Nate Hagens (00:00:02):

You're listening to The Great Simplification with Nate Hagens. That's me. On this show, we try to explore and simplify what's happening with energy, the economy, the environment, and our society. Together with scientists, experts, and leaders, this show is about understanding the bird's eye view of how everything fits together, where we go from here, and what we can do about it as a society and as individuals.

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(00:00:33):
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Jon Erickson is the David Blittersdorf Professor of Sustainability, Science, and Policy at the University of Vermont. Jon has published widely on energy and climate change, land conservation, watershed planning, public health, and the theory and practice of ecological economics. He advised presidential candidate Bernie Sanders on economic and energy policy, and Jon also happens to be my PhD advisor.

(00:01:02):

When I record these podcasts, I get an immediate gut feel on how good the episode was, and this conversation with Jon was great. We talked about his new book, The Progress Illusion: Reclaiming Our Future from the Fairy Tale of Economics, where we plumbed the depths of the human predicament and outlined what a reality-based economic structure and future might look like. Please welcome my friend, colleague, and PhD advisor, Jon Erickson.

(00:01:35):

Hey, Jon.

Jon Erickson (00:01:49): Nathan John Hagens, how are you?

Nate Hagens (00:01:51):

I am well. Good to see you.

Jon Erickson (00:01:53):

You too.

Nate Hagens (00:01:54):

Although we're very old friends, I do feel some small psychological trepidation on seeing your face that I didn't turn in a paper or I didn't pass some-

Jon Erickson (00:02:06):

You had an assignment, though, an important one.

Nate Hagens (00:02:09):

To read your new book?

Jon Erickson (00:02:11):

Yeah, and you told me two days ago that you only had skimmed it. So I've got a quiz.

Nate Hagens (00:02:17):

Well, I could probably, without reading it, answer a lot of the questions, but I am guilty of a Japanese word called... which is those people who buy far more many books than they're able to read. So I'm in that camp. So we have a lot to cover. Let's just get this question I've always wanted to ask you out of the way right out of the bat. How much of a pain in the was I as a PhD student?

Jon Erickson (00:02:44):

Oh, boy. That could take up the whole podcast.

Nate Hagens (00:02:47):

All right. A real short answer then.

Jon Erickson (00:02:49):

You were the good kind of pain in the ass, not the kind that needs, what's it called, Preparation H. You were more like a constant kick in the ass, kick in the ass to me to be a better teacher, a better scholar, a better person.

Nate Hagens (00:03:04):

Wow.

Jon Erickson (00:03:08):

So I was very thankful for your kicks in the ass.

Nate Hagens (00:03:09):

Well, I was there in 2004 is when I started, and I was there until 2010, and that was the heart of my curiosity about the world. Now, I understand, of course, I'm still learning. I don't understand everything, but-

Jon Erickson (00:03:23):

You came to us after this epic journey, right?

Nate Hagens (00:03:26):

Yeah. Well, I quit Wall Street because I was like, "What the hell?" This is happening during my lifetime. Then I went hiking for six months with all these books from Herman Daily and neuroscientists and everything, but I think when I met you and you agreed to be my PhD advisor, other than Jay Hanson who tragically died a few years ago in a scuba accident, you were the first human that I ever met that had integrated all of it, energy, ecology, human behavior, social hierarchy, the whole anthropological story of humans.

Jon Erickson (00:04:03):

Trying, trying to integrate.

Nate Hagens (00:04:05):

Trying, of course. None of us have all of it, and I discovered things every day that I knew nothing about before.

Jon Erickson (00:04:12):

One of my favorite science fiction authors is Ursula Le Guin, and I always use this quote from her to her own students. She always said, "There are no right answers to wrong questions," and to me, you're always someone asking the right questions, and that's a damn good starting point.

Nate Hagens (00:04:28):

Well, thank you for that. So I've known you almost 20 years. Let me just start with this then. How has your view of the world or the human ecosystem or our economy and how everything fits together and in turn your work changed since I met you 18 years ago?

Jon Erickson (00:04:47):

It's been that long, huh? I don't know that my basic worldview has changed all that much, this belief system that I have of an embedded human in a society, an embedded society in an ecosystem, that these systems are all interdependent and that the dangers of isolation, isolationism, especially in my field of economics, is what has caused most of our problems.

Nate Hagens (00:05:15):

What is isolationism? You mean reductionism?

Jon Erickson (00:05:17):

I mean more from distancing the field of economics from other ways of thinking, other ways of knowing, other cultural experiences. Being that isolated discipline, often a very powerful building somewhere on a campus like ours, isolated from other worldviews. So I don't know that my basic worldview has changed all that much, but I think since we met, I've become more expansionary maybe is the right word. When you're young, you don't think you have biases. So I think trying to come to terms with my own biases, escape the constraints of my culture and my gender and my own dogma, not just coming to terms with the failings and illusions of economics, but really coming to terms with the whole colonial point of view that economics and many other social science disciplines tell. So I think I've been on that journey, and I think I'm spending more time than ever on communicating ideas rather than puzzling out the ideas themselves.

Nate Hagens (00:06:26):

Good. So you've learned or you've embraced more humility and the long-term arc of humans and cultures that brought us to this moment.

Jon Erickson (00:06:37):

I think so. It's tough to get out of your own way. It's tough to step out of your own comfort zone. I've prided myself in a career where I've stepped out of the comfort zone of my own training as an economist, but it's more challenging to step out of my comfort zone as a White male, cisgender individual in a Western society, and that's the harder journey.

Nate Hagens (00:06:59):

How much of that impetus that you just mentioned is self-realization and reflection, and how much of it is because of the current trends in universities in North America are headed toward that direction and you're surrounded by people with that same attitude?

Jon Erickson (00:07:19):

Probably both, probably a little of each. Like you, I read a lot and like being out of my comfort zone, like being on that learning edge or the steep part of the learning curve. I love it. In fact, I'm much more of a generalist than a specialist. I like being in that danger zone of knowing a little bit about a lot of things, but yeah, boy, the students that we have nowadays have raised the ante. They really are demanding much more from us, really questioning where that idea came from or that assumption was built on and really challenging us to embrace, thankfully, a richer, more respectful, deeper sense of humanity than just quoting the other White males that built the disciplines that our PhDs were founded on.

Nate Hagens (00:08:12):

Well, speaking of a White male who is also recently passed, I remember the first couple years that I was at University of Vermont under your guidance. You carried around this dogeared, tattered version of E. O. Wilson's book, Consilience. I actually have a mental picture of it in my mind. It had a black cover with white labeling and it was just beat to heck. You referred to this as the Bible as it explains so many things about the human condition. Can you give a summary of the main aspects of that book and why you felt that way? I guess more importantly, do you still feel that way?

Jon Erickson (00:08:52):

The book Consilience by Ed Wilson, 1998, I still think today it was a masterpiece. It is a masterpiece. This is somebody who, like we were talking about earlier, has had multiple careers in a way and multiple times where he has stepped out of his own zone as a biologist, as and entomologist, as a scientific writer. This is to me the Charles Darwin or Rachel Carson or Adam Smith for that matter of our time, someone who was breaking from the mold, and in the case of Wilson, someone who was willing to apply widely accepted concepts from science to ourselves, to the human animal, and

to study us as if we were another one of the ant species that he was tinkering with or thinking about.

