of celebrity, you know, NASA and NOAA and the largest scientific databases and computational capabilities in the world are backing it.

There's a trillion dollars in climate finance per year, nuclear energy, hydro energy, solar energy, etc. And the total amount of fossil fuel energy that is used goes up every year, that entire time. And there's a place where we just have to pause a little bit, if we take that in, to say, wait, wait, so everything we've done towards climate hasn't decreased fossil fuel energy, right?

It hasn't even slowed the increase in the amount that we use each year relative to the year before. We're continuing to grow the total amount we use like what? Okay. So if you think about that for a minute, so because we want to get off fossil fuel energy, we're going to make a hydroelectric dam and it's going to destroy a whole ecosystem by.

You know, flooding that whole area. It's going to stop migratory pathways of fish and correspondingly birds. It's going to cause geopolitical conflict between the countries that were involved. Maybe it's all those problems. Maybe all that would

be worth it if it was stopping the fossil fuels use. But if it's just like, oh, there's another source of energy, awesome.

We'll use that energy and the fossil fuels energy because there's still positive returns on both. They're both profitable to continue to use. And think about all the nuclear energy we've made, right? Like all the risk. of nuclear waste having to be managed forever, all the risk of nuclear power plants being able to be things that can be targeted in war and become nuclear volcanoes even by non nuclear powers, the increase in fissible material, all that risk, and it didn't even decrease fossil fuel use.

And so you're like, okay, well, the way we've been trying to solve the climate problem empirically is not working. And many of the solutions add new harms without actually even addressing the existing ones effectively at all. So this is also not a good definition of

[00:30:07] Nate Hagens: progress, right? But how much, how much of your critique or, or the paper critique of progress is is you know, a critique of GDP as our cultural aspiration by a different name?

[00:30:24] Daniel Schmachtenberger: Okay, let's go back to Genghis Khan, where we were for a moment, and France, because we were pre GDP at that time, right?

[00:30:32] Speaker 3: And we were pre carbon pulse. So

[00:30:39] Daniel Schmachtenberger: it is not true that all of the tribal populations were as big as they could be throughout history, limited only by scarce food. That's part of the rewrite of history that assumes that cities and bigger populations are better and that progress has been linearly happening and etc.

There

[00:30:57] Nate Hagens: is no, when I said that earlier, I meant like 100, 000 years ago, not, not, you know, 000 years ago, but, but go on

[00:31:05] Daniel Schmachtenberger: the, the archeology gets less good to the further back you go, which means it becomes more subject to the projection of your

narrative. Because you have less data and so you read the stuff through your narrative.

So if you have a Hobbesian narrative that says their lives were brutish or nasty and mean, but that same narrative is why we had Manifest Destiny. It is the manifest destiny of us colonialists to take over North America, to take it away from being a vast wilderness for squalid savages and to civilize it so that it can hold civilization, right?

Like, was it, okay. You read quotes from many of the chiefs of, like, it was only considered a wilderness to them. We filled with, like, terrible beasts and stuff. We considered it a beautiful paradise and we were friends with all the animals. And it was only them that considered it full of squalid savages because they didn't have any interest in coming to understand the depth and intricacy and beauty of our culture.

But it was progress because the winners wrote the books. Yes. And so. If there was a culture that didn't orient to its maximum size and maximum colonialism and empire expansion and whatever, because it wanted to not train the kids up to go die in war, wanted to train the kids up to have a beautiful life.

It wanted to have not turn all of nature into military equipment and stuff and agriculture land, but to, you know, have some deep appreciation of what nature was. Those cultures usually lost in war to the cultures that did the other thing.

[00:32:43] Nate Hagens: Well, exactly. So what if there were 10 cultures, 10 tribes back in the day, and nine of them were peaceful in harmony with nature music, community, lovemaking inventions.

If there was only one tribe that was a Genghis Khan type thing, that's who won. Won in quotes. This is a really important part of the story of history, in my opinion,

[00:33:07] Speaker 3: is

[00:33:09] Daniel Schmachtenberger: Unless the person doing the tribal warfare, unless the other 10 all noticed it and went and stopped them from even being able

to develop that capability, then yes, the person who starts in the group that starts investing in offensive tribal warfare is going to win it.

went and then what, and this played a role in the thing that we call cities and the movement to larger civilizations is once we're in the age of tribal warfare, smaller numbers are going to do much less well than larger numbers are. And so if there is any group that is now starting to do the offensive warfare thing, now a couple smaller groups need to unify together.

People will have less say and they'll have less liberty, but already more of them will have to train and, you know, Military than in the arts and other types of things, because that multipolar trap is now in place. But there's a very important thing is we've talked about multipolar traps here before, right?

An arms race is a multipolar trap where everybody's racing to make faster hypersonic weapons and multiple reentry vehicles and more effective autonomous weapons and whatever, because we have to. Do that. Cause what if the other guy gets it, even though we're making a world that is our own risk of dying at all those things goes way up and is a comprehensively worse world.

So the arms race is a multipolar trap. The market race. Even if what it's doing is driving massive externalities as a multipolar trap, the tragedy of the commons, we have to extract the resources, even if we destroy the ecology before the other guy, because if we don't, it doesn't protect the ecosystem.

The other guy is going to destroy them all first and use that increased resource as competitive advantage to beat us. So the multipolar trap is, is one of the reasons why we can't do anything about climate change very effectively right now is nobody wants to price carbon properly at a country level that has the rule of law to be able to bind its own economy because it would put them so radically behind everyone else who wasn't doing that economically and that economics is converted to military power and technological innovation and everything else.

No one wants to slow down their A. I. to try to do it safely, slow down their synthetic biology. So it's just kind of a Full race dynamics. Now, we've talked about this before, but there's something even deeper that you

[00:35:30] Speaker 3: just mentioned, which is

the multipolar trap is usually initiated by

[00:35:38] Nate Hagens: a psychopath. And in our tribal past, sub dunbar numbers, there was strong social reciprocity that would inhibit the potential power of a psychopath. I want to build this out a little bit

[00:35:53] Speaker 3: more and then I'll say

[00:35:54] Daniel Schmachtenberger: that. The, not everyone wants to go initiate tribal war and have their children die in war so that they can have the glorious large empire.

That is not everybody's desire. The the, the people who have won at doing that thing, I can't imagine anything, Anyone not desiring that unless they are betas who just couldn't win at it. Because they can't imagine anything like fulfillment that is not oriented on conquest or intimacy or things like that.

And so not everybody wants to do that thing, right? But if somebody wants to do that thing, there's something wrong with them. There's something really deeply wrong with them. And, but now everybody else has to do something that can deal with that or lose by default,

[00:36:48] Speaker 4: right?

[00:36:50] Daniel Schmachtenberger: And yeah, this is very much like the emergence of a cancer in the body.

Right? The, the cancer is not just another cell having its own individual freedom to express itself in a slightly different way, and it should be allowed to have its own individual expression. The other cells, like, there's a difference between the liver cells and the blood cells and the kidney cells and the, they're all different, but they all have a shared genome and they're all working as parts of this larger whole, and they're constrained by that, and that's okay, because they would also die.

Like, a kidney outside of a body is not that interesting. It doesn't sustain itself. So all of the cells are constrained by being a part of a body to serve the good of the body. So they get to have individual expression, but they also have interconnectedness and with that an obligation. The cancer cell, it's like, nah, fuck the obligation.

I'm going to do my thing and I'm going to actually consume resources faster and replicate faster. And if it does that and metastasizes that idea, right? Then the rest, the rest of the body, the immune system has to kill that thing, or that thing will kill the rest of the system, including itself, including itself, right?

And that's the thing is that the cancer cell is having amazing progress at consumption and replication. It's betterment

[00:38:09] Nate Hagens: for, for

[00:38:09] Daniel Schmachtenberger: its own goals. Yes, it's, it's succeeding at its goals. And then the, there are the most number of copies of itself right before it kills the host and kills itself.

[00:38:20] Nate Hagens: Oh, boy. So certainly in the deep ecology movement there are some people that view humanity as a cancer cell.

And based on the last five minutes you're suggesting that it's not humanity It's some individuals that through some positive feedback in tandem with energy surplus broke free of the, the wisdom and restraint of small groups. And it's, it's that multipolar trap that has created, that has created a lot of these negative effects on the planet.

Nobody can argue that we.

[00:39:03] Daniel Schmachtenberger: That there are a lot of cultures that have no descendants today

[00:39:08] Speaker 3: because Alexander or Caesar or Genghis Khan killed them all

and their memes and their

[00:39:17] Daniel Schmachtenberger: cultures and their genes didn't make it through that particular selection process, and it that there, that does not mean that they didn't have higher qualities of life or more sustainability with nature. It means they weren't good at war. And they weren't good at, even if they were good at war individually, right?

Because some people might take objection, tribal warriors. They were not good at scaled violence, effective scaled coordinate violence. And we are the descendants, unavoidably, of the people that scaled empire with all of the ecological harm, warfare, genocide, et cetera. We are genetically and mimetically and culturally the descendants of those processes.

[00:40:06] Nate Hagens: I think that's a profound insight, but I'll, I'll push back a little and say we're also the descendants of those humans that killed off the Neanderthals.

[00:40:16] Speaker 3: Yes, there is. So, I'm going to make some conjecture

[00:40:23] Daniel Schmachtenberger: here that I don't have the data to support. And I would really like to get the data. Which

[00:40:28] Nate Hagens: I, which I know you by now well enough these past few years is something you rarely do.

[00:40:33] Daniel Schmachtenberger: But but go on.

The data for this is not available that I have seen because it's ancient and our archaeology has too many conflicting

[00:40:43] Speaker 3: things.

So Our early toolmaking, call it stone tools

[00:40:55] Daniel Schmachtenberger: and you know, then fire, right? Like very early toolmaking. Was it a radical change? And obviously that didn't start with sapiens,

right? That started with homo habilis or something like that. It was a pretty radical change in selection criteria from everything before, and because now the selection criteria were not the result of a genetic mutation that was corporeally built into our body, it was the result of us understanding how to extend what our body does extracorporeally, where the ability to advance those technologies was much more rapid.

Then evolution's advancement of our body's predatory, you know, capabilities or whatever kind of selection capabilities. And that was the beginning of a really significant asymmetry that did not exist in the rest of the natural world and the rest of natural evolution. In natural evolution, the mutation forces that are acting on our body.

Something that produce a bunch of useless mutations. I'm using kind of standard evolutionary theory. They produce a bunch of useless mutations, but a few of them are effective and they get selected for those mutations pressures, whether we're talking about gamma rays or oxidative stress or whatever, or just you know, transcription errors are operating across the entire ecosystem.

All of the beings. There's an even distribution of kind of the mutation pressures. And then there's also a co selection process. So the mutation that leads to a predator getting slightly sharper teeth or a slightly stronger jaw or slightly faster running, it's only slightly, right? You don't get like a massive jump like we get with AI systems from one generation to the next.

So let's say there is a mutation that leads to a capacity that makes them slightly more effective at their niche. Let's say it's a predatory niche. Simultaneously, similar types of mutation pressures are happening on the things that they eat that make them slightly faster, slightly better at camouflage, have slightly sharper senses, you know, whatever it is, right?

And so neither of them are getting a massive asymmetrical jump relative to the other. They're having similar kinds of very, very gradual increases. And then let's say the predatory Predator had one first. So it's going to start doing slightly better at eating prey. It's of course going to be statistically eating the slower ones more often than the faster ones, and as a result, the inbreeding of the faster genes also leads to a change in selection dynamics.

So both the distribution of mutation and co selection lead to a process where there is a symmetry of power that is maintained across the whole system. And it's not just in a one to one relationship, right? It's the predator with the prey. It's that prey animal with the plants, right? As it gets the ability to digest more stuff, the plants start figuring out how to put out more volatile oils or spread seeds faster or whatever it is.

[00:44:01] Nate Hagens: But your point here is that it was symmetric and it was really slow. Yes.

[00:44:08] Daniel Schmachtenberger: And as a result, you're actually not getting power asymmetries. You're not getting concentrations of power. You're getting distributions of power. And the distribution of power is what's allowing there to be a harmony across that whole space.

And it's why you don't get that what is good for lions as a whole is bad for gazelles as a whole, right? Of course, this lion eating this gazelle, that might be the case, but lions as a whole and gazelles as a whole are actually symbiotic species. If the lions went away, the gazelles would actually do less well, right?

They would have the weaker genes and breed more often and, you know, et cetera. If the gazelles went away, the lions would do less well. So at the micro level, it looks like competition and even zero sum, but at the macro level, they're symbiotic. But the key reason does have to do with the symmetry of power.

In

[00:45:01] Speaker 3: the same way that like

[00:45:05] Daniel Schmachtenberger: fighting in your weight class is a thing, right? If you're competing and the kind of original definition of competing means something like to strive together. If I'm competing with someone where they get a little bit better and it for like it inspires and teaches and forces me to get a little bit better, you know, there is some kind of co progress together.

But if I am going to fight with a guy that's just 10 times my capability and he just. kills me, right? Like, I don't get better from that. There, there's not a, you know,

similar kind of progress. The progress does involve a certain kind of symmetry and the ability to

[00:45:41] Speaker 3: navigate the situation.

And so if you, the first question with progress is progress for whom?

And then, then we would

[00:45:56] Daniel Schmachtenberger: say progress of what, across what metrics across what way of assessing what is valuable. And progress that is progress for some that is totally bad for others, but also bad for others that that some depends upon is a very narrow definition of progress. And even like the cancer cell that will eventually kill its own host, it's a definition that does not define progress.

actually long term even viable for the, for the interest of where the progress seems to have been true.

[00:46:29] Nate Hagens: So I can begin to surmise why you and your team spent so much time and effort writing this, this paper. This is a central chasm in our discourse that we need to address.

[00:46:42] Daniel Schmachtenberger: Yeah. So we've talked before that the metacrisis, you know, we have lots of different global catastrophic risks just in the domain of ecology we're facing, right?

We could really mess the biosphere up just because of PFAS, just because of pesticides, just because of mining waste, just because of biodiversity loss, just because of damage to oceans and dead zones and coral. Like we have lots of different, from the extraction side and the pollution side, catastrophic risks that are the result of our success at progress.

[00:47:15] Nate Hagens: And by the way, all those things you mentioned are considered externalities that are currently not priced in our decisions and our success metrics at all.

[00:47:25] Daniel Schmachtenberger: And what is the cost of the Great Barrier Reef? Like, what should the value of it be? What should the value of healthy soil microbes be? Well, Everything dies without soil microbiology.

But like everything dies without air and the cost of air is nothing. And the reason the cost of air is nothing is because everybody still has access to it. And I can't. Patented. I can't have differential access to it. So it's just no need to bother putting a price on it. But that also means that it gets damaged through industrial process continuously, through air pollution, through burning things where you're using up the O2 and turning it into CO2, et

[00:48:06] Nate Hagens: cetera.

And there is a slight decline in oxygen globally because of the burning of fossil fuels and much higher in the oceans. Ocean oxygen has declined 2 percent in the last 50 years.

