THE BREAKTHROUGH

Alex Trembath:	Welcome to another episode of Breakthrough Dialogues, the podcasts for pragmatists and problem solvers, brought to you by the Breakthrough Institute. I'm Alex Trembath, your host, and communications director at Breakthrough. Breakthrough Dialogues invites leading thinkers to talk technological and modern solutions to environmental problems. It's part of our effort to move beyond the tribalism and polarization that too often characterizes environmental thought and politics today. For this episode, I sat down with Alan Levinovitz, Professor of Religious Studies at James Madison University in Virginia. Alan's working on a book on the meaning of the concepts of nature and natural, and wrote an essay on that same subject and an essay titled "On Naturalness" for the latest issue of the Breakthrough Journal.
Alex Trembath:	Alan and I talked about whether it makes sense to draw a line between natural and "unnatural" systems, and how such a distinction, metaphorical or not, actually helps humans better understand environmental stewardship. Alan, thanks for being here.
Alan Levinovitz:	Thanks for having me. It's a pleasure.
Alex Trembath:	Absolutely. So, your essay in the Breakthrough Journal talks about the meaning of the word nature, the meaning of the concept of nature. And I want to get your discussion of it, how you conceptualize nature and how you argue. What you argue is a good way to think about it. But I want to start with some arguments and some people that you're actually arguing against. So, what do people mean when they say that nature doesn't really exist or isn't a useful category?
Alan Levinovitz:	Well, one of the problems with a word like nature that's so big is that it's really easy to deconstruct. So, you have a lot of people, philosophers, saying things like the idea of what's natural is a cultural construct, or the idea of nature is a cultural construct. And they'll point, for example, to certain cultures that don't seem to have the idea of natural or nature, or they don't

seem to distinguish between what's natural and what's unnatural. This is taken to mean that in fact, when we talk about nature, we're just talking about something that's made up, and in conversations about environmental conservation or preservation, or in conversations about what kinds of things we should want to have in our lives. The idea of what's natural should simply be bracketed. And we should talk about other stuff instead, like, what makes us happy, or what's good for the earth. Things that can be quantified in a way that's sort of vague philosophical concept like nature can't.

Alex Trembath: You make an actually affirmative defense of nature, that recognizing that it might be sort of hard to always draw a sharp line between nature and non-nature, it's still useful concept. So, what is that affirmative case?

Alan Levinovitz: Well, for me, the way I started thinking about this and I was one of the skeptics to begin with. I thought, it's pretty easy, right? As I say, in the Breakthrough piece, well, what is natural exactly? We're all made out of atoms. Everything's made out of atoms. Those atoms come from nature. So, it seems like kind of arbitrary line-drawing to talk about something being natural or unnatural. But of course, there's also this, what's called a performative contradiction, which is where someone tries to make an argument, but in talking, they also contradict themselves. That's among conservationists who don't want to use the word nature, you have to wonder, well what is it that they're trying to conserve? Is it just things that make us happy? Clearly, not.

Alan Levinovitz: Every single conservationist I've spoken with wants to preserve nature of some kind or another, which requires the category to exist. And so, I started to think about the role of that category in my own life and the lives of other people. I came to realize that it's useful to think about a self-organizing system that came before human beings, and continues to act in the world. If you think about that self-organizing system on various levels, from the way in which particles interact with each other and come together and form larger particles, or if you think about it in terms of systems that tend towards life, I think with that concept, you have a good foundation or the idea of what's natural.

Alan Levinovitz: And of course, when you talk to people about the kinds of things in their lives that are important to them, because they are natural, you start to realize that that concept's everywhere. People will say, "Well, I like to get under the garden. I like to grow my own vegetables." Or people will say,

"Well, I like to sail because there's something about being moved by the wind that's different from being moved by an engine." And so, if there's a kind of concept that's operative in so many people's lives, it seems to me like it was worth taking seriously.

Alex Trembath: Yeah. A way that you have described it or the way you have described nature is as a continuum. That some things are obviously natural and some things are obviously unnatural. But that there is a sort of continuum between the two categories. I'm curious how you made that transition. As a skeptic of the concept of nature to begin with, to now making this affirmative case for the existence of something called nature, where do you see those categories in the world? I think a typical example that we think of a lot around Breakthrough is food. People talk about natural versus unnatural food. There are pretty clear dichotomies in some cases as you talk about and you write about, it's pretty clear intuitively that a forest is more natural than a city. But where else, and maybe some surprising cases do you encounter that continuum?