(00:09:44):

He really broke open some huge doors on the study of human nature coming to terms with both our biological constraints, our moral instincts, founding a field called sociobiology, which was very controversial at the time as much today, but still ruffles the feathers of my fellow social scientists. Consilience, this idea of jumping together of knowledge, is he's certainly not the first person who tried to do that, to try to tell a story that weaves together insights from many disciplines, many ways of knowing, many life experiences to this ultimate prize of one integrated way of thinking about the universe.

(00:10:30):

I don't know that we'll ever get there, but I think the journey that he has charted in Consilience is well-worth the time and effort. A field like ours of economics, we are probably one of the least consilient disciplines out there. We're one of the most disconnected, the most isolated as we were talking earlier in the academy. So Consilience, to me, was just this breath of fresh air to say, "Here's the test. Here's the test for your field. Do the theories in your field. Hold up against the theories of all others."

Nate Hagens (00:11:04):

Well, we're going to get to that, and we're going to talk about energy and the environment and the biophysical side of things, but the way that you and I really intellectually and in a friendship way bonded in 2005, 2006, 2007 is our fascination with human behavior and the evolutionary trajectory that finds us here in 2022 trying to replicate the emotional states of our ancestors, and this is still not widely understood. So why do you think that understanding human behavior from an evolutionary perspective is so important to society steering towards the most benign human and planetary future outcomes?

Jon Erickson (00:11:52):

Evolutionary biology is one of the bridges from which we can build a more consilient worldview. Evolutionary biology is the study, is the field that has tied together physics and chemistry and biology. It is the way that we've been able to link together things from the atomic scale up to the continental scale from DNA to plate tectonics, and to make that bridge from the natural sciences and their relative consilience to the social sciences and humanities is this frontier. It's a really exciting frontier.

(00:12:30):

To do that, you just have to include culture in your definition of environment. Environment, in an evolutionary biology point of view, puts selective pressure on the species, on groups within social species like ours that then push the evolution of new traits, new characteristics, new ways to survive.

(00:12:54):

Culture does the same thing in social species. So if you think of our cultural environment, putting selective pressure on the individual and on the group, all of a sudden you've got to bridge between the natural sciences, social sciences, and humanities. You've got a way of explaining the taste for art or architectural preferences or commonalities and language across cultures or all of the hundreds of things that we find that are consistent across human cultures weighed against the very few things that are inconsistent across human cultures, opposite ends of the spectrum of thinking of the human condition.

Nate Hagens (00:13:34):

So would a standard neoclassically trained economist just categorize all those preferences under one umbrella term of utility or how does conventional economics treat evolutionary psychology and the things you were just talking about?

Jon Erickson (00:13:52):

I think economists, when they're pressed to think about our evolutionary history or pressed to think about other ways of human choice set making instead of just this very narrowly conceived rational actor model, they used the word you just said, utility. They said, "Yeah, it's all utility maximization." You want to account for unselfish behavior, it's because it gives you more utility. You want to account for humans cooperating out of interest of the group and not the person, sounds like utility to me. They've taken this narrow view of utility maximization and tried to wrap everything into it.

(00:14:32):

So a book like mine or concepts from evolutionary economics or ecological economics, mainstream says, "Yeah, we know that," but then they continue to practice and preach

a very, very narrow, narrow, narrow, narrow version, a very small slice of the human persona and then try to fit their policy advice and management ideas and all of their influential foundations of fields like business and economics and political science and anthropology and psychology into this box of narrow self-interest. That's when they start to believe the model is the reality and when the rubber really meets the road in terms of creating huge problems.

Nate Hagens (00:15:18):

So we're going to get to your book, of course, but let me ask a few background questions. So you are one of the better known ecological economists. What is ecological economics, and in contrast, what is heterodox or orthodox economics? Let's start there.

Jon Erickson (00:15:39):

Sure. Heterodox versus orthodox. Heterodox implies that there's more than one story, there's more than one perspective, there's more than one framing of the purpose of the economy. So there's feminist economics and social economics and institutional economics and degrowth economics, and there's ecological economics. Ecological economics fits comfortably within this heterodox view, that there's not only one way of thinking of the economy, one orthodoxy, but there's lots of ways.

(00:16:09):

Ecological economics happens to be, I believe, one of the bigger umbrellas, which is strength, but can also be problematic with a particular concern on the 21st century problem of the size of the economy relative to the supporting ecosystem, the fairness of distributing the benefits and burdens of economic cooperation and, yes, also the efficiency of the economic system, which is the obsession of orthodox economics. So ecological economics is a more holistic, a more systems-oriented version of economics that really pays attention to this relationship between the economy and its supporting social and ecological systems. Doesn't treat the economy as this isolated thing that has its own rules, but it's interdependent on healthy societies and health ecosystems.

Nate Hagens (00:17:01):

So is economics and economic theory akin to a religion in that it's a belief and there are many different flavors of belief or can some economic theories be more true than

others? So said differently, shouldn't there ultimately be just one field of economics, one economic theory that's true because it's made it through all the gauntlets of the various testing periods?

Jon Erickson (00:17:30):

That's a great question. In fact, Wilson accuses economics of being Newtonian, of trying to become that one master theory that is true for all cultural contexts, all peoples, all places, all experiences. I do think that we are striving to have a more uniform, integrated consilience study of the economy, especially in the means of the economy, the biophysical basis of the economy. I think we can get closer to agreement on what makes a system any system. If the economy is just another ecosystem, what makes any system run? That's where we can get a lot of agreement. Then on the purpose and trajectory and ultimate ends or goals of the economy, that's where we get a lot of disagreement and, to some extent, healthy disagreement. What is the economy for?

(00:18:24):

This is where different bands of economists and different flavors of heterodox economics come to fruition. John Kenneth Galbraith, the Harvard economist wrote that, "Economic ideas are always and intimately a product of their own time and place. They cannot be seen apart from the world they interpret." So in that sense, economics shape shifts according to the kind of issues of the time, but as a system, the economy is a biophysical system.

Nate Hagens (00:18:54):

Well, in that sense, most of the core econometric formulas and explanations in orthodox economics were a product of the carbon pulse, which is this one-time anomalous firework-like period for our society that is non-repeatable, and yet we're writing rules and laws at that moment that we're extrapolating forward in time that are not going to be valid.

Jon Erickson (00:19:27):

I remember you talking to a class of mine, I think, showing William Stanton's graphic, breaking up billion years to million years to tens of thousands of years, and then the tens of thousands of years scale to human population doing the hockey stick thing. Then you're making the point that it's on the rise. The blade of the hockey stick is when we've invented economics, yet this whole course of history and the whole sense of who the human animal is was created in a very different time, in a very different context, in a very different sense of scarcity.

(00:20:01):

So yes, we've created the field of economics in a time of huge pulse of energy, in a time of high, high, high energy return on investment, in a time of huge energy surpluses where things like university professors become possible because I can live off the energy surplus of the energy industry. All of that is part of the life and times of the economist who created it, and now we're moving into a new reality, a reality of not just local overshoot and collapse, but potentially global overshooting collapse. (00:20:42):

So therefore, we need a new economics. We need an economics that's not so growth-oriented, but that is more maintenance, resilience-oriented. Economy doesn't solve every problem that growth creates by growing more, but starts to really think about less growing the system and distributing the burdens and benefits of the system, an economy that might ultimately need to contract in a way that hopefully is by design instead of disaster.

Nate Hagens (00:21:11):

So I'm going to get to your new book, but let me ask you one more background question. So when you were a young man, you chose to get a PhD in economics, in orthodox economics, but now you are a ecological economist. What happened in your life, in your brain, in your recognition, in your experience to shift directions?