[00:48:18] Daniel Schmachtenberger: Obviously, the O in the CO2 is, there was carbon, there were hydrocarbons that were getting burned, which means oxidized, right?

So you're, of course, you're going to have those things happen together. It's very interesting. So not just the most important things like. The soil microbiology and the phytoplankton and the air that we are rapidly destroying that are the most priceless, priceless things there could be, right? But if you look at people's deathbed reflections at what they said was meaningful, and I was very fortunate when I was growing up, my mom took me to old folks homes to spend time with them.

And I got to hear a lot of deathbed reflections and it was very influential in my life, the highlights of what people say was worth it. had nothing ever to do with anything that the market ever gave them.

And everything it had to do with was only the things that could occur in the time that they were not an agent of the market, where they were not working, producing, etc. It had to do with their time with their family, their time with loved

ones, their time in nature, their time in religious experience. But the market can't supply those things very well, so it doesn't value them at all.

And it emphasizes reward circuits that it can monetize.

[00:49:40] Nate Hagens: So I don't want to diverge too much from from your paper, but if there were a billionaire, I mean, there's, there's there's multipolar traps, but there's also social traps. And if there were a billionaire listening to this, agreeing with the logic that you're laying out, but saying I'm powerless to change my behaviors in trying to maximize my own Bitcoin fiat currency lead over my competitors because everyone else is doing it this way.

So I see the world as being very messed up and getting worse. Yet for me, in my position, I'm doing the thing that is best for my family, irrespective of what the future is. How do we get beyond those, I call them the 1500 elites in the world have to recognize this, this this trap that you're describing.

[00:50:40] Daniel Schmachtenberger: So the idea of an externality that we're building a technology or a business or a law or a nonprofit or a whatever to do something. We're building it to try to usually solve some problem where we can assess that in a narrow metric, whatever that is, or a small handful of metrics, but that technology and the supply chains that make it and the power dynamics, it confers, whatever, do other stuff.

They affect other stuff other than the stuff we intended to affect, and a lot of it ends up being negative. We call those externalities. There can be positive externalities too, and that's an important thing to consider. So. There's this story that it's impossible to forecast externalities because the world is so complex and you couldn't possibly know in advance.

So all we can do is, you know, make something that is innovative and awesome. And then when we see the problem, work to solve it. And the continuous solving of problems is, is what humanity is here for and part of progress. This is gibberish. Right. This is just total gibberish, but it is self motivated gibberish for the people who did not want to try to anticipate the externalities or didn't want to admit them because they were going to privatize gains and socialize losses.

And then later say it's impossible to predict what the externalities would be. So I think it was a Dow that just got a 10 billion 10 billion. lawsuit settlement for PFAS remediation that they have to pay like 10. 3 billion, which is significant. And it's because some of the investigative journalism showed that not only is the, is PFAS in every drop of rainwater in the entire world, in Antarctica, in, you know, on all the continents, and is it on all the water surface areas?

And is it not just affecting human health, but it's affecting all biology down to the soil microbes and the phytoplankton in ways we can't. And it doesn't break down. There are no biological processes because it was built as an industrial product to be a thing that doesn't break down, right? To resist corrosion and resist all of the various types of things.

Okay,

so just

I

[00:52:54] Speaker 3: think it might have

[00:52:56] Daniel Schmachtenberger: actually been Minnesota, your state. Just one state's PFAS remediation. Was estimated at costing $20 billion if they were gonna try to use known technological methods to get the PFAS out. So this $10 billion from the primary producer globally is a joke. I can send the stats, but it was something like 16 trillion a year to do total PFAS remediation over the course of a decade.

So the entire global GDP to remediate one class of chemicals, it doesn't include a agricultural chemicals and mining chemicals and everything else. Well, that explains why we're not doing it. Okay. So stay with me. I'm trying to construct something and taking a circuitous route. So it turns out that investigation showed that that company knew PFOS was a carcinogen before it was ever put into the environment or put into any industrial application.

They hid the science. It had caused cancer in the lab rats. And so there was just like a direct coverup and the same thing was true with leaded gas. right? We, the

people who were inventing leaded gas were all getting sick in the laboratory. It was known to be toxic, et cetera. And there was just direct suppression of that.

[00:54:07] Nate Hagens: And if that's true, and I believe you that it is, why were those people suppressing it? Because of short term gain for them and the winners write the history books sort of

[00:54:19] Daniel Schmachtenberger: story? Yeah. So the short term gain is, Hey, if I stop this engine knocking thing and engines are the new thing, cars are everywhere.

Right? And I own the patent on this tetraethyl lead thing, and I can add it to all gas. It's needed by everything. We're going to make a lot of money. And probably it's not going to be that bad for people. It'll be in the air. It'll be dispersed. It won't, you know, it'll be the parts per million will be low, whatever.

There are lots of times where we actually know the harm something is going to cause, whoever it is, industry, whatever, ahead of time, and do it anyways, cover it up. That's a known thing. There are other times where we just don't try very hard to do an analysis of externalities, because if we put money and resource into looking at, is this going to harm things, and the other competitor doesn't, they're going to get first mover advantage.

They're going to later be able to say, we couldn't have possibly known. I, the money that I put into seeing those harms might just tell me not to do the project. And now how do I get a return on that money that I put in? And if it does show me a safer way to do the project, it's probably so much later and with less margins than the other thing.

And so at minimum, there's a kind of negligence of if we do due diligence, we do this box checking plausible deniability version, because we know we're going to be able to privatize the gains and socialize the losses. Right. The Apple's a 3 trillion company that played a major role in smartphones in everybody's pockets.

And the fact that teen body dysmorphia and suicide and porn addiction and mental health issues and everything went up, they don't have any liability for that. And so they also have no incentive to really limit their privatized gains to avoid causing those externalities.

[00:56:14] Nate Hagens: Let me interrupt you one more time, which is en route to the, the billionaire question.

So, like you said, in the day of unleaded gasoline they were able to make a lot of money and they thought, Oh, well, this will be dispersed. It won't be that big of a deal. But now I think a lot of people that work at corporations that are paying attention to the metacrisis and the human predicament and climate and oceans and PFAS and social inequalities and addictions and everything else.

They have to be in these boardrooms wondering this stuff is a little bit louder. The externalities are, are more obvious than they used to be. This is a different question that I would love to answer, but if I do it, I'll never get

[00:56:57] Daniel Schmachtenberger: back to

[00:56:57] Nate Hagens: your first question. Keep going, keep going. Remember,

[00:57:03] Speaker 3: it's exactly the next place to go. Okay.

[00:57:07] Daniel Schmachtenberger: One is about. dark triad traits, and sociopathy. The other is willingness to be complicit with it, which are basically the two types of psychology that are conditioned

[00:57:18] Speaker 3: for in the system.

[00:57:20] Nate Hagens: Whoa. Can you briefly describe dark triad again? I've done it on a frankly, but maybe you could describe it.

[00:57:29] Daniel Schmachtenberger: Dark triad is the three, And the three qualities of sociopathy, narcissism and Machiavellianism. And then sometimes it's referred to as the dark quad, where sadism is added as a fourth. And these are like particularly dark aspects of human psychology that can co occur. And so we're not looking here at a DSM diagnosis of a narcissist, meaning narcissistic personality disorder within cluster B or sociopathic personality disorder.

It's sets of traits that people can have higher, lower amounts of. And the same person in different environments can have higher, lower amounts of. You put a

really lovely person in a terrible prison and they're, they better develop these traits or they're probably going to die, right? They're adaptive in some environments.

And

[00:58:16] Speaker 3: so,

[00:58:17] Daniel Schmachtenberger: You know, people can look this up more, but narcissism is roughly kind of an inflated sense of their own entitlement, their own importance, their, you know you know, leadership worthiness, that kind of thing. Sociopathy is a lack of empathy for other people. Not really caring to take their worldview, not really asking, will this be progress for them?

Not feeling remorse if they end up being where the externalities land and harm. is caused. And Machiavellianism is the ability to think strategically through, you know, a complex play, right? So if that Machiavellianism is in service to self oriented goals, self aggrandizing, expanding goals that are not that attuned to others, you get problems with that thing, right?

But those also make Great leadership qualities for the multipolar trap version of progress. And Especially in an

[00:59:10] Nate Hagens: institutional structure where we have corporations and things like that relative to 500 or a thousand years ago. Well, the

[00:59:19] Daniel Schmachtenberger: corporation,

[00:59:20] Nate Hagens: I

[00:59:21] Daniel Schmachtenberger: mean, it's a great example, right? So 14th amendment was really everybody knows.

to give personhood rights to Black people following the Emancipation Proclamation and the end of slavery. It was for personhood rights for things that had not been considered persons. Black people were not considered persons during slavery. And the loophole in what was so obviously to give personhood People who had been previously slaves was then used to give personhood rights to corporations

by corporations that saw the legal advantage of being able to have all of the due process and everything that persons have.

And I think in the first year after the ratification of the 14th amendment, the Supreme Court saw like, Something like 15 cases associated with the 14th Amendment associated with black people. And it's something like 350 cases associated with businesses and corporate personhoods. And the corporate person, the entity that is the public corporation is an obligate sociopath.

So is a

[01:00:27] Nate Hagens: corporation an institutional equivalent of a, of a human dark triad trait? This is what I'm

[01:00:32] Daniel Schmachtenberger: saying. A corporation does not, a corporation is a, you can think of it as a cybernetic entity. Right. The, the operating agreements, the legal agreements of what it is, plus its whole operational machinery does not depend on any particular person because you have an org chart.

And if you lose this assembly line worker or this chief marketing officer, you replace them with a kind of market equivalent all the way up to a CEO. And so the. Entity is controlled by the cybernetic entity kind of controls itself aligned with these legal operating agreements, not controlled by anybody in particular and recognized as a corporate person.

So it protects the directors from legal responsibility of what that corporate person does, even though, of course, it couldn't do it without running on the people. And then you have a fiduciary responsibility to maximize profit, which is a measure of extraction. And so. And of course, that corporate person doesn't have empathy.

It cannot. It's not a it's not a sentient thing, right? It is a cybernetic thing, but it's not a sentient thing. So it doesn't have empathy. It does have planning, i. e. Machiavellianism. It does have my own growth should continue forever. And I should be the market dominator. That's narcissism. And so, yes, it is an obligate sociopath.

And it is actually legally required to maximize It's, you know, shareholder return on profit by the directors of the organization. So the idea that you cannot possibly anticipate externalities is not true, but it's a useful idea of those who are going to benefit by causing externalities. And the people who benefit by causing externalities because they're privatizing

[01:02:22] Speaker 3: all of the gains

to write the narrative in the same way

[01:02:29] Daniel Schmachtenberger: the history was written by the winners of war previously, like it costs a lot of money to affect the narrative of the world. You see this in political campaigns, you see it in marketing campaigns, but if if an idea is spreading, who is writing all that stuff and who's up regulating it and who's paying for the commercials and who's getting the data to do the personalized micro targeted ads and who's, so the ideas that spread are not just spreading through a kind of natural selection of the goodness of the idea, they are getting oftentimes amplified by the media.

Interests that want those ideas to spread. Duh, right? We know this. This is how political campaigns work. This is how advertising works. This is how propaganda works. This is how, you know, on and on. This is how religion works, right? There's a lot of money that goes into proselytizing and getting the ideas to spread.

So there are a lot of ideas that are marketing and or apologism for the dominant class in terms of power. So the dominant narrative is usually apologism for the dominant power system.

And that's why when we were in the age of colonialism, the narrative was that it was generous of us to bring this colonialism to civilize the savages. It's why we were in the age of spreading Christendom through all of the various processes, that bringing Christendom to all of the non Christians was the most charitable good act we could do.

In the same way that, like, when we talk about externalities, when Facebook was in its early phases, there were people like, you know, Jared Lanier famously was saying this very publicly, but there were people coming from the McLuhan school

and You know, coming from various, coming from the Mumford School who were saying, Hey, look, this technology where you're monetizing people's attention and you're going to race to effectively monetize their attention.

And unlike where TV commercials did that, but it was the same for everybody, you now get to have them interact with it to gain personalized info to split test how sticky you monetize their attention. A lot of the things that are going to engage their attention more are going to be limbic hijacks.

They're going to be things that make the person scared or horny or distracted or, or in group, out group identity or whatever it is. And this is going to be really bad for society. It's not that no one was saying that then. It was being said, it was being ignored. It was not being studied and researched and pursued because, and then later they get to say, we couldn't have possibly known it was going to polarize society and break democracy and decrease everyone's attention spans.

So. The, we couldn't have possibly known as a bullshit story. If you think about does, am I saying that you can anticipate everything? Of course not. But am I saying you can do a million times better than we even attempt to do now? Yes, of course. So in the process of developing a new technology, say, could we proceduralize thinking through the total set of effects, not just the intended set of effects and the market benefits of those, but thinking through if this technology really takes off, And goes to its full scale.

What is the pressure of that on all the supply chains to make it? And what is the environmental effects of that? What are the, you know, geopolitical and et cetera effects? What if people use it, is it conferring some power? If so, what other thing is it obsoleting? How will that change power dynamics, et cetera?

You just kind of think it through. Now we have a process That we've developed called yellow teaming. Red teaming is, you know, now become pretty famous, which is you're wanting to do something. You want it to succeed. Red teaming is a process you can do to see how it might fail, how somebody could beat it or how it might fail.

Yellow teaming is if it succeeds, where might it mess other things up? So could we yellow team? Well, yes, you're not going to predict everything, but you predict a lot

of the things, and then you keep watching, and when you notice other things, you procedurally internalize them. Now, in the same way all this was the buildup to the billionaire question, the long

[01:06:53] Speaker 3: buildup, the people in a multipolar trap who are at the

[01:07:02] Daniel Schmachtenberger: front of the race, could stop the multipolar trap, but they don't want to because they believe they can win.

So they use the multipolar trap as a story of their own lack of power to do anything else as plausible deniability. The littler guy cannot necessarily stop the multipolar trap, but someone who's at the leading edge of an arms race, if they wanted to apply the same energy and same sophistication to agreements to pursue, because of course, there's a situation that if my country becomes more secure relative to other countries, which means develops better weapons, It automatically makes everyone else less secure.

So now they have to do the same thing. And it just means that you have an arms race of increasing weapons forever and increasing budgets going to it forever, which is great for defense contractors. It's actually great for GDP and it's bad for everything else. Now, if we could just say how let's make an agreement to all spend less on weapons, we can be proportionally less.

Right. Proportionally less such that relative security changes. Well, of course people say, well, we can't possibly do that. We couldn't get China. We couldn't get Russia. There's no way to enforce it, etc. And we're saying that right now with regard to AI. Well, even if we wanted to stop this thing from advancing that has That accelerates every global catastrophic risk.

We couldn't possibly because there's so many places racing and we couldn't stop China and blah, blah, blah. Therefore, the only possible answer is to win the multipolar trap because losing at it is too bad. If you look at the resources we invest in figuring out AI, if we invested those same resources and actually creating healthy diplomacy where we were not assholes to our international Neighbors and really tried to create global coordination to bind the multipolar trap we could.