Alan Levinovitz: Well, so there's again, some sort of stark distinctions would be between a natural plant and an artificial plant. This is something I didn't talk about in the piece, but I think people do this all the time. If you're in a restaurant, or if you're in a doctor's office or something, people will reach out and touch the leaves of a plant to see if it's natural. You could argue of course that, "Well, why do people care whether it's natural or not? Why does it matter if the plant is so difficult to distinguish?" If you can't know whether it's natural or unnatural, why do people reach out and touch the plant to see if it's natural, which is a word that people also often confuse with real. They say, "Is that plant real or is it fake?"

Alan Levinovitz: I don't endorse that distinction at all. I think that unnatural things are perfectly real just like natural things. But it's clear to me that those kinds of divisions are important, and it's something that we need to take seriously. One of the things that started to change me with this is that there are all kinds of other concepts that exists on a continuum. I know that's slippery, but it nevertheless important. So, I talked about this in the Breakthrough article. But the idea of freedom is a really good one. I think all of us recognize the importance of freedom and autonomy. It's nice to be free. No one but the most intense positivist materialist would assert that there's no such thing as free. And yet, it's kind of hard to pin down, right? Am I free right now? Well, I have to sit here and talk and I've got these headphones on and my society-

Alex Trembath: Sorry about that.

Alan Levinovitz: Yeah, I know. I'm very upset. Stop imprisoning me, right? And yet, we can all sit down together and say things like, "Well, I don't want slavery to exist in the world." And you can nitpick that and you can say, "Well, you know once there was slavery and indentured servitude, and in a sense, aren't we all slaves when were employed by people and we need to use the money we get?" And so on and so forth. But at the end of the day, everyone recognizes that the distinction, the scale of more free and less free when it comes to being human is a useful one.

Alan Levinovitz: I think that rather than simply abandoning a term when it's difficult to articulate its meaning, as is the case with freedom, when it's important enough, and when it's something that we know we need to fight for, then we need to sort of gird our loins and try to figure out what exactly it is that we're fighting for and why, and be courageous enough to defend that idea lest it disappear, and we're left without whatever that idea was.

Alex Trembath: Yeah. So, how do you do that? You talk about this in your essay that some defenses of the concept of nature and not fully satisfying. That I might feel like there's something called nature, is it enough to have that feeling or is there more empirical or more epistemic evidence for the existence of something called nature?

Alan Levinovitz: Right? It's a deep question, right? It's a very deep philosophical question. How do you argue that a concept like nature really is real, right? That it really attaches to something in the world. I think there's a couple of ways you can do that. One, is you can call attention to the utility of the concept and our inability to describe things without it. I think with regards to what's natural, that's really important. A lot of the ways in which we slice up the world, when I look out my window right now of my office, I see trees and I see a paved road. And I understand those trees to be more natural than the paved road in the sense that the system that is responsible for creating those trees is a kind of different system. It's descended from a different place than what's responsible for creating that road.

Alan Levinovitz: We think about natural versus artificial parents in the case of adoptive parents. There are all sorts of ways in which the idea of what is natural is useful anywhere from one's personal life to biological science. One way to make a case for a concept to say, "Look, it's very useful." That's the pragmatist case for what makes something real, right? Is that it's a useful

way of carving up reality. Another way to do it is to say that, "Well, it really is real. It's something in the world." And so for me, it's a pretty simple case when it comes to nature, is that before humans existed, there were self-organizing systems that created life and created ecosystems and created all kinds of stuff in the world that we understand now as natural.

Alan Levinovitz: And so, the bare fact of it is that if you want to define natural as identifying organization that exists without humans, well it's a pretty solid definition. We see it in the world. We know it exists because humans haven't always been around, but life has been and ecosystems have been, and our planet has been. And so, there's I think a prima facie case for the existence of what is natural over and against was artificial. That is to say, what is engineered by humans.

Alex Trembath: What is the danger in taking that too far? What is the danger in drawing too sharp a line between the natural and the unnatural as some philosophers, some conservationists actually do try to do?

Alan Levinovitz: Yeah. It's really interesting you bring that up, because that's what I think is driving a lot of people's rejection of the category entirely. A lot of people want to do what is I guess, after Pinker used it this way, commonly referred to as the naturalistic fallacy, or the appeal to nature fallacy. Which is this idea of it, whatever is natural is good, and whatever is unnatural is bad. And those words are so associated with good and bad that you just can't get away from it. You know a natural death is a death that happens without sickness, or while it's an unnatural death, in Shakespeare's plays is when you're murdered, right? So, we associate these words wrongly, in my opinion, with unethical or moral binary.