Jon Erickson (00:21:38):

Well, it's probably a similar story to yours in a sense. I was a product of the Gogo '80s, and I tell the story actually in the first chapter of my book, the Greed is Good generation, the famous Michael Douglas speech in the Wall Street movie that all my economics professors showed in the first week of class to justify the utility maximization framing. I wanted to grow up and be a ski bum. That was my aspirations. My father was like, "Well, if you go to college along the way, why don't you study business, study economics because at least you can get a job someday?" Econ classes at night, not during the middle of the day when I was trying to ski.

Nate Hagens (00:22:14):

The irony is now that you're so busy teaching ecological economics that you don't even have time to ski and you live in Vermont.

Jon Erickson (00:22:23):

I know. I know. It's terrible, but yeah. So I was studying economics just because it fit what my father said to do. I thought I'd own a ski shop someday, but yeah. Science was my first love. The outdoors was my first love. Connecting to nature was my first love. So coming back to that in grad school, taking college classes in ethics, taking classes in ecology, raising my hand in the back of the room, and my econ class is the same, but, but, but, but and trying to find this consilient, a word I didn't know at the time, but more consilient brand of economics led me quite by accident to ecological economics.

(00:23:03):

I quite literally found a book in a free book pile in Warren Hall at Cornell University called Ecology Ethics Economics by Herman Daly, and I was like, "In the same sentence, ecology, ethics, economics? What is this thing? What is this heresy?" and started to read that and went to my advisor's door and started talking to him about ecological economics. He, at the time, was writing a textbook in environmental economics, that neoclassical version of how to deal with the economy.

(00:23:34):

In fact, this is a long story, sorry, Nate, he challenged me. He was like, "Why don't you write the concluding chapter to my new textbook in environmental economics and tell me why the whole thing's wrong?" and I was like, "Challenge accepted. Let's do it."

Nate Hagens (00:23:46): Who was your PhD advisor? I forget.

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Jon Erickson (00:23:49):
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Dwayne Chapman, a national resource environmental economist at Cornell, who studied at Berkeley. So he had this inner hippie in him from his time at Berkeley in the 1960s.

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Nate Hagens (00:24:00):
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I think deep down all of us have an inner hippie. It's just sometimes there's too many layers covering it. Okay, Jon.

Jon Erickson (00:24:08): Yes, sir.

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Nate Hagens (00:24:09):
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You have recently written a book called The Progress Illusion: Reclaiming Our Future from a Fairytale of Economics. Tell us about the book and the main themes.

Jon Erickson (00:24:22):

Well, in essence, this is what I have to say. I feel like I'm retired now. The book is a reflection on a career in ecological economics. It's discovering ecological economics in the early '90s. The field was only formalized with a journal and a society and all that stuff in the late '80s, early '90s. People like me were supposed to be created. Folks like Herman Daley and Bob Costanza and Dana Meadows and others were trying to create a field of economics that pushed back against the orthodoxy, pushed back against the mainstream.

(00:24:57):

So I'm from a generation of folks who were brought up under these new ideas or we had to discover them ourselves and we're in any department called ecological economics. So this book is a reflection on that. It's a reflection on my generation, on my training, on my journey, my discovery of ecological economics, in essence why my father's advice was misplaced. Greed is good. Go study business. Make lots of money, and everything else will take care of itself.

(00:25:30):

So I get into all these different illusions that I had to unpack myself, the illusion of history. Economics is taught very ahistorical as if the current version is the best, and we don't need to learn from all the philosophical debates from the past, the illusion of the individual, this isolated individual at a point in time, what one of the early critics of the model, Thorstein Veblen, called a homogeneous globule of desire back in 1899, the illusion of choice, that all choice should be framed at the margin. We don't have to worry about the accumulation of the choices. We just need to know is the next choice give you more benefits than costs, and when they all sum up to something that we

never would've voted for, oops, sorry about that, and the illusion of growth, that the solution to all problems that growth creates is more growth.

(00:26:22):

So unpacking those kinds of illusions, holding them up against current scientific consensus like the international, intergovernmental panel on climate change, which assumes 3% growth in all of their scenarios, 2% to 3% growth, and we're going to somehow green growth and figure this out and that then come full circle in the book to arguing for a new story, a new economics, and a new economy where we can thread the current needle and create a more balanced approach to how we think about the relationship between humanity and the environment.

Nate Hagens (00:26:57):

I'm going to get to that. Let me just ask you-

Jon Erickson (00:27:00):

Did you get all that from your skim?

Nate Hagens (00:27:02):

Yes, I got all that from my skim.

Jon Erickson (00:27:06):

All stuff you already knew. Lots of the book I learned from you.

Nate Hagens (00:27:09):

Well, that's one of our challenges as educators and communicators is there's a trade-off between being accurate and being helpful, and we could lay out all the facts that are perfect from a scientific standpoint, but if they don't reach people's hearts and minds, they're not good enough. So I liked the way that you framed these things as illusions. I often talk about them as myths, but what if a large number of people actually recognized that conventional economic broad concepts are fairytales? Would that be enough? Because the conventional economics are so embedded in the power structures that move society forward, both at high political levels, at influential institutions and lobbying. So if people recognize that it was the emperor with no clothes from a scientific consilience standpoint, would that matter?

Jon Erickson (00:28:14):

How would you answer that question? This journey you've been on of gathering knowledge and lots of facts and good arguments, has it made the difference it needs to make?

Nate Hagens (00:28:23):

I would argue that it would matter, but it wouldn't change the power structures and the momentum of the system, but the way it would matter is that you would plant seeds in everyday people and in leaders of various fields that we have to do things differently, and we're going to have a phase shift at some point in the future when we have to meet the future halfway. So you and I and our colleagues are trying to change the initial conditions of the future. I think this isn't going to happen by these tenured economics in the ivory towers around the world saying, "You know what? I've spent my whole life on this. I'm 65, and I think Jon and Nate are right that this whole thing I've built my career on is a fairytale." That ain't going to happen, my friend.

Jon Erickson (00:29:15):

I'm with you. I'm with you. Yeah, no, I agree. I think it's just showering people with more knowledge. The myth of the fire hose and more knowledge, more facts, more fact-based arguments is going to do the trick. That's what we do when we write books. We lay out our argument, but where I come full circle in the book is towards social movement building, towards collective action, towards moving beyond the myth of the individual because I was taught in economics, "Just incentivized the individual and everything will be fine," or in my social science classes, "Just use persuasion and use facts," or from my religious studies, "Use good old-fashioned guilt and people will come on board," but always at an individual level where the actor in the model was the individual instead of the group or the group to the community or the community to the state.

(00:30:09):

So part of my own evolution has been to pull myself away from my American mindset of acting on more knowledge, more incentives, more ideas focused on the individual, and move towards what are the ingredients to build a social movement? What are the ingredients to react when the inevitable collapses and disasters happen so that we're prepared? What are the ways to bring people together, the design of future instead of just haphazardly crash into it?

Nate Hagens (00:30:39):

So let's address those questions. So I assume you've read my Superorganism paper.

Jon Erickson (00:30:46):

I have. I just cited it in a class, a graduate class in Iceland.

Nate Hagens (00:30:51):

So when people put together those pieces, it can be a little daunting because it feels like we don't have agency that this giant metabolic structure is beyond the control of billionaires and politicians, but you just talked about in your book that you like to go up a scale and empower people to be part of a collective movement. How does that happen? How do we move beyond individual choice at the margin to a collective social movement?