[01:09:05] Speaker 3: And so the

[01:09:09] Daniel Schmachtenberger: billionaire that says, well, I don't know how to solve the problems of the world, like I'm too small, right in the, it's a hundred trillion dollar economy. I'm almost nothing. I'm this little. Guy, I couldn't solve the problems of the world, therefore me continuing to just pick up all the game theory tokens I can under a world of increasing uncertainty.

The optionality of that is what's best for me and my family. Look at how much time you spent figuring out. How to gather all those optionality tokens, understanding markets, understanding how to do lobbying, understanding your industry, understanding financial markets, et cetera. And look at how much time you spent trying to say, if I applied all of that same energy, time, thoughtfulness, resource to solving some of the great problems, could I, you have not put enough time to say that you couldn't possibly, it's just not in your interest.

[01:09:58] Nate Hagens: This is what Jeremy Grantham's big point at the end of our podcast was, and I've, I've talked to him about it subsequently. He wants the elites, the rich people, to divert their attention to the ecological crisis. Not only climate, but plastics, and oceans, and many other things, because they haven't. They, they're unaware, it's just out there, and it's a, it's a big drive of his, and some others, and fingers crossed, because that's what we need.

And yet, I've encountered so many more people who are conscious of what's happening to the environment. But like you just said, they plan to give away some of their money in the future, but for now they're focused on their investments and they want to have a little bit more so that they can give more to good causes in the future, which I just scratch my head when I, when I hear that.

You, you could understand someone listening to this past hour. You've just articulated that winner's right. The history books. And the situation is so bizarre and scary and complex right now that if I don't have an answer, I might as well just try to be a winner, which means more optionality tokens.

Yes. And

[01:11:21] Daniel Schmachtenberger: I think there is a, I mean, that is definitely the state of AI in development. Very centrally. It's definitely the state of like the posturing and geopolitics.

[01:11:32] Nate Hagens: And just financial markets. It's the way of that too.

[01:11:37] Daniel Schmachtenberger: Now. If you look at that path of winning and realize it's actually self terminating, and it's not even a win for you, that could be the beginning of a pause.

[01:11:51] Speaker 3: And then if you look at that, okay, so, you know, people

[01:11:59] Daniel Schmachtenberger: talk about like what the, the biggest Nobel Prize you could want to win, the biggest problem to solve for humanity, oftentimes like cure for cancer. If you look at the graphs of incidents of different types of cancers from 1950 till now, you see a rise in heaps of cancers, right?

Lots of rise in endocrine and reproductive cancers, in different kinds of childhood cancers, in very aggressive turbo cancers, and that rise in those cancers, in terms of year over year rise, maps very closely to the rise of carcinogenic chemicals put into the atmosphere. And so when you look at the 230 million chemicals.

In the database of the American Chemical Society, and you look at the huge number of them that are put into the atmosphere and environment through the VOCs and the paint and the walls and then the carpet to the industrial chemicals to the agricultural chemicals. The percentage of them that are carcinogens is very high.

The other ones are. Neurotoxins, or endocrine disruptors, or whatever. So, correspondingly, the increased rate of autoimmunity, of autism, and Alzheimer's, and neurodegenerative disease, of infertility and reproductive failure, follow those curves quite closely. Is that the only factor? No. Is that a major factor?

Yes. The other factors are also the result of the progress of this society in other ways, like the processed foods that follow similar curves that mess up the microbiome and micronutrient profiles of the body and stuff like that.

[01:13:30] Nate Hagens: In, in your paper, you make a, a, a point of highlighting the Haber Bosch process and, and crop yields and food and that's been viewed as progress, but there's a whole lot of stuff it doesn't include.

Yeah.

[01:13:45] Speaker 3: Yeah, so I want to stay with the cancer case for a minute.

When, if you look at

[01:13:54] Daniel Schmachtenberger: all of the scientific advancements trying to cure cancer, why don't they start with, how do we get, how do we stop putting carcinogens in the atmosphere and in the food supply, you know, where there are continuous studies by groups like the Institute for Environmental Medicine that show there's roughly 300 carcinogens, the industrial toxins that are carcinogenic in the breast milk of nursing mothers in the United States and whatever.

Why don't we work on getting those out? Because the vast majority of cancers we have are anthropogenic. They're caused by human activity. We don't need to try to solve cancer in abstract. Like, let's start with that. And Oftentimes the right problem solving is reversing something that was already the wrong path.

I can't patent that. I can't market that very well. The new pharmaceutical solution that I can patent that doesn't address the upstream causes at all might have enough ROI to pay for the research.

[01:14:56] Nate Hagens: But if there's a thousand of these entities out there and 990 of them take the higher, the high road, and why are we putting these chemicals in there?

Let's do it a different way. It's those other 10 that decide to do it in our current institutional corporation structure. And it's just like Genghis Khan. Okay. So this is important.

[01:15:25] Daniel Schmachtenberger: If we build new types of energy, but we don't create both cultural values and particularly law that binds the use of the other energy, we'll just use all the energy because more energy is awesome.

More energy means more GDP means more, you know, all the things associated with what interests of power. So creating a new thing that is supposedly more positive in a way is awesome. Is not actually solving the problem if you're not

binding the harmful thing, because you will just get both and it'll end up being market diversification and more total market size.

Similarly, like the organic food movement has been awesome in a lot of ways. There's a lot of people who shop at the Whole Foods and buy organics and want there to be less pesticides and whatever. And yet, More pesticides have been used every single year during that entire time. So clearly, it's not actually decreasing total pesticide use because we're bringing in creasing amounts of pesticides to conventional agriculture, to the developing world and the populations, whatever.

So it just, okay, it's like, great, we will add that organic niche market on top of the existing market and get more total market share. There has to be more of a focus of actually binding the things that have to stop. And so when you're mentioning, if somebody does that thing, interests of everyone else who want to, again, if there were nine, if there were nine tribes that were really wanted peace and wanted to be in peaceful arrangement and trade and whatever with each other, and they saw an early phase of another tribe moving in another direction and they did interfere and not let it continue in that way, they could possibly have peace for everybody and that actually becomes the obligation.

So, like I said, We have a, the, the system that emerged in the context of power competition selects for people who are oriented to power competitions and other people who are complicit with it. Those are the two things it selects

[01:17:26] Nate Hagens: for. And is that dynamic that you just described what underpins Moloch, Watiko, Koyaanisqatsi, the superorganism?

[01:17:37] Speaker 3: Yes, the generative dynamic can be described a couple ways. One is

humans get conditioned by their environment,

[01:17:53] Daniel Schmachtenberger: right? I grew up in a tribal culture. I grew up in a modern technological culture. I grew up in a city in the dark ages, whatever. I'm going to be, I'm being conditioned by the environment I'm in in terms of my language, my worldview, my technological capabilities, desires, identities, all those things.

So, so the civilization is conditioning the minds. which means patterns of perception, identity, value, and behavior of the people. And those minds are, in turn, creating more of the types of things that they were conditioned to. And so there is a feedback loop between the individuals influencing the whole, the whole influencing the individuals, and there is a particular thing that is getting upregulated.

So let's talk about theory of hyperagents for a minute. I think we mentioned this somewhere before, but we'll do it again quickly. The Genghis Khans and the Alexanders and the Caesars were obviously different types of people than most of the people that either worked for them or they killed. And the you know, kings following that and the, and the robber barons and industrialists and whatever that like all have that in common up to today of that how much power they have consolidated relative to most everyone else is extreme.

And they're. And it's not arbitrary. There were things about their psychology that had them pursue that and be good at it. So agency, our own ability to achieve our goals and do the stuff we want to do. You could say that a hyperagent is someone whose focus is maximizing returns on agency. They want to do the things that make them capable of more doing, right?

They want to, and they, they want to use their

[01:19:53] Speaker 3: This is a great question,

[01:19:55] Daniel Schmachtenberger: right? Towards what end is You were just mentioning it with your billionaire friends who are like, well, the future has a lot of uncertainty. The money gives me the ability to live in one place or another place, to build this kind of tech or that kind of tech, to employ tech or people or land.

It gives me the ability to influence minds through media. It's a generalized optionality token. So I'm just going to keep working to get there. So that I always have the maximum freedom and ability to do what I want to do every scenario. Now, one of the reasons is that one of the reasons is winning.

One of the reasons is their own fear of death and wanting to be remembered in the history books forever, whatever, right? Some set of reasons that are associated with,

um,

personal

[01:20:42] Daniel Schmachtenberger: expansion of power. So a hyper agent maximizes kind of return on agency. It's important to state that return on capital can be return on agency, but it's not necessarily. There are hyper investors who are really good at applying capital to create more capital, but are not using that to influence the world to a vision of the world they want beyond that heavily.

Right. Like Warren Buffett was not trying to change laws and politics and culture all around the world. He was a hyper investor, not really a hyper agent, whereas Kissinger had much less money personally than Buffett ever did, but had radically more influence on world systems through the influence of a lot more total money of state funds and, you know, whatever.

So Hyper agency is the more fundamental concept, which is kind of the return on agency. There are people who are also motivated to do that. They're just not good at it. And maybe they become like a very controlling middle manager or a gangster or something. But the people who are good at it are good at scaling.

And that's through both the influence of a lot of people and the employment of technology. And that can be social technology, like writing laws and influencing capital. which are social technologies creating narratives like The rise of Nazism or Mao or whatever. Right. So like, but they're good at being able to scale.

So the kind of tier one hyperagents, the ones that have the most influence in the world are not just oriented to maximize returns on agency, but they're good at it. And If you look at the distribution of traits that humans have in a population, like empathy, they'll usually follow a Gaussian distribution, right?

You'll have most people are here, they have some level of empathy for some circle of people, you know, kind of average. There are bodhisattvas on one side that are,

you know, hyper empathetic, and there are sociopaths on the other side, no empathy. And we could also take, say, Machiavellianism, how good someone is at, like, long gaming chess.

And there will be most people are kind of here. You have some that are really amazing strategists and some that really suck at it.

There is a kind of a naive sociology that looks at the Gaussian distribution of human traits and tries to explain the world by that distribution of traits, and it doesn't work. And it's because if you look at the distribution of power, which is what's influencing the world, it doesn't have a Gaussian distribution, it has a power law distribution.

The power law distribution means a few people over here have almost all the influence. That's true in money. It's true in the, the stats of, you know, the differential between the top wealthiest and the bottom poorest people continue to get more and more extreme. And the graphs that look at the power law distribution of money from 1960 to 2000 to now are amazing how much deeper that curve gets.

I think it's something like the top eight wealthiest people have more money than the bottom 4 billion people currently.

[01:24:09] Nate Hagens: But does that power law also work within the top 1%? There's another power law within that top 1 percent where 80 percent have, or 20 percent have 80 percent of the wealth. Obviously 1 percent

[01:24:21] Daniel Schmachtenberger: is a lot of people.

8 people having more wealth than 4 billion people is pretty significant. And so this is true in terms of military power. Not that many people can push nuclear buttons. This is true in terms of media power. This is true in terms of, you know, financial power. This is true in terms of technological innovation capabilities, is that there's these kind of power law distributions, and so people at the top of the power law distribution explain the shape of civilization much more than everybody does, and those people don't come from the center of the bell curve of almost any psychological trait.

[01:24:57] Nate Hagens: And in ancestral times, we still had the same Gaussian curves, but we didn't have the energy surplus and the scale because power, you know, 10, 000 years ago with 150 people or whatever, and power in nature, there, there is only so much endosomatic energy that an organism or a human pre modern human could use.

And so it's the, it's the scale of. Size of people and the civilization coupled with this giant dollop of historical magic dumped in our economy a couple hundred years ago that allows this accordion to spread upwards.

[01:25:40] Daniel Schmachtenberger: They didn't have the same Gaussian distribution. Okay. Why? Okay. So going back to this idea that the people who are at the top of the power law distributions that have the most influence are not at the center of the bell curve of psychological and behavioral traits.

They're usually like two standard deviations to one side. Yep. More sociopathic, less empathetic, more driven and motivated towards narrow goals, better at technology and business. Propaganda and long range strategic thinking and whatever, right? Various things. And

[01:26:16] Nate Hagens: just to interject there, did those people design our structures or did our structures self select for those sort of Recursively

[01:26:23] Daniel Schmachtenberger: both, right?

Someone is born into structures. Someone who wants to be at the top of the power law is a desire. It's a particular type of desire that really, really wants that and that is good at it and can win enough win lose games to ladder climb to the very top of it. and can drive enough externalities and rivalry and whatever to get there.

So they are, the current systems are selecting for the people that can win at the current systems, but then those people in turn change the systems in a way that continues to optimize their winning, which is just like evolution. Is the animal created by its environment or does it niche create to make more of an environment that's good for it?

So we are both being shaped by the niche and the niche creating in turn. But the other thing is that it doesn't just mean that they're making, so, you know, that looks like somebody gets to a high position in finance and law in the current system. And then they change laws, they do, they remove Glass Steagall, they do financial deregulation, they interpret the 14th amendment as corporate personhood rights, they interpret, you know, the, the L'Oreal case or whatever as to do fiduciary responsibility for profit maximization.

So, The people who can change the system to continuously be better, they decide that bailouts for the banks that failed and too big to fail and golden parachutes made sense. So it's simultaneously or like someone is good at war and then they innovate at war, right? So it is this recursion. Now, the people who are in those top positions are not only changing the system to be better for them.

They also are obviously invested in that success. So anyone else who would be very successfully doing something that would mess that strategy up, they have a maximum incentive to make sure don't succeed.

[01:28:16] Nate Hagens: I did a, frankly, a few months ago, I forgot what the main topic was, but I talked about dark triad and in my research, it said that around 10 percent of our modern population is, is dark triad, but that that is probably an underestimate because of someone that's Machiavellian is not going to answer those surveys in the way that would show that they're a dark triad.

But are you saying that, okay. 10, 000 years ago, 50, 000 years ago, 10 percent of our population were not that combination of traits. It's, it's something modern. Look at the story of

[01:28:53] Speaker 3: how the Spartans raised their kids.

The, you know, the,

[01:29:01] Daniel Schmachtenberger: they're kind of famous stories that if, when the infant came out, if it looked like it had any deformities or was small or a runt kind of thing, that it was killed right away. Infanticide of ones that didn't look like they would be kind of, you know. maximally dominant. And then how early they were being trained in warfare.

And, you know, the, the process that happened when they were six, where they had to kill adult slaves with tools. And if the adult slaves killed them, great, they're dead, right? Only the ones that make it through are the ones that have this much, you know, kind of vicious capability. So is that conditioning the Gauss?

If you're in a Spartan society, is that conditioning, the Gaussian distribution of everybody? Of course it is.

[01:29:46] Nate Hagens: Yeah.

[01:29:47] Daniel Schmachtenberger: If, yeah. If you are in a. And this is why looking at the kind of extreme outliers of the things that we think of as human nature under different conditioning is so important, is you can have the Janes, who across the whole population, nobody hurts bugs.

[01:30:08] Nate Hagens: I met some Janes when I was in India. They were just wonderful, wonderful human beings.