Alan Levinovitz: That's hugely problematic. What is natural is not necessarily good, just as what is unnatural is not necessarily bad. And the same way that freedom is not always good and more freedom is not always better, right? You think about the paradox of choice, for example. And so, I think that when you take the idea of what is natural, and hook it up with Nature, with a capital N, which is something that I think about a lot. So, when you deify nature, and when you turn it into the source of all that is perfect and good, and therefore make what is unnatural the source of all that is evil and imperfect, you're making a huge mistake. And a lot of people are so frustrated by that, I believe. I'm sort of psychoanalyzing this.

Alan Levinovitz: But they see this problem and they're like, "This is ridiculous. This category of natural doesn't make any sense." Whereas what actually doesn't make sense is the necessary link between what is natural and what is good, and between nature with God. Those are huge problems, and I think we need to push back hard against them. But if you throw out the baby with the bathwater, as I say in the piece, well there's nothing left for a conservationist to conserve.

Alex Trembath: Yeah, this is something that we've gotten a lot more sort of conceptual and philosophical clarity here at Breakthrough over the last few years, is this distinction between the natural and the unnatural. I think we most often around here use the word synthetic, and not using one-to-one good-to-bad mapping onto those concepts. In our work, we see a lot of good in the synthetic for nature a lot of time.

Alan Levinovitz: Exactly.

Alex Trembath: Synthetic rubber saves rubber trees, oil saves whales, because we don't need their whale oil anymore. The synthetic can actually, as we say, make nature useless and therefore save it. So, it's not a simple good-to-bad one-to-one map.

Alan Levinovitz: Right. And that can be counterintuitive for a lot of people, and I understand people who want to use technology or industry to save nature getting really frustrated with that, right? The idea that you could use what is unnatural in the surface of what is natural. If you've defied nature and if you've turned natural into a synonym for good or pure, then that that whole equation falls apart. What you end up with is a really difficult situation in which the only way to care for nature is to be more natural yourself, to employ more natural things, to purify the world that anything that is unnatural. That to me, seems to be a terrible idea in all kinds of ways.

Alex Trembath: It seems like that being the case, you still agree with at least the motivation behind a lot of the conservation community who does draw a sharp line around nature. And that you suggest we need a grounding metaphor for understanding nature in order to save it, in order to protect it. So, why do we need a grounding metaphor and what do you think it should be?

Alan Levinovitz: Well, so the reason I think we need a grounding metaphor, in part is because we already use it. Instead of denying that we do. I guess it would be

fine to do that. But I'd be curious to see what conservation would look like without that defining metaphor. When people point... For example, when we're talking about things to conserve. So, any conservationist, whether of the nature's pure, nature is not pure strike, they're going to point to things they want to conserve. They're going to say, "Well, look what's happening with deforestation. Look what's happening with the oceans." What they don't point at his old television shows, or language systems, or any of... If you make the list of all the things that conservationists cared about, you put it in one column. You make another list of the things they don't ever mentioned, but that people do care about like preserving old paintings or whatever, you'll see that those things are all united under an umbrella that we might term natural.

Alan Levinovitz: Without that umbrella term, which is we're going to be fuzzy at the edges of course, we have no way of talking about what kinds of things we're interested in preserving. And even the people that deny that natural identifies anything at all, if they're conservationists in practice, even if they deny it in theory, they will be acting to conserve those things which fit under the umbrella category of nature. By that, all I mean is things that are more organized by forces that do not come from human beings. And so, the idea is that what is natural represents to a greater or lesser extent that which takes its organizing form from a place that is not human.

Alex Trembath: Yeah. In your essay, you talk not about Gods protecting some sacred Garden of Eden, but you talk... I'm trying to quote you a little bit about humans as caretakers watching over or protecting a primal nature. Not a sacred nature, but a primal nature. Can you talk about why you think those terms and that metaphor is useful, or why it might not be?

Alan Levinovitz: Yeah. I think the idea of being a caretaker is really important. Because what it means is that there is something that we are caring for that is not something that comes out of us. I know there's these dueling metaphors. Emma Maris has the idea of a gardener. Stewart Brand has talked about us as gods. But I think the problem with gardeners and gods is that the garden ultimately, at the end of the day, is a function of humans. Humans make of the garden the way they want, and they can make it. There's garden debates in Europe, but a garden is something that we create. Gardens did not exist before humans. That's just how it is. That's what the word means. So, it's something that comes out of us. And in the same way, being a god implies a kind of complete control. Whereas a caretaker is entrusted something that existed before them and outside of them.