Jon Erickson (00:31:20):

That's how change has always happened. That's how the current economic ideology is in power by funding and plotting and carefully designing what we call the conservative movement or the neoliberal turn or neoliberalism, whatever you want to call it. That was a social movement. So all of these kinds of big, short, long wave changes happen from collective action, social movements. They often start one neighborhood at a time or one watershed at a time or one community at a time, and then there gets to a tipping point where the aggregation of these ideas and action gets to where you change policy, change governance, change the rules of the system. (00:32:06):

All of this is about getting lower and lower and lower down on Donella Meadows' systems leverage point wishlist, moving from just changing the numbers, accepting the system as is, that's akin to increasing taxes or decreasing taxes, to changing the guts of the system to feedback loops, positive, negative feedback loops, to changing the rules of the system, the goals of the system, and getting all the way down to the paradigm of the system. This field of ecological economics and the career that I am

reflecting on is a bunch of us trying to shift the mindset, trying to shift the paradigm, and that goes way beyond the individual.

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Nate Hagens (00:32:45):
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I think she said in a later interview that shifting the paradigm wasn't actually the number one thing. It was shifting how you think about the paradigm.

Jon Erickson (OO:32:55):

Transcending paradigms, that was her highest leverage point is to always be open to other points of view. Don't get so dogmatic with your own paradigm. Shifting the paradigm isn't enough. You always need to be curious.

Nate Hagens (00:33:09):

Did you ever meet her? She had passed away before I came to Vermont.

Jon Erickson (00:33:13):

No. She died too young. No, I never did get a chance to meet her.

Nate Hagens (00:33:17):

So getting back to the trade-off between being accurate and being helpful and getting back to the concept of consilience, when you build a social movement, and there are a lot of them that have been around for a while, there's a big climate movement and other social movements, but I'm frustrated with some of the social movements that philosophically and their end result is something that I would completely get on board with, but the logic of what they're trying to do is divorced from the system's perspective that you and I have been spending the last couple decades putting together. For instance, a lot of people in the climate movement don't look at our problem as ecological overshoot. They look at it as climate change, and they blame fossil fuels and fossil fuel companies, and we don't go beyond that. Do you have any thoughts on that?

Jon Erickson (00:34:17):

It's always a challenge to get to root causes, and that's one of the lectures we have of being in the Ivory Tower. No one's going to hire me, pay me to do root cause analysis in the private sector or even in government because everyone's just running around putting out short-term fires. I remember a meeting that Peter Brown, a colleague at McGill University, and I had with Rockefeller Foundation. We were making the case for investment in graduate programs and leadership training and long wave change and how do we change the paradigms of our new department heads and deans and college presidents, and clearly from an education strategy point of view because we're both educators.

(00:34:59):

The folks from Rockefeller were like, "Yes. Right on. This is what we need. This is what I'm talking about." We're like, "Great. Will you fund it?" "No, because all our money goes towards putting out fires. We're in a state of emergency. We're putting out fires. We can't keep the eye on the prize of long-term systems change." That's a challenge right now especially in social movement building.

Nate Hagens (00:35:28):

Isn't the academy one of the few places or education more broadly where we can affect that long wave change?

Jon Erickson (00:35:36):

It is. It's why the conservative movement funded so intently and so focused the academy from the '50s, '60s, '70s and onward. They had a long-term strategy. They had professors. They funded business programs. They created mining and oil schools in Wyoming. They built bridges between the University of Chicago, your alma mater, with Latin American governments. None of these things were short-term solutions for what they wanted to get across. They were all long-term investments. The challenge now is we are in crisis mode. Do we really have the luxury of planting seeds and having podcasts and building momentum for the shift the system someday maybe in the future?

Nate Hagens (00:36:26): I hear you on that.

Jon Erickson (00:36:27):

We do need to fight fire with fire. We need our own movement building. We need to stop splintering off into little groups. We need to stop doing the, what does Josh Farley

call it, the circular firing squad. This is going to take some really creative movement building. That's why I've been so attracted to the work of Senator Bernie Sanders because he has been saying the same damn thing for decades, and he's persistent. He's like a dog with a bone, and he has seen some of the changes that he's been arguing for in his lifetime, but it's been slow-going, and it's been his persistence and his determinism, and he's got some record amongst all senators whoever lived of amendments. He's behind the scenes making hundreds of amendments to bills to make the kinds of tinkering shifts along the way. He's a radical pragmatist. He knows there's pragmatic things that we need to do now, but he never keeps his eye off the prize of radical change, of wrestling power from the status quo. That's what I'm talking about.

Nate Hagens (00:37:38):

You work with him, right? You advise him from time to time?

Jon Erickson (00:37:40):

I've worked a lot with his staff. Him and I have done some projects together on youth climate action, again, a long-term strategy. I advised him on his Green New Deal Bill. We did the job numbers for that, did some economic modeling. He's been both an inspiration, but also someone that's been fun with him and his staff, mostly his staff to bat ideas around. We did a film. We did this whole film called Waking the Sleeping Giant that followed the arc of his first run for president and told the story of progressive movement building around the country.

Nate Hagens (00:38:12):

So I can't remember when it was, but I think I once told you, "Jon, if we write that paragraph, the financial and tech people are going to label you as a Marxist," and you replied to me and you said, "Yes, and I would wear that as a badge of honor," or a badge of pride or something like that.

Jon Erickson (00:38:34):

Let me unpack this because I do see a continuum of political organizations, if you want to paint two extremes from capitalism to socialism. On the positive side, the reason I said it takes one to know one is that the US economy is firmly built on the tradition of democratic socialism. It is everywhere. Our colleague, Gar Alperovitz, talks

about this, Emeritus Professor at University of Maryland, talks about the quiet democratization of wealth that's all around us from employee-owned companies to community-run commons, to cooperatives. He points out that something like 40% of the US population are members of some form of cooperative, agriculture, banking, electricity, insurance, art, food, retail, healthcare.

(00:39:27):

So much of our economic system is run on democratic, socialist principles, where you're not voting with your dollar, you're voting with your vote, where the person's opinion matters, not what they can and cannot afford, and where we organize and plan for outcomes rather than just let the market do it for us. So that's the one side of the financial and tech people who would label us as socialists because they have benefited from huge investments in a socialist foundation to our so-called capitalistic system. (00:40:08):

On the negative side, I would say it takes one to know one is that they are firmly entrenched not in a democratic socialist world, speaking more specifically about corporate America, but in an autocratic socialism. That is everywhere. Martin Luther King said, "Socialism for the rich, capitalism for the poor." The most successful, in financial terms, parts of the economy are hugely supported by our social system.

Nate Hagens (00:40:41):

Including the market itself around the world right now by central banks.

Jon Erickson (00:40:45):

Including the market itself. From the court system to the road system, from the internet to transportation and air traffic control, to all the things that the tax, to security, to all the things that the tax base creates makes the market possible, and it makes the creation of and sequestering of extreme wealth possible. This is the system that they benefit from, and there's been many, many, many, many warnings along the way throughout the history of economic thought from Henry George to Karl Marx, to Karl Polanyi, to Donella Meadows talking about these builtin feedbacks that are inside the private capitalistic system that lead to greater and greater and greater social support for a smaller and smaller and smaller group of people. So I would say they've benefited the most from socialism in a very contorted, perverse way.

Nate Hagens (00:41:43):

Well, if I had to describe it in one sentence, our system has privatized the profits and socialized the losses not only to people, but to ecosystems and future generations.