[01:30:13] Daniel Schmachtenberger: Yes. And so it's clearly not just a Gaussian distribution or a genetic thing, because you can have an entire culture where everybody who gets raised there doesn't hurt bugs. And then you can have the child soldiers in Darfur, Liberia, or whatever, where if you make it to adulthood, you have killed people.

You've hacked people apart with machetes.

[01:30:34] Nate Hagens: So our culture is recursively building out the percentage of our population that exhibit dark triad because of incentives and self selection and other things, yes?

[01:30:47] Speaker 3: Yes and no. I would say that there are not,

[01:30:50] Daniel Schmachtenberger: there's not the kind of data that I would feel was meaningful to try to make really strong statistical claims, but I'll say some things about trends that I think will feel intuitively resonant to most people.

[01:31:02] Speaker 3: The digital data. universe as a native universe generationally has narcissistic conditioning pretty built in,

[01:31:21] Daniel Schmachtenberger: meaning that if I'm in the woods, the woods don't rearrange themselves for me. I can fall out of a tree and get hurt. I actually learned that there is this unforgiving nature, you know, Eric likes to call it of reality that I have to actually respect it and interact with it in a, you know, a respectful way and it doesn't conform itself.

To me, if I have a digital universe where the newsfeed is literally conforming itself to maximally entertain and engage me, and I have an infinite amount of options and I can just, all I have to do is this and the whole universe changes. Now I'm in this universe, now I'm in this universe, and it's maximized for my kind of dopamine optimization.

Do I have a world in which My conditioning is the whole world is supposed to conform itself to what I'm interested in. And I'm supposed to do very little and be able to get lots of reward.

[01:32:15] Nate Hagens: So, so you're saying that we assume is the good life and our own choice, our own volition is actually manufactured demand by the winners in, in our current society.

[01:32:33] Daniel Schmachtenberger: Again, if we go to the old people on their deathbed reflecting on what was meaningful, most of what the people spent their whole life pursuing is what they wish in reflection that they had not spent their whole time pursuing. And most of the things that they called successes and progress are not part of what is in their mind as they're dying that they wish they had spent more time with.

[01:32:57] Nate Hagens: Well, that begs the question, how, how, at what point in their life could they have realized that and made different decisions?

[01:33:05] Daniel Schmachtenberger: And we will see times where someone decides to leave the rat race and keeping up with the Joneses, where every time they get a raise, they increase their cost of living, so they have to keep working more and

paying someone else to raise their kids and because the other person charges less than they can make and on and on.

And where they're like, no, fuck it, I'm, I'm out. I'm going to lower my cost of living and I'm going to try to do something where I can spend time with my kids. And I can spend time in nature and I can reflect on why I exist at all before I die. And the sense of meaningfulness and fulfillment almost always goes up when people do that, as does the harm footprint they cause on the world go down.

Hmm. As does the intimacy and meaning of their meaningfulness, of their relationships and the quality of life of the people they touch.

[01:33:52] Nate Hagens: And, and where do those people fall on the behavioral Gaussian distribution or who knows?

[01:33:59] Speaker 3: Well, there, so, like I said, the,

[01:34:03] Daniel Schmachtenberger: the selection criteria selects for people that lead things that end up winning at power and other people that are willing to follow and participate with that thing.

So um, You know, very famously in the Nuremberg trials of Nazis after World War II, when the Nazis were being tried for the war crimes, and they were all asked, did you believe that everything you were doing was good? About 90 percent of the Nazis said, Only at first. At first, we were, you know, we had been in terrible poverty in the Weimar Republic.

Our kids couldn't eat and, you know, etc. The Jews had all this wealth. And, you know, we, we believed that we were getting supported to be able to, you know, do well for our people and whatever. But as time went on, like, no, we did not feel good about putting kids in gas chambers. And we didn't feel good about seeing them starving.

Like we felt really bad about it. Like 90 percent of the Nazis said, no, I did not feel good about it. And then when they were asked, did you try to stop it? They all said no. And then they quoted the same German phrase that translates to officer's orders. I didn't have a choice. And Yet, of course, if 90 percent of them had all said

that simultaneously, which is a coordination failure here on their part, there would have been no holocaust.

But anyone on their own is like, if I try to defect, I'll get thrown in the gas chamber, too. So it's best for me and my family to just go along with it.

[01:35:39] Nate Hagens: It's kind of a gruesome microcosm of what we face on so many levels today. Yes.

[01:35:46] Daniel Schmachtenberger: And so the Ash conformity studies and the Milgram studies were so important.

And I think actually under represent how deep those principles are, right? The, the idea that when the authority was telling the person, the scientific authority, Hey, you're in a study, do this thing. And we're doing electroshock therapy, whatever, that the person following authority would shock the other guy to death.

Because of, I don't have a choice, the authority is telling me. Or in the other one, in the Ash ones, that if 10 people in the room were all saying this line is longer than that line, the person would defect on their own understanding to go along with that. These are very

[01:36:28] Nate Hagens: powerful insights. And the smoke filled room.

If there's smoke coming under the door and other people don't notice it or don't care about it, I don't speak up. Yeah. So we are social creatures. Social conformity is a core driver.

[01:36:44] Speaker 3: So I, if there was, so imagine

[01:36:49] Daniel Schmachtenberger: that you have a 10 tribes and kind of harmony world and, and for whatever reason, somebody hits his head, gets traumatic brain injury that knocks his empathy out.

And now he's an asshole and you know, wants tribal warfare where it was not necessary before. And, you know, Figures out how to try to make a story that it'll be in everybody's interest because the other tribes are really plotting against us, even

though they aren't or whatever. You could imagine a scenario where the other people are like, dude, you're crazy.

Like, no, we're not going to do that thing. And you need to chill out or you're going to get banished. And that happened, right? That happened a lot. But If that guy succeeds because he scares people enough, right, let's say he's really big or whatever it is, or kind of brutal, that nobody wants to stand up because even though if everyone stood up together, they could deal with him individually.

Nobody wants to stand up to him. You can start to have a situation where everyone else has their survival strategy. being not like getting the goods that guy is going to deliver. He's going to deliver safety and he's going to deliver economic growth and he's going to deliver whatever. And you don't want to piss that guy off.

And so you get a kind of fealty that Stockholm syndrome with that kind of leadership. And and also a recognition that if you go against it, it's not going to go well for you and still won't change the scenario. So then again, you have this plausible deniability. Best for me and my family is just go along with it.

That combination of distortion, like profound ethical distortion and leaders and complicity. and others. And the, and environments that were already created in power, conditioning those psychologies, and then the psychologies to get to the top of the power stack, conditioning more of systems that continue to do that.

The recursion on all of that is the thing that you call the recursion. Bye. And this is why they have continued to orient in the direction of more extraction, more technological power, more military capability, more money, more. And it's advancement. Technologically, is it progress in terms of good? Well, obviously none of the species we made extinct through doing it think so.

And obviously none of the animals in factory farms think so. And obviously none of the. You know, some odd 50 million people that are in conditions of slavery today doing forced labor to make that system work think so. No Native Americans in North America think that the U. S. progress story was awesome.

American descendants of slaves don't think the progress story was awesome. And not only that, you know, like even the people who are winning. So even the

billionaire. His body is being exposed to the carcinogens that the industries have caused that the medicine cannot

[01:40:08] Speaker 3: solve. And

even

[01:40:16] Daniel Schmachtenberger: if you look at the quality of life there, it is actually with decreasing actual fulfillment and the replacement of fulfillment with mostly addictive flashes. Right. Reward circuits that provide kind of addictive flashes, whether that's, you know, food, drug, or new yacht or

[01:40:38] Speaker 3: new position of market dominance.

Now, this is actually another part that's so important. I want real progress. I think

[01:40:50] Daniel Schmachtenberger: it's a, it's a very important thing to see that we can grow and that we can add our life energy. to the world

[01:41:01] Speaker 3: in a meaningful way. And

this is why really

[01:41:10] Daniel Schmachtenberger: thinking about what would constitute actual progress, that the world is better as a result of us having done this. Better, the world, not my tiny world, not better in the symmetric, but the world long term. Thinking seven generations ahead, thinking about all the other species we inhabit it with, thinking about all of the different aspects of self, like does my, did my cell phone enhance a lot of things?

Yes. Did it diminish a lot of other things? Even for me? Yes. So what does better mean? If I really kind of think and feel through that

well

[01:41:44] Speaker 3: And so I, I, I

[01:41:49] Daniel Schmachtenberger: want us to pursue real progress. I want us to rescue it from the kind of bullshit progress, but also in a healthy life, progress is not as important. It's not as central because if life is fulfilling now, if life is a gift now, I'm not exclusively focused on making it better in the future.

and making it better that corresponds to winning, usually or, and I'm not even focused on changing it as much as I am also maintaining it and appreciating it. So progress gets a undue emphasis when there is a disconnection from being, where now is miserable, so good has to be in the future by me doing some new thing.

And if you, if you think about the unlikely miracle of our existence, Right? And you think about the billions of years of stuff that had to happen to make a biosphere with the complexity that we could exist. And you think about the miracle that we get to see colors, and we get to hear birds, and we get to exist, and that we get to love children, and we get

[01:43:00] Speaker 3: to, like, all the things.

Appreciating

[01:43:07] Daniel Schmachtenberger: what already is, that is so profoundly unlikely, that took billions of years to make, and so much activity. Like, there should be, most of our life should actually just be an odd appreciation at what is, and then the desire to maintain and protect it. Because it is so unlikely and so much work went into bringing this about.

But nobody makes the history books for maintaining things. They make the history books for making new stuff or destroying stuff. Or you put the two together, creative destruction, which is the creed of society right now. But like 99 percent of life should actually be maintenance. 99 percent of life is you feed the kids and the meal that you made then is gone.

And then you make another meal and you wash the plates and then they're dirty again. But you're actually maintaining the sacred thing. And then true progress is where I can actually Add a new thing that really is factoring everything good for the whole, then yes, I'll add those things and that's progress.

But it has to really be good for the whole factoring everything that's involved. And most of my attention is actually needed to maintain all that's happening. So I both want to kind of like reclaim what progress is, which is important and sacred, but also move it out of the center. And that it's only in the center in the same way that, like, when someone is more unfulfilled, they have more addictive tendencies.

Because they're looking for a hit of something. When someone is more fulfilled, they have less addictive tendencies. There is a way that when someone is in appreciation of what is and they're in meaningful, intimate relationships, the so much of the impulse of progress that is actually coming from emptiness and the desire to be somebody.

I got that Nobel Prize. I got that Nobel Prize. Ph. D. I got that position. I won. I whatever is a compensation for actual like trauma and emptiness. And it's and so it's not only that it's not authentic progress in the world. It's that where it's even coming from in me is not aligned with the fullness of the world and adding fullness.

It's aligned with my own emptiness and the desire to do something that will fill that up. That is not the right thing.

[01:45:23] Nate Hagens: So it's the hungry ghosts are consuming alcohol and pizzas and building shopping centers and getting stock options and all that to fill a trauma and a loneliness not, not actually to achieve something monumental that's great for society and the future.

[01:45:47] Speaker 3: Yes, but it will be

[01:45:51] Nate Hagens: sold

[01:45:52] Speaker 3: as that.

[01:45:55] Nate Hagens: So is there any evidence that the people that are in the dark triad or those people that are you know, riding high atop Moloch and the superorganism have a higher incidence of, of trauma and loneliness and, and emptiness?

[01:46:16] Daniel Schmachtenberger: I

[01:46:17] Nate Hagens: don't know

[01:46:18] Daniel Schmachtenberger: stats on like ACEs, right?

Childhood trauma associated with those positions. There are certainly plenty of very traumatized poor people. And it's not like, it's not like everyone responds to trauma in the same way, right? They're the total nuances of how trauma ends up affecting someone

are yeah.

[01:46:42] Speaker 3: Not easy to put an algorithm together to predict.

[01:46:46] Daniel Schmachtenberger: So, someone is physically abused when they're little, and they grow up to physically abused children. Someone else is physically abused when they're little, and they grow up to be the most non violent person who doesn't ever want to be like that. Maybe even to the place that, as it's an overcompensation, they don't stand up enough, right?

Someone else has a, the healthiest response and actually becomes a protector of children, right? So it is not necessarily saying that the people who are in the highest positions of power are most traumatized, but they had types of trauma that oriented themselves to to both power seeking and types of education that oriented themselves to good insights about how to do power at scale effectively.

[01:47:33] Nate Hagens: So I can tell you an N equals one uh, experience. I was recently in India and I spent a lot of time with 30 people every day chanting, singing, humming, eating doing sports, doing yoga, et cetera. And then I would go for bikes in the forest and record sounds of birds. And I came back and my addiction impulses were much lower because I had six weeks living on more of a maintenance.

I'm, I'm maintaining the thing. I don't need other things. And I was like, Oh my gosh, this is what we need to change the culture. But the other part was when I came back, it was a week or two and I got sucked right back into the vortex. of, of everything going on in this culture. So we need both. We need the personal

discipline and change in a community, but we also need the infrastructure and the institutional change and, and that crucible.

Think about this. When you were

[01:48:37] Speaker 3: in that environment with those people in India.

The reward circuits that you were

[01:48:47] Daniel Schmachtenberger: experiencing on a day to day basis were the type of pleasure, the type of reward that comes from intimate communion with other people, that comes from listening to birds, that comes from People having authentic conversations that don't have status climbing as part of them focused on meaningful and real things came from all that.

Right. And so there's a fulfillment in that, that is not oriented with how many likes a thing got or how much we did this thing or, you know, whatever. It's, those

[01:49:22] Nate Hagens: things weren't available. I mean, I had internet there, but there weren't all those other distractions, except there were parties with music. And there were musical concerts every night of the week there.

Those were the options. Right. So,

[01:49:39] Daniel Schmachtenberger: but someone's not craving the other thing because the reward circuits are full. Exactly. One's actually in a state of fulfillment and they're in a state of fulfillment for things that make them healthier, the relational network, healthier, and. the, and that can align with stewarding the world well.

Now, if you go to an environment where there, you go to a different environment where there's nobody around you and there's no real intimate connections. And so again, we're, we're social primates. This is a, such an important evolutionary thing is that there wasn't a lone dude with stone tools in the Serengeti making it with the lions and the hyenas.

There were tribes of people that would make it. And so the, the idea of Ubuntu, I am because we are, It was this foundational concept of human beings before the thing we call civilization, right? I Am Because We Are was, like, just at the most prosaic level, nature did not select for individual sapiens. It only selected for groups of sapiens.

Individual sapiens in evolutionary environments were all dead. And so what's best for me that fucks the tribe is not a concept. That's not a thing, right? What is best for the tribe that I can't exist without of? I am because we are, I would not exist. I'd be dead without all of us. That's like the basic insight.

So

[01:51:05] Speaker 3: I am, because we are obviously just starts with, I couldn't

[01:51:08] Daniel Schmachtenberger: survive without us. But then it's also deeper, which is I think in words that I didn't invent. that all these other people invented. And, but my own most intimate thing, my thoughts with myself are in a language that I didn't make. I am, my, my thoughts were made by other people, right?

The, the, the language of my thoughts, my understanding of the world was transmitted to me largely by other people. The tools that I use, the things that I benefit from, the, all of that, that I am, almost all the things I think of as I am, because we are, right? Because of things that were created. End.