Alan Levinovitz: I think that distinction is extremely important to make. I actually think it's one that conservationists of all kinds with Emma Marris or Stewart Brand, or anyone else would actually accept. They would say, "Yeah, yeah, yeah. Of course, we wouldn't want to replace." An ideal world 200 years from now is not one in which we have successfully replaced all animals with new animals designed by us, and all forests with new forests designed by us. I think that there is a sense in which conservation, trying to keep species like the condor alive, comes from the desire to make sure that these primal organizing systems, and primal in the sense of they came before, they were primary, they came before us, that there is something deeply important about preserving those primal systems. And so, if that's what we're doing, then we are taking care of them. We're not creating them. We are not making gardens. We are not acting as gods. We are caring for things that came before us that were entrusted to us.

Alan Levinovitz: That I think is helpful not just because it describes accurately what I think conservationists are doing, whether they want to talk about it or not in that way, I think that's what most conservationists are doing, but also because it brings conservationists together where some see the metaphors of gardening or being a god as a kind of hubris that has led to the destruction of the natural world they're trying to protect. That's a really important misunderstanding that causes a lot of division that shouldn't exist when people's goals materially align.

Alex Trembath: I'm obviously persuaded by a lot of this, but I get a little more lost and confused with what it might mean practically or politically. I'm looking at your essay, and to quote you real quick, you write, "Those who value nature should be concerned when disagreements about metaphor get in the way of dialogue about policy." So, caretakers of a primal order is open to a lots of different ways that people might think about nature and, as you argue, can maybe dissolve some of the disputes between different factions of conservation of environmentalism.

Alex Trembath: But I wonder how far that goes. And I wonder if we don't actually need to have the dispute. To have the debate about what is natural, what is unnatural, what those categories mean normatively and where they fall in the continuum. Here, I'm thinking of maybe certain brands of environmentalists who oppose, say, fake meat, or who oppose de-extinction, or who oppose nuclear power, because those things are farther away from natural than other things in those conceptions. So, I wonder

how far a grounding and open metaphor really gets us, and whether we actually need to have those fights.

Alan Levinovitz: Well, so it's a really interesting question in terms of how this looks on the ground politically, right? And you bring up nuclear energy or fake meat, both of which I think are really good examples of places where if we adopt a metaphor in which it is clear that what is natural is essentially important to the conservation movement, then we will be able to talk with people about splitting nature away from the idea of what is good, right? So that it's the normativity of nature that I think is problematic. But if people realize that everyone's interested in saving nature, and everyone is interested in preserving this kind of primal order, then they will feel less wary about the means that are undertaken to preserve it.

Alan Levinovitz: So, what I think is going on personally, with the fake meat or with nuclear energy is a combination of two things. The first is that there are people who belong to a kind of religion, if you want to call it that, in which it's not just that we want to save the primal order, but that the primal order is intrinsically good and everything that departs from it is intrinsically bad, and nature acts as a god. Those people have a lot of difficulty talking to other people who don't share their religious faith. But if it becomes clear to them that the people that they're talking with really actually have some of the same core values that they do, and you think about this is like a sort of religious tolerance lesson or something like that, then they'll be more likely to come together and work together on important issues rather than seeing the divide as insurmountable. And that why I think that's what they currently believe.

Alan Levinovitz: And so, when they see fake meat or nuclear energy, what they see is just more evidence that people don't care about the primal order. They don't want real natural meat, they want fake meat, and they want to replace real energy with fake energy, and so on and so forth. I think that if we can show that that's not the end, and by the end I mean that's not the goal, that's not the goal of fake meat, the goal fake meat is not eventually to have everything be fake, and the goal of nuclear energy is not to make sure that we all become nuclear powered robots, which is how I think people see this stuff, then they'll start to be a little bit more comfortable with it.

Alan Levinovitz: Another way to think about that is that for people who are members of that faith, it's hard to distinguish between conservationists who are fans of technology like ecomodernists, and people like Ray Kurzweil, who I think

frankly doesn't see a whole lot in nature to conserve. He would prefer all of us to download ourselves to the cloud and the earth to become some... I don't know. I have no idea what his techno-utopia looks like. But a lot of people are scared of that, and it's important to distinguish technological optimism in the service of the primal order, from technological optimism in the service of technology.

Alex Trembath: And it's a very difficult discourse to disrupt. As ecomodernists, we encounter a lot of that cognitive dissonance all the time when we talk about how good cities are, both for humans and for nature, and when we talk about things like fake meat or nuclear power, which can use less of nature or can cause less animal suffering or less biodiversity loss. That those semiotic concepts are not categorized in a lot of people's minds as natural, aka good, and therefore it doesn't compute that ecomodernists or whomever would pursue those technologies or whatever, in service of protecting nature. It's often not a rational or argumentative dispute, it's one about symbolism and about the mental categories that people already have.