Jon Erickson (00:41:57):

Absolutely, and this was all predicted by the early critics of a purely capitalistic system. Capitalism, capital ownership, capitalism is privately owning the means of production and then allocating those means through a free market. What happens in a natural tendency of a capitalistic system is positive feedback loops, where the capital owners are able to buy more capital, create more opportunities, become richer, and the rich get richer, and the poor get poorer. That's what Marx warned about. That's what Henry George warned about. That's what Karl Polanyi in the 1940s, 1950's warned about in his book.

Nate Hagens (00:42:37):

The Great Transformation.

Jon Erickson (00:42:39):

This reduction of all social relationships to market logic, and that's where I think we live in this era that the ecological economist, Dick Norgaard, calls the econoscene, where we've reduced all social relations and now even environmental relations to market logic, the most obscene version of what Polanyi called the market society.

Nate Hagens (00:43:02):

So you have articulated some of the philosophy of your book, but if you could for the next little bit choose three of the main fairytales or illusions, the absolute core disconnects from standard economics that's taught in universities around the world versus the actual reality we face. Can you spend a minute or two on three different core fairytales?

Jon Erickson (00:43:34):

Sure, sure. So I mentioned the illusion of history, that the modern orthodoxy is the best system that we've ever created, and all the debates are solved, and this is what we do. In fact, this illusion got probably the most attention out of Occupy Wall Street, where students from around the world were walking out of their econ classes, the most famous one being the walk out of Gregory Mankiw's class at Harvard. We're creating these post-autistic societies for economists. We're saying, "At the very least, teach us the heterodoxy. Teach us about the debates. Let us debate the ethical and ecological dimensions of different forms of economic cooperation."

(00:44:22):

All of that has happened throughout history, and somehow economists have been successful in aligning themselves with the status quo and stripping away the history of thought. As you know, economics, economists, people like Adam Smith, David Ricardo, and Karl Marx didn't call themselves economists. They were moral philosophers. They were puzzling through the morality of different economic organizations. So that's been a huge illusion that I try to unpack in this book.

(00:44:48):

Then there's the illusion of choice. So all of economics is framed around marginal thinking, and that magic decision rule is marginal benefit equals marginal cost. You do something until the next benefit equals the next cost. In fact, I tell my students, "Raise your right hand, repeat after me. Marginal benefit equals marginal costs," and they all laugh and do it. I say, "You now have a PhD from Cornell University," because that's all I've learned every puzzle.

Nate Hagens (00:45:18):

So that would be the oil barrel would be the one that would be the futures price would be the marginal barrel that was produced is \$85 or whatever.

Jon Erickson (00:45:31):

So in the context of economic decision making, if you're only thinking of the margin, then that next consumption choice, that next house built, that next lane added to a highway, that next strip mall, that next wetland mowed over to build the next shopping mall, each choice at the margin. What are the benefits? What are the costs? Especially when they're framed just solely in human benefits and human costs, makes sense, but I learned as a grad student that there was this other economist at Cornell called Alfred Kahn, who wrote a paper way back in 1966 called The Tyranny of Small Decisions. He made the very simple point that that kind of decision framework, thinking at the margin, all those marginal decision makers, five years, 10 years, 20 years out might never have voted on the future that we crashed into.

(00:46:30):

Who amongst us is going to say, "My dream is to build that house in the countryside with 10 acres and quiet," and blah, blah, blah? Then if we all do that, we get traffic, we get failing schools, we get climate change, we get wetland loss, we get our farms mowed into shopping malls. The original decision makers say, "We never would've voted for this future."

Nate Hagens (00:46:52):

So this is the economic equivalent of the ocean ecological concept of shifting baselines.

Jon Erickson (00:46:57):

In some sense it is. Shifting baselines has more to do with your set point. So how do you think the world works? Well, if you grew up in a world with all shopping malls and no forest, then you think that's your baseline. So these marginal decisions lead to a new baseline, and the original decision maker say, "Wait a minute, I never would've voted for this future had you told me that this is what we were in for."

Nate Hagens (00:47:27):

So if that's true then, what would be the mechanics of shifting to Mr. Khan's theory of small choices idea where we could embed the decisions of the past and make changes to them?

Jon Erickson (00:47:43):

It's simple. It requires the ability to end, to make collective choices, to do comprehensive planning, to have a little bit of foresight, which is what we do very often in ecological economics. We use dynamic systems model. We use multi-criteria analysis. We use geographical information systems to say, "If you make these string of choices, this is the likely future that will result. Is that what you want?" If people are given the opportunity to think outside their own individual consumptive choice or their own individual life or their own individual household, they say, "No, that's not the future I want."

(00:48:18):

So then what is the opportunity to collectively design a future that you want so that we all can live well but within ecological and social constraints? So that theory of choice, of collective choice that constrains the individual is quite different than the Wild, Wild West choice of do what's best for the individual. That illusion of choice is one of the main illusions, fairytales that I unpack.

(00:48:48):

You said three, so a third one is the illusion of growth, which is one that we've talked a lot about. Growth is great, and growth is a stage of development. If you think of any ecosystem, if you start with a grassland that wants to go to a forest, there's the early stage pioneering species, and they are like lovers, stabilize the soil, bring in lots of nutrients, and their sole purpose on earth is to grow as fast as they possibly can. Then comes the more mature forest species that eventually shade out the pioneer species and bring stability to the system and are less concerned with growth and more concerned with resilience and stability and maintenance.

(00:49:34):

The illusion of growth is that we're always in that pioneering stage, that there's always more planet to exploit, and when we run out of this planet, we'll jump on what's his face's of a spaceship and go to Mars and get more.

Nate Hagens (00:49:45):

There's two faces, Musk or Bezos, but go on.

Jon Erickson (00:49:49):

Was it faces? Sorry, but yeah, so this illusion of growth. Then growth in a full world, to use Daley's framing, we start to create more costs than benefits that we get into an era of noneconomic growth. So even your marginal decision rule starts to become violated. What's the next unit of growth work worth at the macro level? Does it create more benefits than costs? A lot of evidence is to say that, especially in wealthy countries, "No, we're in a noneconomic growth error," that actually dialing back-

Nate Hagens (00:50:25):

For the last 50 years.

Jon Erickson (00:50:27):

... resizing our economy, reallocating time, reallocating work, creating more leisure and less labor. Shifting our priorities actually leads to higher wellbeing and more happiness, not less. So we have to think about stages of development and that we don't get stuck in a mindset that growth is the one stage forever and forever, Amen.

Nate Hagens (00:50:50):

Well, I do know that a lot of very high level institutional government people still on the surface believe that we're going to grow for centuries. I think that you and I would agree that that's implausible, and if it does happen, we will cook the earth beyond making it habitable.

Jon Erickson (00:51:09):

Well, it's a belief system. A lot of that stems from technological optimism, that the human species is creative, we're adaptable, we can pull this off, and that's, in fact, as you know, baked into our climate economic models like perfect clairvoyance, perfect adaptation, perfect transition to a warmer world. So no wonder these models say don't worry about current costs of reducing greenhouse gas emissions when we're so damn smart.

Nate Hagens (00:51:40):

The field of orthodox economics has massively failed in a lot of areas, but in the climate arena, it's just outrageous. Who is the Nobel Prize winner, Norgaard, recently that said at ... Nordhaus, Nordhaus.

Jon Erickson (00:51:56):

Nordhaus, Nordhaus, William Nordhaus.

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Nate Hagens (00:51:58):
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That if we go to three and a half degrees Celsius, that GDP will drop 6% or 7% in the year 2100. It's just like, "Are you freaking me?"