[01:51:50] Nate Hagens: Okay, now I have so many questions, but, but keep going.

goes deeper,

[01:51:54] Daniel Schmachtenberger: because the we was never, never just meant our tribe. It also meant nature. the extension to all our relationships, and all our relationships was all life, and life didn't just mean biological, which is why they were animistic. Those cultures were all animistic. The spirit of the sun, the spirit of the river, the spirit of everything, because it was a very clear understanding.

What would I be without the tribe? I'd be dead. What would I be without the sun? I would have never existed. What would I be without the galactic center around

which the sun orbits? I wouldn't exist. What would I be without the gravitational field? What would I be without the soil microbes? What would I be without plants?

What would I be without all of that? I wouldn't be. So, I, that is not the emergent property of we, isn't even a thing. It's not even thinking.

[01:52:44] Nate Hagens: Fast forward to today. And when I'm sitting around by myself, lost in my thoughts, my thoughts are in English, which is a language. of the winners that I'm not even aware of everything that came before that English was selected for in this progress a story over the last few hundred years.

Is that also part of the, this story? So our

[01:53:13] Speaker 3: umwelt,

[01:53:17] Daniel Schmachtenberger: our, the things that are in our awareness, the tiniest, tiniest sliver of a fraction of what is. And so there's,

[01:53:30] Speaker 3: you know, like within the progress narrative,

most people don't miss the

being able to actually understand what the animals

[01:53:47] Daniel Schmachtenberger: are saying in the way that indigenous people have much more understanding what the animals are saying as they're growing up in the environment, listening to them. Right? Most people don't miss that because they never had it and they don't even realize they don't have it.

And they don't realize how much more communicative and alive the forest is to someone who knows how to listen. And so they are impoverished, but they don't know it. And they don't miss having a bunch of people that they can be completely authentic with because they've never experienced that. They've never been completely authentic with any human being.

They are always fucking withholding and lying. to some degree, and always paying attention to appearance. So they don't miss a thing they don't know exists. And

they don't miss what it feels like to have a body that doesn't have 300 petrochemicals in it because they have never had a body that didn't have 300 petrochemicals in it.

And what real vibrancy feels like, they have no idea.

[01:54:45] Nate Hagens: This has rhymes and, and analogies to the movie, The Matrix.

[01:54:51] Speaker 3: Yes. And so

[01:54:54] Daniel Schmachtenberger: some people take the blue pill, right? Because the reward circuits, you know, once they see it. And so, one, I have, people have a hard time imagining that there was a life that was awesome.

Full of things that they have no experience of or even awareness that is, was a thing. There's a cool documentary, I think it's called Everything is Rhythm, that shows how in African tribes, what, when the way somebody was weaving and the way someone was cutting something and the, were actually all Making music and dancing together, right?

They were actually all in this experience of nearly continuous rhythm and whatever they were doing and part of the communication process that was not mediated through words and semantics. Like, what does it feel like to be part of a culture where everything you're doing is song and dance in coordination with everyone and that you feel this kind of rhythm with each other and the rhythm of nature?

Most people have no idea that's a thing. And you know, so many things like that. So it's hard to value things that you don't even know exist. And it's hard to let go of the only hits of pleasure you've ever had. And so, even though, when you look at the graph of the reported amount of suicide, I mean, the amount, the recorded amount of suicide for teens proportional to the number of hours per day they use their cell phone, and that as the number of hours goes from a half hour up, with each hour up, the rate of suicide goes up, The team doesn't want to give up their phone, they will completely fight to keep their phone, and don't want to give up the pleasure hits they get associated with the likes they get from the beauty filter on Instagram that is what drives their body dysmorphia.

[01:56:40] Nate Hagens: Right there is another microcosm of our entire GDP focused super economic superorganism culture. Yes, advancement is not betterment. Hmm.

[01:56:51] Speaker 3: And if you have, if you, if you go back to Descartes, so I said, I'd come back to modernity at some point.

[01:57:01] Daniel Schmachtenberger: So there has always been this story all that I won't say always for a very long time.

There's been this histories written by the winner and the winner usually says them winning was a good thing. And, you know, Genghis Khan united the disparate Mongol tribes and Alexander the Great and Caesar, you know, united and expanded their great kingdom and et cetera. So, you know, There was always that element of progress, but it was also kind of bound with appreciation of certain types of tradition associated with religion and whatever associated with modernity and kind of mostly getting like a, decreasing the role of religion and the then kind of rapid increase in scientific and technological progress.

The progress part became almost the entire story and the idea of progress through these new institutions, science, technology, industry, market, democracy, et cetera, became like the dominant narrative. And if you go to Descartes and the Separation of the objective world that you can measure. We can all measure.

We can get repeatable measurements and we can apply science, the philosophy and the methodology of science. And that's the domain of is, right? But that science can't say anything about the domain of ought because I can't measure ought. Right. I can't measure. We can't all independently measure. Is that beautiful?

Is that good? I can independently measure how fast it is or how heavy it is or, you know, how much kinetic energy it has or whatever. So where does the ought come in? So, you know, Descartes is like, well, that's the domain of religion. And it can deal with that stuff, but science can't. And so science is only going to deal with the is.

Well, but the is is focused

[01:58:45] Speaker 3: on

being able to

[01:58:51] Daniel Schmachtenberger: reduce a domain of reality to a model that emphasizes mechanisms that both allows me to predict things and then create the applied side of science, which is technology that can control things. And so it's learn how it. to be able to apply levers to build megalithic construction, right?

It's learn how genetics work to be able to do genetic engineering. It's learn how chemistry and thermodynamics and mechanics work to make internal combustion engines. But if the applied side of is, of science, is engineering, right? What is a good technology? Well, no, no, no, we can't do anything with that, right?

So which thing gets built is, well, where did the money for the research come from? Somebody that has money that is seeking ROI on that money. And so you don't really get science, you get the R& D arm of the market, because the research money is going to be pursuing something that generally has some goal that's associated with it.

And so the profitable extractive, you know, whatever thing And, you know, because science can't say what ought with its methods, because of that division of the subject of universe and the object of universe, which not all philosophies had, even the Greeks didn't divide those, right? And as far as Westerns, and definitely the Vedic system and the Taoist system and indigenous systems didn't divide.

Subject and object and make object that is measurable, repeatably real with some methods and the other either not real or, you know, whatever. So

because when you're just focused on the objects, there is no meaning and, and I can't measure those things, right? I can try to measure a neural correlate when someone says they're in an experience of intimacy, but that's not the experience of intimacy. So. When von Neumann wrote Economics and Game Theory, it's important that it was those two things in the book, von Neumann and Morgenstern, right?

It was game theory, the formalization of the mathematics of how to win at win lose strategy games under uncertainty, and the theory of the market, which was, you know, application of that same principle. So, What is a good choice? Science can't answer, but game theory ended up becoming the best closest thing to what science, a scientifically congruent thing could say is the best answer or a good choice is the choice that doesn't lose.

And so under uncertainty, assume the other guy has more malicious intent, more military, and prepare to not lose under that scenario. And, you know, on and on. And so, That definition of which has nothing to do with good, right? It just has to do with not a particular kind of bad to me, you know, under that uncertainty.

So if you can study the world down to the level of mechanism where you can then engineer to the degree that you can land a rover on Mars and you can split the nucleus of an atom and you can make A. I. s that can beat humans at war games, And you can scale up industrial technology to planetary scales and, and extinct species at scale and make new species with genetic engineering.

That level of technological power in the domain of is applied is not bound by what is actually good in some deeper Understanding, where the only good is that which wins game, theoretically, that choice making system on that level of tech will self

[02:02:52] Speaker 3: terminate in the same way the cancer does,

[02:02:58] Daniel Schmachtenberger: in the same way so many earlier civilizations did.

And so the fact that we have such a powerful system of the study of is that can lead to all that technology, we do have implicit within us the ability to have a comparably abstract and deep and profound system of Ethics or wisdom about the nature of ought to bind that other thing. I know you've had Ian McGilchrist on and the framework of the master and the emissary that the goal achieving has to be bound by picking good goals, and it is not the analytical break all the parts into pieces come up with the metric part that can figure out good goals.

It's the field of I am because we are. So is this a good goal for the totality of we? Am I perspective seeking and feeling and being engaged with the reality for

everybody? Are they all at the table such that it could be? So if we get incredibly powerful at goal achieving with shitty goals, very narrow goals that are beneficial in the increasingly narrow metrics with increasing harm externalization as we're passing thresholds of harm externalization capacity for the planet.

That thing terminates. So to steward that much goal achieving power, we must meet it with what are good goals. What is actually progress? What is worth maintaining? What is worth for sure protecting and maintaining? What do what should be reversed that already harmed things where the actual progress would come from reversing Some of the stuff, not just making more new stuff.

[02:04:42] Nate Hagens: So what if we had the ability to take a hundred or a thousand billionaires, but not just billionaires, but the, the social power equivalent modern day of Kissinger, as you said earlier, and like in Clockwork Orange, like force there's eyes open and watch this entire episode, what, what would such a group of people and.

Beyond, be able to do from the moment we are in 2024 and, you know, the, the metacrisis at its current state, what could we do to step more towards authentic progress and the maintenance of just the good things that make our planet and our civilization viable and, and get rid of the, the bad goals. So there's this quote

[02:05:37] Daniel Schmachtenberger: from General Smedley Butler.

And he called war is a racket. It's very famous. I'll read just the beginning. It's long and people can go check it out. And, you know, I'm assuming people know what a racket is. Racket is like a classic example is a protection racket where a gang will come Rough up a store. So the store thinks that they need protection and the police aren't protecting them.

And then other members of that same gang come offer them security services for sale. And so they are protecting them from themselves for a fee. So they are basically manufacturing the demand and then offering the supply. The amount, if you, if you

look at

[02:06:22] Speaker 3: How much of our

[02:06:26] Daniel Schmachtenberger: modern market and market government system meets the criteria of creating a problem that's a result of some part of market or technology that some other part of market and technology will come to solve, that will then simultaneously create new problems. The whole thing being a racket is actually a very But with that definition of a racket, what he says here is war is a racket.

It always has been. It is possibly the oldest, easily the most profitable, surely the most vicious. It is the only one international in scope. That's not true anymore. He wrote this in like 18. 81. Oh no, 19 something. It's the only one which in which the profits are reckoned in dollars and the losses are in lives.

Racket is best described, I believe, as something that is not what it seems to the majority of the people. Only a small inside group knows what it's really about. It's conducted for the benefit of the very few at the expense of the very many. Out of war, a few people always make huge fortunes.

[02:07:29] Nate Hagens: Plus ça change, plus c'est la même chose.

I mean, again, another microcosm of our situation, but now I'm seeing war in light of this conversation as, as a progress narrative erasing parts of history and writing a narrative for, for the masses that feels good. It sounds about right but is really divorced from what could be possible given our history.

[02:08:01] Daniel Schmachtenberger: people will say that I'm romanticizing indigenous life and don't, I know that there was infanticide and blah, blah, blah. I'm not romanticizing it. I'm saying that the Hobbesian story is the villainization of it. And that's definitely self interested propaganda that justifies evil. And that there was obviously a humongous range of the way tribal people lived over 200, 000 years in different environments with different groups of people.

Oh, this was the unsubstantiated thing I was going to say earlier. Now it comes back. It's the unsubstantiated. So we were saying that there was this kind of symmetry of power that happens through natural selection, that of, you know, where the increase in power happens to this evenly distributed mutation with co

selection, but that when we start developing technologies that increase our, let's say, coordinated predative capability faster than the rest of the environment, it can also be increasing its resilience to it, then we can overhunt an environment.

And rather than have our population shrink, either start farming the environment or move on to the next population, move on to the next environment and start overhunting it. So there is some indication, though it does seem like the, the jury's still a little bit out on some of this, that the extinction of a lot of the megafauna and the earlier hominids was the result of sapiens success at this strategy, meaning it was a extinctionary, including to the other kinds of humans we could be inhabiting the world with early on it.

So the hypothesis I have is that the early indigenous wisdom traditions were learning from some of those mistakes. And there are certainly indigenous stories that indicate this, that when we, Some of them have stories that when they saw the destruction that they were able to cause with their stone tools, they realized that they had to bind them with wisdom and that the kind of wisdom traditions emerge to take more careful responsibility and that there may have been something like one phase of a unrenewability And then lesson that led to a more kind of sustainable phase.

So that's the thing I'm saying is I can't substantiate across the board, but sounds probably at least part of the truth.

[02:10:33] Nate Hagens: You increasingly talk about indigenous cultures, indigenous wisdom and you bring up examples that I've never heard of. How do you learn all this?

[02:10:46] Speaker 3: There are.

[02:10:49] Daniel Schmachtenberger: Obviously, some books and papers studying this, and there are increasingly indigenous people who are becoming scholars who are also, but who speak their native languages and are translating it.

But I've also just pursued making friends with people of that type, particularly the ones who are have studied their own histories and kind of understand modern anthropology, evolutionary theory, sociology, and can kind of explain the parallax

on those ideas. And this is an area I would, I actually really want to invest a lot more time and attention because the thing that we call civilization has been around for a very short period of time.

The thing we call industrial civilization, an even shorter period of time, the, it's the thing we call civilization is fair to call the domestication, the beginning of human domestication, where the other thing was more sapiens in the evolutionary environment, right? We call it wild now. It was not, okay.

They wouldn't have called it wild. And the domestication of humans at scale and the domestication of livestock went together. And this is actually really fascinating, right? Which is the, and we've talked about this before, that the emergence of the plow and kind of ox drawn or, you know Donkey or horse drawn, plow, creating grain and surplus.

You could call the beginning of the Anthropocene where if I'm hunting and gathering, I don't want to change the ecosystem. I want to partake in the abundance of the ecosystem, right? Like maybe within the trees a little bit. But Even if I am digging with a digging stick, like in early horticulture, I can't do vast spaces, so I don't need to clear cut land to allocate it to agriculture.

Once I get, and grains aren't useful in small amounts, but once I can have an ox draw the plow and I can do these vast kind of row crops, now I can get enough grains and I can store them better than I could store other stuff can get this kind of vast surplus. So we can see why the, the ox drawn plow was A massive advancement in the ability for surplus, which meant that you could grow a much larger population.

It meant that you could send that surplus along war routes so that you could support much larger wars. It meant that you could, with that large population, have more specialization and division of labor so you could advance the total tech stack, you know, means all of those things. But with the emergence of the plow was also the end of animism because.

In the hunter gatherer life, sometimes the animal kills me, sometimes I kill the animal, just like in the predator prey kind of relationships, I can pray to the spirit of the buffalo, I can apologize for needing to take its body, I can say when my

body dies and goes into the earth and becomes the grass that its ancestors will eat, that we are part of this great cycle of life and we breathe our spirit into each other, but I can't domesticate that buffalo into an ox and yoke it and beat it all day long and still talk about the great spirit of the buffalo.

And so then we move to man's dominion over kind of models. Religions that the animals, God put us here to rule over, they're all here for us, dominion, etc. And the domestication of the animals where their well being didn't matter, they were here for us, also corresponded with the beginning of slavery.