Alan Levinovitz: Yeah, that's exactly right. Again, I don't know I'm a religious studies scholar, not a psychologist. But I think what's going on is there's not a lot of trust around here. And so, what people think is going on on the other side of these debates is that, well, they say they care about the environment, but look at the metaphors they use. They want to be gardeners, they want to be gods. This really isn't ultimately about nature, this is about control. Frankly, I understand that, right? I understand people being wary of industry.

Alan Levinovitz: I understand people being wary of god metaphors in a world where enormous corporations control a great deal of the power and people feel powerless in a world in which at least... The prima facie evidence is that however technology is being used to preserve nature, certainly the cataclysmic changes we're seeing, whether climate change or pollution or disruption of ecosystems are caused by humans in control of the kind of technology that we have today. It's hard for people to understand that that technology could also be... That it's a tool, right? It's techne, it's an art that could be employed to a different end.

Alex Trembath: Yeah. You just mentioned you are a religious studies professor. Why nature? How did you come to be interested in this discourse and this subject?

Alan Levinovitz: Well, I specialize in non-Buddhist Chinese philosophy and religion; it's a funny specialty. So, classical Chinese philosophy. One of my favorite books, the Zhuangzi, part of the early proto-Daoist cannon, talks a lot about this idea of Ziran which literally means the self. Self, Zi; ron, so. It's translated often as natural.

Alan Levinovitz: I remember, even as an undergraduate, being fascinated by the idea that what is "self-so" would somehow be better or superior than what is not "self -so." As I sort of move through my life, I started doing journalism on food in addition to my religious studies work, and I started to see that people were constantly talking about food using natural as a kind of default term of praise. What is natural is necessarily good, and what is unnatural is necessarily bad. I was like, well, that's a lot like the Ziran in classical Chinese philosophy. It seems like there's almost this human tendency to moralize that which is natural. And then I was shocked to find, honestly, that although this word is so important to us, that we use it all the time with food, and also with medicine, and also with energy, and also with sex, and also with economies, that although this word, in my mind at least, is as important or perhaps more important than God, because atheists use it and religious people use it when they talk about natural law or what it is that nature intended.

Alan Levinovitz: But then no one had really thought it through. That we haven't had a clear public discussion of the role of this term and how important it is in a sort of fundamental way to everyone, in the way that when you reach out to touch that plant leaf and find out whether it's natural or artificial or synthetic, that what you're doing is showing ritually that you care. That this is the kind of thing that is really important. I believe that it's really important to everyone, and that we need, in order to discuss practical things like what kind of energy we're going to use, or what kind of food we're going to eat, or what kind of sex we're going to have, we need to get out on the table what our beliefs are about nature. I think oftentimes for myself at least, and I know for a lot of other people, those beliefs are largely unexamined, but incredibly powerful. I think largely unexamined and incredibly powerful beliefs are dangerous, and they make dialogue difficult.

Alex Trembath: Well, now that we've returned to the artificial leaf, we can start winding down. But I want to ask you a question we asked some of our podcast guests. Which is, can you tell us your story in six words?

Alan Levinovitz: Yeah. My story in six words. The conclusion I've come to about people is that: everyone needs myths to make meaning.

Alex Trembath: I like that.

Alan Levinovitz: Myth is this negative word. It often is synonymous with falsehood, in the same way that unnatural is synonymous with bad or evil. But I think actually myths are just the big narratives that we use to make sense of the world. And people need those narratives. They need metaphors that tell a story about who humans are and what our place is in the world. And so, I say in the Breakthrough piece, myths are metaphors in narrative form. That's what they are. We need to take the world as something else in order to understand it. And sometimes, we need to give that the shape of a story. And we all do it whether we want to or not. I think the question is how clear we can be about the myths that structure our lives and give us meaning, and how we can reconcile dueling myths when that reconciliation is important to a shared goal.

Alex Trembath: I couldn't agree more. I think there's a reason that ecomodernists have quite a bit of overlap with the groups that previously or still call themselves Promethean environmentalists, speaking of myths.

Alex Trembath: But with that, I want to thank you for joining us today, Alan.

Alan Levinovitz: Thanks for having me. It's been a great conversation.

Alex Trembath: Take care.

Alex Trembath: Thanks for tuning into Breakthrough Dialogues. If you like our show, tell your friends, rate us on iTunes, and subscribe on whatever platform you get your podcasts. I want to again thank my guests, Alan, and our producers Alyssa Codamon and Tali Perelman. Catch you next time.