Jon Erickson (00:52:10):

Yeah, but that's the perfect illustration of thinking of the margin. He famously said in a National Academy Sciences report that climate change will largely affect

agriculture. Agriculture is only 3% of the economy. So even if you lose half of the agricultural sector, no big deal. I'm paraphrasing, but that's basically what he said.

Nate Hagens (00:52:32): Right, and we all need food to eat.

Jon Erickson (OO:52:32):

Oh, by the way, we've got trading partners and we'll export to them stuff that we can't eat and import from them stuff that we can. So that's the story. Those are some of the illusions.

Nate Hagens (00:52:42):

I think some of those illusions, especially the growth one, more and more people are starting to recognize that, but I don't think it's voiced as much as it's recognized because I think people are afraid, that to go to the resilient, managed, more wholesome scale, that there's a grim reaper standing between here and there. What do you have to say about that?

Jon Erickson (00:53:08):

Yeah, yeah, that's the thing. We're part of the system we're trying to change. That's a challenge. We're all on this treadmill. When the economy contracts during a recession, there's a lot of pain, especially for the most vulnerable in society. So the most vulnerable who would benefit the most from changing the system are often the most opposed to changing the system because they're very livelihood depends on the status quo. The very livelihood depends on the powers that be.

(00:53:42):

There's a beautiful quote in my book from this economist from Oxford or Cambridge, I forget where, but I should dig it up. He talks about you create an economic system where the poor get just enough not to cause any trouble.

Nate Hagens (00:53:58):

Do you think there are actually people on the world today that are saying that behind closed doors?

Jon Erickson (00:54:05):

I think that there are a lot of people who've convinced themselves that they're keeping the system in place because that's what's best for them and for everybody else. This system depends on growth.

Nate Hagens (00:54:17): This system depends on growth.

Jon Erickson (00:54:19):

This system depends on growth, and when the system stops growing, there's a lot of pain that goes around. So changing the system and having it less dependent or not dependent at all on growth is a huge lift. So most of us, I would dare to say all of us who live in the current system depend on growth. Prices go up, you got to keep your income going up. You got to compete. You got to juggle your assets, et cetera, et cetera. Only the wealthiest amongst us are able to disconnect and unplug. That's a challenge when we want to change the system but we depend on the very system we're trying to change.

Nate Hagens (00:54:59):

So in all of these discussions, there's really two central questions, which is, what would, to use Bob Costanza's phraseology, what would a sustainable and desirable end state look like for a new economic system? Then the second question is the much harder one in my eyes, which is, how do we get from here to there intact? So let's just assume that the fear of the bend versus break scenario. Let's set that aside and look far enough in the future, 30, 40, 50 years in the future. What would a human society after this transition look like? What would our daily lives look like in an economic system that you think would be more tethered to a consilient reality and some of the other issues you brought up?

Jon Erickson (00:55:52):

Sure. Well, you don't have to imagine this future because it's all around us. There are communities around the world that have much larger, informal economies than formal economies that are disconnected from the market, that trade with one another, that have reciprocity, that are built around essentially the principles of a gift economy. Those same economies are being told to join the market economy because that's progress, that's how they'll expand their material wellbeing. When they do that, there's often a lot of regret because they realize they lost leisure, they lost time with family, they lost time with community.

(00:56:30):

There's a group called The Next System Project that's documenting this right here in the United States, showing the models out there that are at community skills, whether they be farmers' markets, whether they be worker co-ops, whether they be various arrangements sharing in the assets instead of this model where we all have to own our own truck or our own tractor. That's the future that could be scaled to a livable planet. That's the future that bring these same people joy through relationships with each other in the earth. That's the future that's all around us, and that's the future that we're telling in our Econ 101 classes to abandon, to become good consumers, not good citizens, to vote with our dollars, not with our votes. So I don't have to go out into the future to imagine that world. That world is all around us.

Nate Hagens (00:57:24):

How do we build social movements or awareness and at least give people some choice either at the margin or with some planning and volition to live more like you just described?

Jon Erickson (00:57:39):

It all starts with power. We take power back from the 1% or the 0.001%. That's where most of the environmental impact is. That's where most of the control over the social system is. That's where all the levers over our so-called democracy are. They're all concentrated in the hands of the very, very, very few. So when you see disruptions like the Great Recession or the COVID pandemic or the next one or the next one or the next one, that's when the current system doesn't work for all of us, and where we have these small openings where we say, "We don't want to go back to normal. Normal sucked. Normal was already a crisis. Normal had too much power in the hands of too few. We want a different future."

(00:58:27):

We always see these openings during times of crisis, and then they quickly close again because the powers that be get us back to normal. This was the quote I wanted to share. This Cambridge economist, Ha-Joon Chang, who describes this treadmill, this dependence, he says, "Once poor people are persuaded that their poverty is their own fault, that whoever has made a lot of money must deserve it and that they too could become rich if they just tried hard enough, life becomes easier for the rich."

Nate Hagens (00:59:03):

Well, that's why a lot of people voted for Trump because he was so rich that people thought that he deserved it or was smarter or whatever.

Jon Erickson (00:59:12):

In part, sure, but people voted for Trump because they thought he was going to blow the system up. They voted for Trump because he was anti-establishment. When we were making this film about the Sanders revolution, we were at these Sanders rallies all across the country interviewing people in line. Inevitably, we'd ask the question, "If Sanders doesn't get the nomination, who are you going to vote for?" Surprisingly, many of those people at Sanders rallies would say, "If Sanders is not in, we're voting for Trump," because they were not voting on Democrat, Republican, red, blue, conservative, liberal. They were voting on establishment versus anti-establishment. (00:59:50):

That's an important sign that first came out of Occupy Wall Street, which was this folks rising up and saying, "Anti-establishment. We need to blow the system up in order to repair it." It'd be nice to not have to do that, that we could redesign the system thoughtfully with the most vulnerable amongst us at the center versus blow the system up, and the most vulnerable will get hurt probably the most in the short term, but that's the choice we're at right now.

Nate Hagens (01:00:19):

I'm very worried about socially blowing the system up or with bombs blowing the system up because both are potentially on the horizon.

Jon Erickson (01:00:29):

The nuclear threat, unfortunately, is always there.

Nate Hagens (01:00:31):

I think as we face the end of growth, that threat is going to grow.

Jon Erickson (01:00:38):

What's the fellow's name, the young degrowth economist you had on? He was fantastic.

Nate Hagens (01:00:41):

Timothée Parrique.

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Jon Erickson (01:00:44):
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Timothée. I'd say get old farts like me out of the way, and the sooner we can get people like him in charge, the better.

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Nate Hagens (01:00:51):
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So do you think, and I assume that you wrote that book and are doing this podcast, that you do think this way, that there is a chance that a broad swath of our culture can sufficiently understand and value nature and fairness and the sacredness of life and the ecosystems of our one planet and living differently and incorporate those things ultimately into our choices, our behaviors, and our prices, and assuming you believe that, how might that come about or at least have higher chances of coming about?

Jon Erickson (01:01:26):

I am a hopeful person by my nature. I think most humans are. I think that ultimately it's going to probably be a little bit of both preparing for the future we'd like to see, but also having alternatives in place for when the crashes and collapses and pain happens. Whether that pain, crash, collapse happens one massive storm at a time or one credit default at a time or one toppling of a dictatorship at a time, I can't predict the future. In fact, people who study paradigm shifts say that you can't predict paradigm shifts because you never know when they're going to come. They come out of left field, but the elements of paradigms are always in place.