[02:14:23] Nate Hagens: So that's.

All those things you just mentioned are a story that the winners are telling.

[02:14:29] Daniel Schmachtenberger: Totally. And it's why the indigenous narratives of the early civilization are very different. And it's that the agricultural revolution was not an awesome thing. If the population that does that thing will become a larger population with more specialization, division of labor, and then it will win in war against the cultures who don't.

So one of the insights is that when a new technology emerges, there's two insights here that are important. First is technology is not values neutral. We've talked about this. It actually changes human values because in using it, like if I go walking around in a forest with a camera, what I perceive changes.

Because of holding the camera, I'm looking at different things. If I go walking around with a gun, my perception of the forest changes. If I go walking around with an axe, my perception of the forest changes. The affordance of that tool attenuates my attention to the things that that tool can do something with.

And so the process of even engaging with the tool attenuates attention, right? Changes the nature of attention. And then it also makes a different behavioral pattern. Beating an ox all day long is very different than hunting. It's a, so I'm going to have, agrarian mythos, rather than hunter gatherer mythos.

I'm going to be dreaming and thinking and feeling in those types of ways. I'm going to be conditioning my nervous system based on the movement patterns that

my body's going through in those ways. I'm going to have radically less complex total movement patterns than I had in the other environment, which leads to less complex and dynamic thought and phenomenological patterns and on and on.

So, and then of course, I can't believe that the animal is animistic. And as soon as I do the dominion model, then And they were here for us. Then the women are here for the men and the lower classes are here for the upper classes and the slaves are here for the slave owners and the, and the, what was a forest that we had to clear cut to turn it into ag land is all fine.

And so that model starts to develop. So the first thing is the technology is not values neutral. It will code our attention. And change our behaviors and as a result, change our psyches and societies and heaps of ways. So the externalities of tech are not only physical, they're psychosocial. The next thing is that if that thing confers advantage, game theoretic advantage, it becomes obligate because the people who don't use it will just simply lose.

in power competitions, even if what wins at power sucks for all kinds of metrics of what is beautiful and good. And so the technology is both mind altering, value altering, attention altering, culture altering, behavior altering, and obligate. And this is why the Sabbath was about controlling the use of technology and controlling productivity.

This is why wisdom around when a new technology came out, do we build this or not? And if so, how do we use it? How do we change those patterns? We consider it is necessary. And if you do not have that, then everyone becomes the result of dominant culture, dominant technology, because it has to. The whoever is best at running the system of technological power.

And that was cavalrymen at the time of Genghis Khan, and it was industrial tech at the time of Rockefeller, and it was computer tech at the time of Gates, and it was the people who it is now at the time of AI and etc. Whoever is best at the power associated with the tech stack will also then determine the narratives.

And they will be narratives that support that power stack as good.

[02:18:05] Nate Hagens: So I know you and your organization are working on some pretty important projects yet you spent the time these last few months to write this paper on immature versus authentic progress, presumably because you think it's critical. That people understand this and think about it and presumably because you see some sort of a maybe thin, but narrow, but a path forward where we can head towards a more authentic progress for our fellow humans alive on the planet today and in the future.

Can, can you outline that or are there still foundational pieces?

[02:18:52] Speaker 3: Yeah, so.

There are many famous authors who have contributed

[02:19:01] Daniel Schmachtenberger: to the progress narrative and of why antibiotics and vaccines got rid of pandemics and plagues, you know, and et cetera. And why Haber Bosch and the Green Revolution led to being able to feed so many more people and why you know, on and on, all the good things and why it's getting, why the world's getting better and better.

[02:19:28] Speaker 3: And there's not no truth to this,

but it is definitely cherry picked.

[02:19:37] Daniel Schmachtenberger: It is definitely what is better for those who were not genocided or extincted or killed in war or are still in the positions of poverty that the same system that is offering those things to some is creating for others, right? It's definitely cherry picked in terms of who it's looking at progress for, and it's definitely cherry picked in terms of what value metrics it's considering and which value metrics it's not considering.

It's definitely also framed that the types of value that were destroyed are not even mentioned or talked about. The types of value that are not really real value, they're basically like racket type value, are overemphasized. A lot of the comparisons are decontextualized. There'll be things like in 1815, the average American only You know, had a 1.

50 a day and now inflation adjusted. They have 10 times that or, you know, whatever it is, like, yeah, but they grew their food in a way that didn't take dollars and they made their own house. And like, the idea That dollars were mediating their life was gibberish. That's not true. So you're decontextualizing the fact of dollar as how their life was mediated, which it is now to then is not true, right?

So there's a place where that is. We wrote another paper called How to Mislead with Facts, and it's cherry pick the facts. Decontextualize the facts and then kind of lake off frame the facts and you can make specious conclusions from true facts, right? So that's that story. And so I'm not saying that there are no truths in it, but like, okay, if the, if you take the best examples that there have been, like the, the progress stories, darlings.

You know, Haber Bosch is obviously one of them, which is the creation of synthetic nitrogen. And then, you know, beyond that synthetic fertilizer, which is now, you know, MPK which did make a lot of unarable soil, arable, and did allow us to be able to grow a lot more total crop through, you know, industrial agriculture.

And that did play a major role in the population going from half a billion to eight billion in 200 years. Which is a 16x in population. And as you state, the, in the industrialized world, the resource consumption per capita was not just the food, but all of the energy for the entire system, the energy the tractors are using and the lights, whatever.

And that's something like 100x during that same time. And that 100x ing per capita and 16x ing the capita in a very, very short period of time from what was already kind of a steady state post agrarian revolution, right, which was, had brought the numbers to way higher than they were in that kind of hunter gatherer time, is all using resources from the earth faster than they can regenerate and turning them into trash and pollution faster than they can be processed.

Even calling it resources, right? This is when you were talking about language. The idea that a whale is a natural resource as opposed to a sentient being with its own life is not that different than the idea that a person as a slave is a natural resource rather than a sentient being. The idea that A 3, 000 year old redwood tree is a natural resource because I can make timber out of it.

And we, you know, in business, we talk about human resources, which is not beings that are, whose moms had hopes for them and who are going and who have children and who are going to have deathbed reflections. They are resources that we want to employ in a way where we get more out of them than we put into them.

Fuck, right? Like it is such a, it's such a psychopathological. worldview, the instrument instrumentalizing of everything in that kind of way. So nature is not natural resources. Nature is nature. Nature is all the beings that were here for all this time before we were here and that our life doesn't exist without.

I am because we are right. So you look at the Haber Bosch and you say, okay, okay, okay. Was that exclusively good? That thing where that population grew and the resource consumption grew deficit, but there's a curve that looks at human population and species extinction and shows how closely those are correlated.

And the dead zones in the ocean are the result of the agricultural affluent from the Haber Bosch, right? And like, we're, it's a three quarter water planet and we have 500 dead zones that are the result of that mechanism. And a lot of the health issues that people have are because we're not putting everything that came out of the soil back into the soil.

We're taking everything out and putting three minerals back in. Right. A very tiny subset. So you get micronutrient deficiency. So you look at that darling and you're like, this was not exclusively comprehensively good.

[02:24:35] Nate Hagens: So we're just fixing the prices on environmental externalities, energy, and other non renewable inputs get us much of the way towards real progress.

[02:24:46] Speaker 3: Kind

[02:24:48] Nate Hagens: of, sorta. Because all those negative things that you just said, none of those are in our price system at all.

[02:24:55] Daniel Schmachtenberger: Right. Indulge me quickly on the, this one other example I wanted to give of a darling of the progress story, which is like the

one that is so easy to sympathize with, of who wants to do dentistry in the time before Novocain.

Like, fuck that. That seems dreadful, torturous. Okay. Now, I can't say that I know for sure how dentistry in the time before Novocaine, but in the indigenous world specifically. So this is important. A lot of the dreadful world before the progress narrative was the already civilization system, right? People living in cities during the Dark Ages and whatever, where we saw the great plagues.

Do you have huge plagues that are zoonotic when you don't have animal husbandry, where you have, you know, close proximity with all of the rats and the cats and all of those types of things with the grain stores and the animals that are there inside of large population density urban centers? No. Right?

Yeah, it's a very different situation. And so, so many of those problems, like a high population density city, high population per capita, shitty hygiene, and animal husbandry, you know, in the environment, yes, that's a pandemic breeder. And, but the answer could have been to change the city design, right? Not just, you know, vaccines and, you know, antibiotics, et cetera.

I actually think we might. Underattribute, how much just plumbing and hygiene went to the benefits that occurred there. But so if you look at the, so much of what we think about how barbarous dentistry and medicine, whatever, were was also again in the post, the post Caesar Genghis Khan you know, et cetera, era, the post civilization era.

You go back to indigenous world and Weston Price's work, and I know there are questions on replication and whatever on Weston Price's work, but Weston Price's work went, you know, was involved in founding the American Dental Association. He was looking at the last hunter gatherer tribes. around turn of last century, that had not adopted grain into their diet, not gotten into agriculture because it's not grain in a hunter gatherer.

And he found that they had no cavities. And they didn't have a problem was with wisdom teeth and they didn't have major occlusion issues. They had these amazing teeth, right? This was a huge thing that he documented. And he's like, we didn't just evolve wrong where we have wisdom teeth issues. We're eating a diet that

demineralizes our bones so that we don't actually have the bone density to be able to get that last part.

So we have wisdom teeth. That's also the occlusion issues. And it's also the cavities. These people didn't have toothpaste or toothbrush, but they also didn't have cavities. Then watched when Western diet was introduced, specifically heavy grain. Diet. And they all start getting cavities and having occlusion issues.

So again, from the racket perspective, do I like Novocaine to get my mouth drilled on? Yes. Is it entirely possible that a huge amount of the dental issues were already the result of having solved problems in shitty ways that caused externalities to our orthodonture and to our dentistry itself, where then now you need that thing?

And the right answer would have been a comprehensively different tech stack. Right? That didn't have most of human diet come from something that we didn't evolve to eat.

[02:28:20] Nate Hagens: Do we even, as a culture, as a species, have the ability to measure and govern such complexity? Like, obviously, once Weston Price and other people like him figured that out, was there a vector to change what was happening?

Or was it the racket and the one person in ten that had the dark triad traits just swamped everything else?

[02:28:47] Daniel Schmachtenberger: The direction of more new technology keeps increasing novel, complicating effects that are very hard to monitor. But like, let's say we're, let's say we're talking about humans in a state of nature, right?

Vast majority of human life. civilization. Do we understand how the whole world works? No. Do we understand everything about hydrology and how all the convection patterns work and how all the funguses and bacteria and kingdoms and everything work? No, of course not. But does it work? Yes. And did it take billions of years of radically complex evolution doing distributed information processing to make that whole thing work?

And it's still doing all that. Yes. Okay. So Things that I do that are going to change that whole system in a way that doesn't have any evolutionary precedence, I should kind of go slower. I should kind of like really think through and do some tests and really look at all of the effects. Now, if so,

[02:29:53] Speaker 3: Let's talk about the complexity for a minute.

Let's say we discuss the

[02:30:01] Daniel Schmachtenberger: movement from what we call currently conventional, which is kind of this weird industrial agriculture method where you turn natural ecosystems into basically desertified soil that you spray NPK on, you put highly hybridized row crops in that are designed for combines, and then you spray cover them in pesticides, herbicides, and fungicides that are designed to kill the most robust creatures.

And then humans are both getting trace mineral deficiency, super weird genetics of the plants, dead microbiome of the soil that modulates the genetics of it, and covered in pesticides and herbicides. So then we have all these diseases. So you see disease on the rise. But then the answer is pharmaceuticals.

And they're regulated by the same industry, food and drug. And The NIH puts money into drug studies and stuff, but not into dietary studies, which is why the food pyramid is created by the American Dairy Council and American Grain Council. And you know, so, so you look, there's a racket, right? Of course, it's a fucking racket.

And whether it was designed or emerged through shared system incentives is actually mostly irrelevant to the point. Of course, it's some of both. And, but if you say, okay, Okay. How does soil work in a natural system? Everything that comes out of it goes back into it. There's a loop closure, right? So the tree, when it dies, decomposes into the soil.

The leaves, when they fall, decompose into the soil. The animals that are eating the things, their poop goes into the soil and their bodies go into the soil. Every, everything that comes out goes back in. And it's actually all made of the same

atoms. Right. The same distribution of atoms, basically like six elements that make up most everything in the distribution of trace elements.

If I take stuff out of the soil that involves atoms. All of the living compounds and the complex chemistry, the humic and fulvic acids and the, and the amino acids being produced in the et cetera, and all the trace minerals, and I put back in three minerals that are enough to make something that looks like a plant, but has totally lower amounts of macronutrients and different phytochemicals and et cetera.

Like it's kind of odd. Can I predict exactly every single biochemical change? No. Can I tell that's probably going to have problems? Yes, that's pretty easy to tell. Do I want to not spray things designed to be poisonous to cockroaches that could make it through nuclear war and designed to be poisonous to exoskeleton creatures?

Do I want to not spray poisons like that on the food that we eat? Yeah, that, like, that seems pretty reasonable. And do we, do we not want to grow food in a way that is killing the topsoil that we depend upon, but there should be regenerating it. So you start to look at what are the principles, all the stuff that comes out has to go back in.

There's going to be a balance of things that fix nitrogen in the soil and use nitrogen. The principle set to do it well is amazingly simple. And what is that? This is, this is what I'm giving an example, like in the case of agriculture, like how do you do agriculture properly? Put it, put back in the soil all the things that come out of it.

Make sure that the things that are in the soil have a distribution of the different types of things that are kind of like you find in a natural system. Natural system has legumes fixing nitrogen and non legumes pulling it out. And then it has That's it. plants that naturally repel excessive amounts of insects of the insects that those come to there.

You can see those patterns in nature. So can we build off of that? You know, the kind of permaculture approach that just maps some of what nature is doing. And can we tell that if the trace minerals that are in the plants or in the animals that

eat the plants that we evolved with, Go back into the soil and back into the plants that we're eating.

I can't predict exactly what percentage that will lower MS over what time period relative to all the other multifactors, but can I, versus rheumatoid arthritis versus autism, but can I guess that as we get the trace minerals back in, as we get the quality of the soil up, as we get the pesticides out, following the way the curves of the diseases and the curves of those things happen together, in general, the health of the soil, the health of the plants, health of the ecosystem and the health of the people are all going to go up together.

Yes. And I don't need to try to optimize every, I don't need to understand every bit of how the soil microbiology does everything it does. I have to just pay attention to what it needed to do that evolutionarily and continue to support that. I, but this is that thing again, where I have to appreciate the thing that is already here with its evolutionary complexity and seek to maintain it and make sure that what I'm adding to it is not debasing that which it depends upon.

Yeah.

[02:34:45] Nate Hagens: So in your paper, you outline three strategies to move towards authentic progress. And I'm going to, I'm going to ask you to, to list those in a second, but first I want to read a quote from your paper, progress worth believing in progress that is really about increasing betterment, increasing the goodness in the world must still be able to be considered good once it is taken account of all perspective and externalities.

So for such, here's my question, for such a metric to occur, doesn't there first need to be a culture wide change in our values? Otherwise, why would such a thing come about? There's another

[02:35:30] Daniel Schmachtenberger: paper that we wrote on perverse asymmetries, and the perverse asymmetries are kind of this like entropic gradient, which is if I cut the tree down or I kill a whale or whatever, I didn't kill all whales, I didn't cut down all trees, there are still forests I can access.

I can still breathe the air. So I'm not experiencing that I'm causing the problem at scale. And in fact, I'm not causing the problem at scale. I'm causing some tiny little problem at scale. Papercut towards it, and everybody else is doing that, but the advantage of the tree to my family as timber and selling it on the market is, is profound and obvious.

So there is this asymmetry between how significant the upside is to me versus how, what a tiny part I am of the downside. But then the system dynamics of everybody doing that absolutely ensures the downside and ensures it to be something that will end up affecting everyone. So there's a lot of perverse asymmetries like that, like those who pay more attention to the risks of a technology up front won't win the technological race and first mover advantage is those who pretend that it isn't there or cover it up and make narratives about how positive it is and scale it rapidly.

Ultimately, we have to overcome all of those perverse asymmetries. Because we are powerful enough that we are not small relative to the ecosystem anymore, you know, or small relative to our own survival, our own species capacity. And so this is a, with that much growth of, like, no other species could

[02:37:06] Speaker 3: destroy the

[02:37:06] Daniel Schmachtenberger: ecosystems.

That they depend upon. So they did not have to ensure that they didn't. Because we can, we have to ensure that we don't, right? And this is the whole, the same recursive abstraction that leads to the ability for technological progress and war strategy and business strategy. That same recursive abstraction can lead to the vow of the bodhisattva, and the recognition, the conscious recognition, when men are not the web of life, we are merely a strand in it, whatever we do to the web, we do to ourselves, and extending our compassion to all sentient beings in the universe.

We can expand our capacity for wisdom as much as we expanded for intelligence. We can expand the scope of our considerations of what a good goal is as much as we expand our goal achieving. What I'm saying is we must. Now you're asking, is

there a cultural thing that has to happen? Yes, obviously our culture, as we already said, is being an Shaped by our tools and by our social systems.

So our, our superstructure, our culture, our value systems, our social structures, our economies and governance systems and institutions, and our infrastructure, our tool set are all co influencing each other. All three of them are confluence co influencing each other. So obviously we can't, as you, as you saw when you were in India, you change your environment and something that no amount of moralizing yourself to do would ever work.

It was automatic in a different environment. And so can we achieve cultural change by just moralizing people that they should culturally change while they're still in the environment that is predisposing the culture that is here? No, that's not going to work that well. At the same time, where is the intervention point is some people who already recognize that that's not a culture they value enough.

They recognize the fail of it. They meditate on meaningfulness enough that they actually stop willing to be complicit with it. And not just to remove themselves, which is a step, which some people do, but to say, how do I dedicate my life energy to changing those dynamics, which should then entail a study of change efforts that were well motivated and failed.

And or made worse problem so as to not repeat that to try to understand why that happens to understand what change that would change all that could actually would require and what it would be like now, of course, to really change culture at scale, we have to change the two Technology and what it predisposes, right?

We have to change the social systems. As long as you have an economic system where putting the externalities are externalized and cost, then I can't empathize and take, want to take responsibility for all the harm that I'm causing if I'm competing against someone who's not internalizing those costs, like economically, you can't, that you're economically incentivizing sociopathy.

Through the cost externality. So of course that has to change. And of course as that changes, that makes possible a different value set. And the same way that like the algorithm on Facebook could upregulate for different things, it could upregulate for exposing people to different worldviews and different ideas and

paying attention to only upregulating the ideas that drive common unity rather than, you know, division.

So those are places where culture's affected by technology and social system. But how does it start? It has to start with a culture first recognition of the I am because we are. The version of progress that is good for I, that is not for we is actually not real progress. I, I remove myself from that thing.

I won't participate in the lie of it. And I will dedicate myself to wanting to understand.

What is, what actually be good for the whole and make sure my life energy is in service to that and then progressively that I am participating in things that have more agency to be able to affect that?

[02:41:13] Nate Hagens: So it starts with a change of values and consciousness with some people and that expands upwards and ultimately I think You're inferring that we need a modern day equivalent of a Sabbath superimposed onto the superorganism structure that is leading us into a terminal phase.

[02:41:40] Daniel Schmachtenberger: I want to

[02:41:40] Nate Hagens: speak

[02:41:40] Daniel Schmachtenberger: to imposed people with a libertarian bent will be naturally concerned. By some of what is being said, and I want to speak to them.

[02:41:51] Speaker 3: Okay.

[02:41:55] Nate Hagens: That was my word. I could have used emerge or something, but go on. But we

[02:42:01] Daniel Schmachtenberger: did talk about restraint. And then we talked about if someone wants to do the thing that is more like a cancer cell or more like cause tribal warfare, they're not going to be the ones to restrain themselves from doing it. Other people will have to.

That is something like law. Right. That is something like imposition. And so then we are right to consider how those systems have went in the past. And because using force to curtail someone's liberty has its own problems, even if what they're wanting to do with their

[02:42:32] Nate Hagens: liberty has problems. And that's already in, in the zeitgeist right now.

A lot of people are worried that climate change is such a thing that will cause people to eat bugs and not own anything and all kinds of authoritarian rules.

[02:42:48] Daniel Schmachtenberger: Yeah, and I think if the people who were talking about the eating bugs are the solution and not owning anything were themselves not major capital owners who were not applying those things to themselves, people might feel a little better about it.

But like, The dude that is a hunter gatherer and he eats a lot of crickets and grubs. And if he says like, bugs are good, like nobody's freaked out about that. They're freaked out about a situation of radical wealth inequality and class warfare and the class warfare telling more stories of justifying radical inequality as the, you know, as a solution while they have the largest carbon footprints themselves.

So like understandable, right? So the thing that I want to say is.

[02:43:35] Speaker 3: The,

you, you introduced

[02:43:42] Daniel Schmachtenberger: me to her Vanessa Andrade, who you had on the show, who I had a conversation with and thought she was amazing and really respect it's in her book. She said that her the chief of her tribe, the, his definition of colonialism, she probably said that on your show, but I'll bring it up is that colonialism was not about taking other people's land, fundamentally, or about abuse of land or abuse of people or anything, that those were epiphenomena, that the core of it was believing there are separable things.

And you can say even deeper than that is being conditioned to perceive the world as a bunch of separable things. Which is what Bohm said was the underlying cause of all the problems, which is what Krishnamurti said was the cause of all the problems, which is what Einstein said. So if I believe there's a bunch of separable things and I'm separate from other things, then I can optimize some things at the expense of other things.

And then I can actually rationalize that everything is trade offs and that's how it is and etc. And, you know, then reify social Darwinism and nonsense like that. So the root

[02:44:54] Speaker 3: One could say that the root of the issues is if people

want things that inevitably cause harm to others.

[02:45:12] Daniel Schmachtenberger: That's the root of the problems. Either because they know it causes harm and they want it anyway, so it's some kind of, you know, rivalry or sociopathy or something like that. Or because they don't know it causes harm and it's from, you know, ignorance and externality.

They just want what they want and they're not thinking about what all the cause and effect would be. Because if you then say, great, let's let the, let's let people pursue what they want. And what they pursue getting causes harm and then also creates propagating patterns where to protect themselves against the harm that other people have to do similar competitive things and blah, blah, blah.

And you have a world defined by arms races. But if the other answer is don't let the people pursue what they want, use some kind of enlightened law that says that's bad and prevent it by force, the oppression is inherently also bad. And the asymmetry of. force tends to lead to an increasing corruption of the power stack.

And so neither of those are good. So as long as humans believe that they are separate from everything else, as long as they perceive the world separately, you were mentioning language earlier. And I think similarly, Vanessa was telling you that English has like 70 percent of the words are nouns and most indigenous languages, very small percentage of the words are nouns.

You look at Whitehead as one of the kind of great philosophers of English. 20th century. And the reason he came to process philosophy is he's like, there's no things like the things that we think of as things are processes of interaction of other things, right? A tree is not a static noun. It's the doing trillions of metabolic functions every second.

It's interacting. biophysically, with the sun and the air, it's interacting biochemically, it's interacting biologically, doing gene transfer with the fungus on its roots and the soil microbes, like the tree is in a live process. It's a verb. It's lots of verbs. And the idea that it's a noun just makes us think very poorly, makes us very bad thinkers.

And the fact that we're thinking in nouns all the time and built into our language is making us bad thinkers at scale that we don't even realize because we don't know what it's like to have a language that doesn't see the world as a bunch of nouns that are all separate.

[02:47:17] Nate Hagens: So changing how a lot more humans perceive their relationship to others, to nature, to the whole is kind of a necessary prerequisite for authentic progress.

[02:47:31] Speaker 3: Yes, because if I,

[02:47:34] Daniel Schmachtenberger: I was I was just

giving this example to someone, I'm going to, A little kid who's at the phase when they say, what is that? What is that? What is that? Right. And they're trying to understand, they're trying to like, learn what all of the things are, the anatomy of the universe. And that phase usually happens right before the phase where they say, why, why, why, why, why?

Because they're, they're trying to learn the phase. Yeah. The mechanics, the, the dynamics of universe. The kid says, what is that? And they point to a thing we call a tree. I don't say that's a tree, or more specifically, that's a spruce tree or whatever, because that's going to teach the kid a bunch of things.

It's going to teach them to just accept the default worldview and not think for themselves. It's going to have them confuse the ground reality with a symbol. It's

going to have them Think in generalizations of now understand what are trees and what are not trees, generalize all of them and stop perceiving uniqueness.

It's going to have them, you know, like it does all that stuff to them, right? So the kid says, what is that? And I'm like, let's go closer. And we go closer and I'm like, touch it. And touch the leaves and then touch the flowers and touch the bark and, you know, touch all these parts. And like, what does it feel like?

And then smell it and then notice the other little animals in it. And and then, you know, just have them engage in that way. And then say, do you think the tree stops there? Do you think, what about this moss that's growing on it? Is that part of it? Or is that not part of it? What about the the soil?

Is that part of it or not part of it? And, and then I'm like, what do you think it is to that squirrel? What do you think it is to that little bug? What do you think it? It is to itself. And, you know, what do you, what do you feel when you're with it? And eventually we'll come to, in English, we call this a tree.

In Spanish, they call it arbole. And in this language, they call it this and the different kinds of things. But this particular one, notice that if we go look at this one, they're different. And in fact, this one, there's not another one in the entire universe quite like it. And it's not even the same as it was yesterday, and it'll be different today.

So the only way to know it is to be with it fully, more presently in this moment. And, you know, so imagine if kids grew up that way, rather than that's a tree, memorize its Latin name, understand the botany associated with it, blah, blah, blah. Like, then they're using much more of their whole self to understand Reality in a much more full, rich way that understands that that same thing is different from every different perspective and so many different contexts.

And and so if someone is perceiving if they are supported to perceive the uniqueness of everything and the interconnectivity of everything. That nothing is fungible and nothing is separable. Nothing can be standardized without actually causing harm and nothing can be optimized at the expense of others without causing harm.

And they get that uniqueness interconnectivity of everything and they get I am because we are for a we that extends to the stars. And then what they want that comes from that first hungry ghost desire is not the main thing that emerges. This like awe and fulfillment and fascination and gratitude emerges from that connection.

And it's actually the lack of that connection that leads to the hungry ghost place that needs more and more hits and progress. So the first thing is just not that much desire emerges in the same, the same way. And then the desires that do emerge are in connection with. everything else that I'm connected with.

Like, is it, will it be good for the tree? Is it bad for the tree? What about the squirrels in the tree? I just spent time commuting with them. I love them. I wouldn't want, it wouldn't be good for me if it hurt those squirrels. Now, the desires that arise for people who are in connectivity with their inner, who are clear on their inner connectivity with everything, those desires can be pursued in a way that doesn't harm anything because their own identity is not separate from everything because their perception is clear.

[02:51:46] Nate Hagens: What percent of humans alive today would have to have such a value and consciousness change to effectively change the superstructure, social structure, infrastructure going forward? I don't want to critique

[02:52:05] Speaker 3: too harshly, but if you look at what we said, that

[02:52:11] Daniel Schmachtenberger: since the climate movement started, all of the work that has happened has not been actually empirically decreased the fact that fossil fuel use goes up every year.

And emissions go up every year. Yeah. And the environmental movement has not changed the fact that more tons of pesticides are used each year than the year before. And that species extinction continues. Even the, the not market seeking best motive There's clearly something off with how we're doing stuff, right?

Like, clearly, we don't just need more of that thing that not only is not effective, but then makes nuclear and dams and other things that don't get off fossil fuels and

cause other problems. So there's the mind that was conditioned by this kind of system can't avoid making more of this kind of system.

It is part of an autopoietic process, and there is a need to extract oneself from it and then actually

deprogram the, the nature of that kind of mind that started by a language of nouns and perceiving everything as separable and separate and then in rivalry and from a place where I think my fulfillment comes from status and getting things and just all the nonsense, right, to where there is a mind that's That in a being whose motive is not what's in it for me, who actually feels a fulfillment that they get to exist at all, who feels in awe that they have already got to see sunsets in color, feels a fullness in that, whose motive is actually in service of future beings that they get to keep experiencing it.

And their desire to protect and maintain and serve life and that can perceive the interconnectivity of things enough to not overfocus on one part in a way where the solution to that part will externalize harm elsewhere without realizing it. So if one wants to really not participate in causing more harm and maybe really change something, one does have to look at how this system has actually conditioned their own mind.

and how they understand what problems are and what solutions are and how to figure those things out and how to measure them and how to scale them and how to all, all like that and come to say, like, how does nature work and how do I understand how nature works such that I can work in a way that is aligned with that?

[02:54:47] Speaker 3: And yeah, there's, there's profound deconditioning and re and new learning that has to happen.

[02:55:02] Nate Hagens: It feels right to me because. I've experienced it and I noticed it in you since I first met you, even just the change in your language and, and some of your ideas. I have 12 questions that I had prepared after reading your paper and we're already three hours in.

So I think we're going to have to do a part one and part two, but, but let me ask you this and then get your input on how you'd like to proceed. Here's another quote from your, your paper. Philosopher and psychologist Eric Fromm wrote that optimism is an alienated, alienated form of faith, pessimism, an alienated form of despair.

If one truly responds to man and his future, in effect, concernedly and responsibly, one can respond only by faith or by despair. Rational faith, as well as rational despair, are based on the most thorough, critical knowledge of all the factors that are relevant for the survival of man. So with that quote, Daniel, what, what are your goals and the organization that you work with, with publishing papers such as this one on immature versus authentic progress?

What are you hoping to lastly, how can our viewers help? Yes,

[02:56:29] Daniel Schmachtenberger: this is another open loop. We were talking about about kind of how the progress narrative really accelerated post modernity. That if one has that story, that things are getting better and better because of tech, which also includes having written the history as and alternate realities as, you know, worse than they were.