Nate Hagens (01:02:17):

Well, I think we have to affect things in parallel at multiple scales, and there are no solutions to what we face, but there are responses. So there's a global conversation, there's a national one, there's one in communities, and there's one in individuals listening to this podcast, and those things hopefully will all converge somewhere towards some more benign system in the not too distant future.

Jon Erickson (01:02:44):

In this book and in our conversation, we're not talking about economy or economics. We're talking about political economy. That's an important distinction.

Nate Hagens (01:02:54): What's the difference?

Jon Erickson (01:02:55):

Well, we're talking about the political economic system, who's in charge, who has power, what choices it make, what are the desirable ends of the system. We don't teach political economy on university campuses by and large. We don't teach history of economic thought. We don't teach alternative economic paradigms except for the few little courses in ecological economics or feminist economics that are squirreled away in, I don't know, whatever, on those studies program like they are at the University of Vermont. It's the political economy, the political change.

(01:03:27):

We're working with The Next System Project to puzzle through the idea of what would a next systems curriculum look like. There's this great new Next System's reader that's out there that I used in a class of mine last spring, and students were blown away that there were these alternatives to market-based capitalistic systems. What's the quote? People can more readily imagine the end of the world than the end of capitalism, and that was my students like, "Dead on." They were like, "We can't imagine a different system." We worked through this Next System's reader and we talked about cooperative economies, sharing economies, carrying economies, gift economies, and we showed them evidence that these aren't wishes that they're all around us. They were freaking floored, Nate, and they were like, "Why don't we learn this in our classes?" So that's the preparation. That's the preparation.

Nate Hagens (01:04:19):

It's so true. I read a paper on altruism and how when people were shown an example of someone else being altruistic, they were 300% more likely to do altruistic acts themselves. I think maybe in these alternative economic systems or alternative ways of interacting with others and commerce and trade and barter and gift economies, we lack imagination. We don't see what's possible. So if we can see other people doing it, it's like Josh Farley says, "Just when you go to the health club, you lift weights to flex your muscles and tear down your muscles a little bit and they build back stronger." The same thing is with cooperation and community and sharing and interacting with others. You have to flex those muscles.

Jon Erickson (01:05:08):

I often ask in my classes, "What's the purpose of the university?" and I get answers like, "Well, it's to train us to get jobs and be successful people in economies," and I'm like, "Let's read the charter of our university together. It doesn't say anywhere about getting you a job." Universities, higher education, educational systems are at the base of democracy, the ability to think freely and to challenge each other and to build scientific reasoning. That's the purpose of the university. Our students have become so indoctrinated with the idea that universities are to train workers and consumers, not citizens.

Nate Hagens (01:05:52):

I know William Wallace is waiting for his hay. So I'm going to move to the closing questions, and for those of you who don't know, which is probably everyone listening, William Wallace is Jon's donkey. Yes? You still have-

Jon Erickson (01:06:07):

And E. O. Wilson, E. O. Wilson is my new black lab. Did you know that?

Nate Hagens (01:06:10):

I did not know that. Oh, my gosh.

Jon Erickson (01:06:13):

We were struggling to name him and Professor Wilson-

Nate Hagens (01:06:15):

You call him E. O. Wilson?

Jon Erickson (01:06:17):

Yeah. He passed away when Professor Wilson passed away when we were struggling to figure out a name. Pat and I just both looked at each other and we're like, "Oh, our dog's name is Wilson."

Nate Hagens (01:06:31):

Oh, man. I am, like you, a huge animal lover. I remember staying at your house with your dogs back in the day, and dogs are a big part of my life. So Jon, I'm going to ask you some closing questions that I commonly ask my guests. Given your lifetime of personal and community experience and all the work that you do, do you have any personal advice for the listeners of this program at this time of global crisis between this bend and break moment? Personal advice.

Jon Erickson (01:07:07):

I've listened to your podcast, I knew you were going to ask me this question. The best I could come up with is accept grief. Without going too deeply into this, psychologists generally speak of five stages of grief, denial, anger, bargaining, depression, and acceptance. So we need to move through denial of the climate crisis, for example, or being angry about whose fault it is or bargaining with left and right to do things that are entirely insufficient or just not doing anything and being completely depressed. If you accept that we're in a crisis, if you accept that the world is unraveling, I think that's the starting point, acceptance, but recognizing that acceptance is not defeat. It's a starting point for restoration and renewal. So accept grief. Get to that fifth stage of grief and be ready to start anew.

Nate Hagens (01:08:10):

That was very well said. I never really thought about it until I heard you stating that, but that's the role of this podcast is to get more people rapidly through those stages to acceptance so they can play a role in their communities or whatever issue they care most about.

Jon Erickson (01:08:27):

I'd never said that either. It came to me thinking about your podcast and these, what do you call the little soapbox things you do?

Nate Hagens (01:08:38):

Franklies.

(01:08:38):

Franklies, yeah. You're welcome to use the five stages of grief as a frankly because I think it'd make a good one.

(01:08:43):

Okay. I'll put it on the list. I have 19 of them written down that I have to get to. Tomorrows is on spite, and I did do an evolutionary game theory matrix on the payoffs, altruism, spite, cooperation, and selfishness.

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Jon Erickson (01:08:59):
Nice.
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Nate Hagens (01:08:59):

Speaking of that, you have been a teacher most of your adult life and you, like me and our friend Josh Farley, teach these complicated and somewhat downer synthesis to young humans. What specific recommendations do you have for students, young people who become aware of our energy, climate, biophysical, economic constraints to our human system?

Jon Erickson (01:09:28):

We were talking about this earlier. I think my recommendation is be in awe of the majesty, the wonders of the universe. It sounds silly, but it's just an extraordinary time and an extraordinary moment that we live in the course of the universe. I teach big history in one of my undergraduate classes. It's a class in integrating science, society, and policy. So I start with big history, which is this frame of teaching history that comes from David Christian and others, which means I go all the way back to the Big Bang and march forward in what David Christian calls these various moments or these Goldilocks conditions where the universe which wants to go towards higher and higher disorder, lower and lower or higher and higher entropy creates order from nothingness and Goldilocks conditions of life on Earth is one of those.

When you place the human in the course of big history, not just since the Roman Empire kind of thing, which we do in a lot of our Western civ classes, I think you have this opportunity to connect with the mystery of the universe. When I first learned that I am made of stardust, it just freaking floored me and connected me more towards a sense of purpose than any Sunday school class did when I was growing up Roman Catholic. So be in awe of the wonders of the universe.

Nate Hagens (01:11:03):

Here, here. So what do you care most about in the world, Jon?

Jon Erickson (01:11:08):

Well, I was going to answer this with your typical thing like family and, of course, family is top of my list, my wife, my kids, my granddaughter now. I don't know if you knew I was a grandpa.

Nate Hagens (01:11:20): I did. I did. Congratulations. What's her name?

Jon Erickson (01:11:23):

Zoey. Zoey.

Nate Hagens (01:11:25):

Oh, excellent.

Jon Erickson (01:11:27):

She's just awesome. The pictures I get every day are just amazing. So that's where my head goes right away, but let me say something a little more intellectual. What do you care most about in the world? I go back to wonder. Wonder is what fuels our relationships, our connections with the Earth. Our seeking out puzzles of the mysteries of life is from wonder where we get the desire to nourish, protect, build lives together. Wonder is like this, I don't know, human superpower that can lead us to open-mindedness.