And someone doesn't think about all the externalities. They think about the That's it.

The default assumption is that when new tech emerges, it'll cause some problems until we figure out how to use it. Then we'll rightly regulate it. And net net, it'll be good. Right. That's kind of the default assumption. And so then that default assumption, when we look at technologies that have radically more powerful than anything, power than anything we've ever touched, that scale faster, that have more complexity or more not understandable and more unregulatable, like AI, like synthetic biology.

The default assumption will be it, it'll probably be net positive. It'll cause some problems. We'll figure out how to solve those problems. And I actually don't think a right assessment of the history of technology warrants that, nor do I think these technologies currently warrant that as the right assumption.

And so in the face of exponentiating technology, that is also exponentiating destructive capacity. And it's not just destructive capacity through its militarized uses. It's even through its market uses, doing a thing that we want that is narrow progress, that's driving externalities more as we pass planetary boundaries.

If it is,

[02:58:19] Speaker 3: I, I want more people

[02:58:22] Daniel Schmachtenberger: to have a A a wider kind of clearer worldview through which they can look at things that are being called progress and promising a better future to be able to look at the issues that are emerging right now and have a different default assumption. And a different, like, where should burden of proof be?

Actually, some of these things are so harmful. Burden of proof should have been proving lead was safe before putting it in gasoline and aerosolizing it to everybody, as opposed to having irreparable harm that could never be addressed and then regulating after the fact. Um, and so Where there is truly existential risk portended, burden of proof shouldn't be that it is really dangerous.

It should be, we actually have to prove adequate safety through doing a detailed enough analysis of what those untoward effects will be before we rapidly scale the stuff. So that was the reason that we wanted to put that paper out now is because the rate of technological I will not call it progress.

I will call it advancement because it is definitely increase in goal achieving with it, with not the refining on what is a good goal without changing the economic incentive that leads to externalities and all like that. But the rate of technological advancement is definitely in the verticalizing part of the exponential curve.

No one can actually really understand The speed and the portent of it. The fact that now, you know, that there was nothing like Moore's law, right? It, it, it historically, and it kind of ate the world. And that was progressive doubling of compute power every couple of years. And just the hardware on GPU based AI will 10X in the next six months.

You know, the power will 10X in six months, not 2X in two years, right? And then in six months, it will do it again in less time than that. And the software and the parameters and the data are also an exponential function.

[03:00:25] Nate Hagens: 100X in less than a year? Probably. Something like that.

[03:00:31] Daniel Schmachtenberger: And if you look at, I think it's a million X increase in the last 10 years.

[03:00:38] Speaker 3: And so, you

[03:00:41] Daniel Schmachtenberger: know, and if you take something like AI, where we're developing it for increasing generality, It is basically a general purpose goal achieving tool. Do you want to beat people at chess? Do you want to beat them at Go? Do you want to beat them at Starcraft? Do you want to beat them at missile targeting?

Do you want to beat them at protein folding? Do you want to beat them at comprehensive war planning or high speed currency trading? Great. Let's increase the ability to do all those things. The technology will be developed for one purpose and we'll focus on the upside of that. But when the Cost of the technology becomes cheap for that purpose.

And then the affordance allows everybody to advance every kind of goal. That has to be really thought about as part of the externality

[03:01:23] Nate Hagens: set. I, I, the AI is another conversation that I want to have with you, especially with respect to, to climate change and the environment, but on this topic. Isn't AI being trained with the old linear model in English and with all the perceptions of what we just discussed of, of, of progress.

And isn't it like an exponential layer of the same on top? Like you said, as humans, we have to change our perception of our relation to the whole. Isn't AI like being fed zillions of times more the perception of the, what we don't want? Yes, but worse than that,

[03:02:11] Daniel Schmachtenberger: it does not, you know, it has the ability to already do goal achieving, obviously.

It does not have the ability for empathy, which means that goal achieving without empathy is sociopathic. I'm not saying

[03:02:24] Nate Hagens: sadistic, it doesn't have interiority. Oh, so, so AI is only a dark triad, not a dark quad.

[03:02:30] Daniel Schmachtenberger: The whole conversation around will AI develop sentience or not is another thing. More importantly is that AI doesn't operate by itself.

It operates inside of companies and inside of militaries with the people that are there as part of a cybernetic system. So it already doesn't have to be completely general to be part of a cybernetic system that is general. Because what the AI does, what other types of AI is, so the whole cybernetic system as a hybrid of cognitive architectures, plus what it predisposes the people to do, you know, is actually

[03:03:03] Speaker 3: the thing that's being selected for.

So, as we're in a

[03:03:13] Daniel Schmachtenberger: place where technological advancement is speeding up, it is being sold as the solution to all these problems. They're problems that our previous technological success has caused. The harms of these technologies are being downplayed. Everyone is racing as we're crossing planetary boundaries.

It would be better if more people understood what is wrong with the progress narrative and understood what the Authentic progress actually entails and understood the caution and restraint that it requires understood the emphasis on maintaining understood that very often the best way to solve a problem is to remove its causes, which actually involves reversing some stuff rather than always create new stuff.

But the obviously market incentive is on create new stuff. The history books incentives on create new stuff. But as we think about how do we actually solve problems in a way that isn't a racket, right? That isn't solving a problem that was caused by the result of our previous problem solving and that will in turn create more of that.

First, we have to say, is this actually a problem? Is it bad that food perishes? And that's a problem to solve through artificial preservatives and making Twinkies that can last 25 years, as opposed to like fresh, Vegetables that start to decay. Or is that not a problem? It's actually a feature of reality we should interact with and embrace.

There's that meme that shows a picture of a rambunctious kid and it says Ritalin easier than parenting. Is, Is our children wanting our time and our attention a problem that we need a technological solution like an iPad for? Well, yes, because we have to work because of all the other parts of the system.

But like tribal life was the kids and the old people spending tremendous amounts of time together as the center of civilization with everyone else spending time supporting that. And so the first part of problem solving is, is this even a problem? Or is this actually a feature of reality that yes, it requires, like, do I want to automate every single thing that requires muscular engagement where then you have a society of obese people with brittle bones and like that?

Or do you actually want that? Like, All the dynamism of our bodies and the development of strength in them is actually important. It's actually required that I don't want to automate all those things away. Do I want to remove every kind of pain like, Oh, your family member just died until you feel depressed?

Here's a here's a psych med to take your emotions away. Is it a problem that you're feeling emotions? And the answer is a technological solution like a psych med. Or is in the exploration of those emotions, the possibility that you can have a meaningful life at all? Because you understand that everyone you know and love is going to die.

You're going to die. What is meaningful while you're here? Why did, what does it mean that you loved that person? That you're in deep question. Some of the

depression is like, I was a shithead to that person. I didn't express my love to them as much. I was too busy working at my job. To have a cost of living of shit that has a bunch of stuff that doesn't actually make me happy, but that I think that I need and I feel sad and I realize that maybe I'm not going to stop and then I'm going to die and there aren't going to be that many people who are that touched by me and like, fuck, maybe that depression is exactly what the fuck you need to reflect and make a meaningful life change, not a psych med.

So the first part of problem solving is. Is this a problem that needs a technological solution, or is this a facet of life that I actually need to embrace and be with? The next step is, if it really is a problem, what caused it? Was this always the case and it's a feature of reality, or was this caused by other things we did where the first step is undo the causes?

As opposed to ameliorate at the symptom level, those causes continue to express somewhere else. And, you know, so there are these kinds of steps of what would it mean to engage in problem solving in a way that does not cause more problems. And it is possible. And it does result in the possibility of having us have what we add to the world be actual progress, meaning actual betterment.

But it is different in process and different, different in process and different in motive in almost

[03:07:37] Speaker 3: every

[03:07:37] Nate Hagens: way.

[03:07:40] Speaker 3: Is there a third step?

There's some

[03:07:42] Daniel Schmachtenberger: papers we're going to publish on the processes that you can walk through and they're not formal, they're not algorithmic, they're, they're principled kinds of reasoning. Like, is this really a problem that needs a technological solution? Or is this a facet of reality to be with? Is this, what were the causes?

Have I traced it back to the causes? Do I understand them? Do I understand the cause of those costs? You know, like those kinds of things. One of them is yellow teaming. Yellow teaming is once we decide there is a. Thing that we want to create, whether it's a law or a business or a technology, because there is some thing where we've addressed the upstream causes, et cetera, and there's still something to develop, then I really want to think through if this thing succeeds and solves the narrowly defined definition of a problem, what is the totality of the effects of it succeeding on all the other areas and where is it going to externalize effects because it's going to have effects other than that one area.

And if it externalizes more positives, awesome, that's a good sign that it's in the right direction. for tuning in. And if you look at like a tree, a tree does a million positive things for a million entities over a million timescales. Right? The tree is causing benefit to squirrels and to butterflies and to birds and to insects and to soil microbes.

It's stabilizing topsoil and holding moisture in the ecosystem and causing transpiration and keeping the river clean and the banks of the river. So, like, positive externalities are actually the result of good design based on understanding the interconnectedness of things. Negative externalities, where you don't understand the interconnectedness, you optimize it for a narrow thing.

See you next time. So, the yellow teaming is the thinking through the network of relationships and causal dynamics such that you look at the externalities, both physical and psychosocial, see where there are possibly harmful ones and say, either we don't do the thing or how do we design such that that's not the case, that the externalized effects are positive.

And that is actually possible. Not perfectly, but progressively better.

[03:09:37] Nate Hagens: It's sometimes with increasing frequency, it seems to me that we're waking up as a species at the exact time the clock is running out. That's the hope. That's the possibility. Yeah. So isn't a paper in the public domain at a podcast about naive versus authentic progress a tiny sign of authentic progress?

[03:10:04] Speaker 3: There are signs of authentic progress in the world. There are. There are

[03:10:10] Daniel Schmachtenberger: more people that kind of care about deep ecology. There are more people that are interested in thinking about long term future as well. You know, there are more people interested in approaches to healthcare that are not exclusively you know, allopathic healthcare.

[03:10:33] Speaker 3: Currently, The rates of growth of

[03:10:41] Daniel Schmachtenberger: the things that are moving in the authentic progress direction versus the narrow progress harm externalizing direction are not adequate. Right. And like I said, many of the things and everybody that is contributing to the meta crisis thinks that they are contributing to real progress.

Right. I'm, I'm providing a product or service that the market wants, which means there's demand for it, which means it's increasing. It's solving some problem for someone that makes their life better. And I'm employing the tools of science and technology, which is this awesome system that allows us to understand the world in a unified way and improve things.

And like, that's, that's The story. So it's like the, and that's why people can come out in such defensive fossil fuels of look at all the things they give us. And you know, and of the market and, and they do, and they give all of these externalities. And while that has benefited some and sucked for others, it also benefits some dimensions of self and sucks for the dimensions of self, even for those most being benefited.

And it is in the process of self terminating where it will be a benefit to nobody. No one. In which case, the, damn, I really don't want to be complicit with that thing. Damn, I really don't want to just, what's best for me and my family is continue to have optionality tokens. And damn, I don't want to try to make things better where I end up making them worse because I am coming from the same type of mind that engages in rivalry and cause, does a movement in a way that creates counter movements and that optimizes for one thing in a way that ends up causing harm elsewhere.

So I want. That the activism, the protection impulse in me reconnects to the source of reality deeply enough that I know how to participate, that I'm guided in how to participate in a way that is actually meaningful. So I would actually like to see a

slightly slower movement into action, a deeper movement into withdrawal, and a deeper understanding of the history of well intended failed actions more rigorously, it's very painful, and a deeper being with the emotions about the whole thing and really taking it all in and noticing how much of our desire to make it better is still ego, is still um, An avoidance mechanism for not wanting to feel it is still a problem solving mode that is reductionistic that will end up contributing to it

[03:13:27] Speaker 3: and like letting that stuff settle to get to a place

[03:13:30] Daniel Schmachtenberger: where one can engage in how to shift the system dynamics of the world in a way that are actually what's needed.

[03:13:40] Nate Hagens: Here, here. Once again, you have surprised me. I read your paper. I understood it. And this conversation went in a different way than I expected. What would you like from our viewers?

How would you like to wrap this up? And what are next steps?

[03:13:57] Daniel Schmachtenberger: You mentioned 12 questions that we didn't get to and, you know, some viewers may have questions, thoughts. So if there are interesting questions, then maybe we can do a session two. Particularly if once we publish some of these papers, people have questions on them because we don't have where we're publishing them, the ability to answer them there.

I think the thing that I would hope

[03:14:19] Speaker 3: people leave with is

[03:14:25] Daniel Schmachtenberger: deepening appreciation of it. The tremendous amount of non human activity that it took to make the world that you exist in, the incredible preciousness and miracle of it, and the desire that the thing that makes your life and the life of everyone you love possible, you want to have occupy more of your attention than it does now.

And That the places where your attention and your time and your energy are occupied by the result of a system that resulted from selection of coordinated violence and like that, that you really want to root that out of your

[03:15:16] Speaker 3: own self and psyche. And, and you want to just like appreciate the, the universe and world that gives rise to the

[03:15:30] Daniel Schmachtenberger: possibility at all, and then seek to explore how do I, there's something like a vow, like a Hippocratic Oath that's like, I, I'm not willing in pursuing a narrow definition of advancement for me or whatever, or in being complicit to cause harm to this like miraculous world.

Not willing. And I'm going to look really carefully at what does that. And rather than jump so quickly to, well, yeah, but I can't because I have to work, whatever, try a little harder to say, do you have any other possibilities? Like, don't jump to your own lack of agency so quickly. Like we said about the billionaires that would say, Oh, I don't have agency relative to the thing.

Well, like, how long did you spend thinking about it? Like, how many options did you really pursue?

And

[03:16:20] Speaker 3: and I think the combination of

[03:16:29] Daniel Schmachtenberger: the removal of some of the energy from this work. world system, the increasing appreciation of the natural world, and the commitment to both not cause harm, the study of what does, and then the commitment to be part of what can actually protect against harm can result in, like, that is the movement.

Or the set of cultural shifts that I would really like to

[03:16:59] Speaker 3: see.

[03:17:02] Nate Hagens: That's a hell of a start, my friend. For my part, it's about a half hour away from being dark here in Minnesota, and I'm going to bid you goodnight, and I'm gonna go sit by a tree. And reflect on it's not just a tree and all the processes and parts and relationships and just do a little bit of a pre uh, dusk sitting that this, this was a lot.

It was beautiful and wise and has given me much to think about. Thank you for all your work, all your thought, and all your efforts on behalf of our planet, the future, and all of us striving to play a role. Thank you, my friend. Likewise, my friend,

[03:17:52] Daniel Schmachtenberger: it was a

[03:17:52] Nate Hagens: delight to be with you

[03:17:53] Daniel Schmachtenberger: today.

[03:17:56] Nate Hagens: If you enjoyed or learned from this episode of The Great Simplification, please follow us on your favorite podcast platform and visit thegreatsimplification.

com for more information on future releases. This show is hosted by Nate Hagens, edited by No Troublemakers Media, and curated by Leslie Batlutz and Lizzie Sirianni.