(01:12:01):

I was thinking about this today. I went down to sit in a cafe and think about this podcast. I remembered that there was this study by Dan Canaan at Yale University, and he found that there was ... Well, he found one troubling thing from his survey work on climate science and climate science acceptability. The troubling thing is he found that science knowledge or science literacy, like what we were talking about before, just tell people what's up and they'll change, it actually makes things more polarized. If you put science knowledge or climate science knowledge into a liberal camp and a conservative camp and very scientifically literate conservatives actually move farther away from liberals and their belief in science because their belief and their connection to their tribe is way more important than climate literacy. Am I making any sense?

Nate Hagens (01:13:00):

Yeah. That's motivated reasoning, right?

Jon Erickson (01:13:02):

Exactly, exactly, but the one thing they found that made a difference was, and they try to measure this, scientific curiosity. They found that those who are primed for scientific curiosity, whether they're in one tribe or the other, it narrows the gap. It puts them closer into agreement when they get new knowledge about, for example, the climate because turns out, according to this research, science curiosity counteracts politically biased information processing, and I find that's just an amazing hopeful thing.

Nate Hagens (01:13:41):

So do we all naturally have scientific curiosity or can that be expanded or triggered?

Jon Erickson (01:13:49):

I think we are born with it. I think children are naturally curious, and then often depending on which course of life you're in or which tribe you join, it gets beaten out of you. So this is a really important leverage point. They did all this research related to media and science television shows, and some of the research is like what draws some people to science shows versus others. This characteristic or attribute of scientific curiosity promotes a open-mindedness information that conflicts with your worldview, and that's the point. If you're curious, you're willing to be open-minded and step out of your comfort zone and question your own worldview. I can only speak from a sample of one. I was always a curious kid.

Nate Hagens (01:14:42): Me too.

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Jon Erickson (01:14:43):
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I was a curious adult. I've been curious my whole life, and I think that's what has enabled me to question the dogma of myself and my worldview.

Nate Hagens (01:14:51):

I love that. I don't know if you remember, but when I was your PhD student, I wrote a paper called Curious George Discovers America.

Jon Erickson (01:14:59):

I forgot about that. I forgot about that.

Nate Hagens (01:15:02):

You loved it because it was all human behavior stuff.

Jon Erickson (01:15:07):

That's beautiful. See, it was thinking about you today in the coffee shop that triggered all these things.

Nate Hagens (01:15:16):

So we mentioned nuclear war earlier, but last three questions, Jon. What are you most concerned, out of all the issues we face, what are you most concerned about in the coming 10 years or so?

Jon Erickson (01:15:30):

I'm most concerned about the invisible gorilla. Do you know that? Do you know Daniel Simmons' game?

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Nate Hagens (01:15:36):
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Oh, yeah. We're watching something and we're focusing on how many passes the ball will be, but there's something else going on that we don't see.

Jon Erickson (01:15:47):

Exactly. He's got this video with people with white shirts, people with black shirts, and you're meant to tell your audience, "Really concentrate, really focus on the people with white shirts and count how many times they pass the ball." I do this in class all the time, and the students are like, "Okay. I'm going to get it right." They count, they count, they count, they count. They're super focused. Then at the end of it I'd say, "Did you see the gorilla?" Three quarters of them say, "Gorilla? What?" Then you show the video again and they're not so focused on counting the balls, and in the middle of the skit, this person in a gorilla suit comes out in the middle of the game, pounds his chest or her chest and walks off the set. You couldn't miss them if you were at the 10,000-foot view trying to keep track of it all, but because you're so hyperfocused, you have this change blindness. You can't recognize change.

(01:16:40):

So that's what I'm most concerned about. This relates to what you were talking about earlier of the shifting baseline syndrome. This is a concept that the fisheries biologist, Daniel Pauly, popularized in fisheries management, that his example was you go on this big family fishing outing in Florida Keys and you had no idea that the fishing outing in the 1950s had this incredible catch with these huge fish and a huge diversity of fish, and the fishing outing in the 2020s is still lots of fish, but they're all this big and they're of one species, but you get this-

Nate Hagens (01:17:14):

Yet everyone is super happy because they caught-

Jon Erickson (01:17:15):

Everyone's super happy because that's their baseline. They're like, "This was amazing. We caught lots of fish," and then you're like, "Go back and look at the picture at the same point, with the same company, with the same fishing tour 50 years ago, and think about what their baseline was." That's what had me most worried.

Nate Hagens (01:17:32):

I think it's interesting that if you don't tell the students anything and you show the movie with the gorilla and the passing-

Jon Erickson (01:17:40): Notice the gorilla.

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Nate Hagens (01:17:41):
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... a lot more of them will notice the gorilla. I think it's the priming.

Jon Erickson (01:17:45):

Absolutely.

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Nate Hagens (01:17:46):
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You win a prize, a lot of people get this wrong, count the number of passes. I think what is the economic equivalent of that right now, that we're focused on growth and marketing and distraction and supernormal stimuli, and the invisible gorilla is the ongoing decimation of the natural world and the fact that we're one of the richest cultures in history and most of us are miserable.

Jon Erickson (01:18:10):

You got it. You got it. So turn on CNN, turn on Fox News and ask yourself what are they priming you about. Are they teaching you to be a good citizen, teaching you to be a global environmental citizen? Are they teaching you to be a well-behaved consumer?

Nate Hagens (01:18:24):

So in contrast to that, what are you most hopeful about in the coming 10 years or so?

Jon Erickson (01:18:29):

Well, it's the opposite of change blindness, shifting base there. I'm most hopeful about the ability to remember, the ability to remember what it is to be human in community, to be in community with our branch of the life's family tree, but also in community with the whole majesty of the world. I think we got a small taste of that, at least in privileged parts of society like mine, where I was a university professor. I was simply told to go home and teach and not come to work anymore during COVID, but I still got a paycheck. All of a sudden, I discovered what I was missing in a home life, family life. I started taking walks. I took up birding. I discovered all these pocket parks within half a mile of my house.

(01:19:20):

When we slow down and reconnect to who we are as human beings, to our long evolutionary history as humans in groups working together, we can remember a very different experience with the world. We need to be reminded of these old baselines. We need to go back to the future, if you will, and yes, accept the mess that we're in, but have this ability to tap into a new but oddly familiar human story of harmony.

Nate Hagens (01:19:50):

Excellent. Last question, and I think a lot of people shy away from this question, but I have a feeling that you're not going to. If you were benevolent dictator, Jon, and there was no personal recourse to your decision, what is one thing that you would implement or you would champion that would improve human and planetary futures?

Jon Erickson (01:20:12):

How about this? I would get rid of all the current benevolent dictators. I'd get rid of them all because there is a lot of them, and there's a lot of them who think they're benevolent. I might start with Pope, might start with just about every CEO who thinks that he or she's doing their job for their stakeholders out of their own benevolence, might start with college presidents, who are some of the biggest benevolent dictators of all. It turns out that most organizations in Western societies are organized as dictatorships, companies, colleges, businesses. Anywhere where there's not an elected official who's in charge is a form of a dictatorship, and many of these dictators think they're benevolent. I'd get rid of them all and see what the alternative would be of a people-powered society. How about that?

Nate Hagens (01:21:03):

Good answer. Jon, thank you so much. We ought to talk more often.

Jon Erickson (01:21:07):

Well, I appreciate it. Thank you so much for the opportunity and I'm really enjoying your podcast. I listen to them as I shovel horseshit.

Nate Hagens (01:21:15):

What a compliment. What a compliment. Thank you so much, Jon. I will talk to you soon.

Jon Erickson (01:21:20): All right, man.

Nate Hagens (01:21:22):

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