



## **S1E6: Transcript**

**The last in a special, 5-part  
Covid-19 conversation series  
with David Sloan Wilson  
The Core Principles of Cooperation**

**Tava Gilbert:** Welcome to Stories of Impact. I'm producer Tavia Gilbert, and in every episode of this podcast, journalist Richard Sergay and I bring you a conversation about the newest scientific research on human flourishing, and how those discoveries can be translated into practical tools.

Today's episode is the last in our five-part special series focusing on Covid-19. Today Richard talks with David Sloan Wilson, professor of biological sciences at Binghamton University and president of the Evolution Institute. Prof. Wilson describes the core principles of human groups that allow successful cooperation and discusses how we can implement these principles to alleviate the negative effects of the current pandemic and stop its spread.

**David Sloan Wilson:** My name is David Sloan Wilson. I am a professor at Binghamton University and also president of the Evolution Institute, a nonprofit and actually the only nonprofit that formulates public policy from a modern evolutionary perspective, as strange as that might seem, I think it's an accurate boast.

**Richard Sergay:** And when you say modern evolutionary perspective, help me understand that.

**David Sloan Wilson:** Well, actually, any evolutionary perspective, as you know, I mean, evolution is famously misunderstood in America. Even for those who accept it nominally, they don't put it to use in their professions or in their everyday lives. For almost everyone, evolution is a biology topic. They don't think about applying it to policy issues of all sorts. And so the idea

that evolution is as explanatory for all things human, as it is for the biological world is very, very new. And it's so new that it doesn't matter where you stand on the political spectrum, liberal or conservative, libertarian, no one draws upon modern evolutionary thinking to formulate their public policies. That's new and almost all of the development have only taken place during the last few decades. It wasn't until the closing decades of the 20th century, that terms such as evolutionary psychology, evolutionary economics, evolutionary anthropology, were even coined. So it's a, this is actually a background for our conversation: for most of the 20th century, the study of evolution became gene-centric, as if the only way for offspring to resemble their parents is by sharing their genes and the study of cultural evolution, and something like personal evolution, was ceded to other academic disciplines, which for the most part developed in their own way, without reference to evolution and sometimes in perceived opposition to evolution. And so all of this is developing, uh, in the current day, but the good old Evolution Institute, which is tiny, is the only nonprofit that explicitly has this message, is that we formulate policy on the basis of modern evolutionary thinking.

**Richard Sergay:** Interesting. So let's dive into our topic for Stories of Impact today, which is on cooperation and the pandemic. So as an evolutionary biologist, helped me understand, first of all, when we talk about the word cooperation, what does it mean for you? And then let's dive into, what does it mean for the pandemic?

**David Sloan Wilson:** Cooperation is agents working together, coordinating their activity to achieve some common goal, and it need not be humans, a cooperation takes place in nonhuman species. Even plants can cooperate. And the reason that it's an important subject from an evolutionary perspective, the reason that evolution has a lot to say about cooperation is that it is vulnerable to cheating. Individuals that don't cooperate, that accept social benefits without paying the cost, often have an advantage. So evolution tells us that often cheaters will have the advantage, not cooperators. In other words, special circumstances are required for cooperation to evolve by an evolutionary process, and that those special circumstances we can get to. So, so basically any case of individuals working together to produce a jointly beneficial outcome is an example of cooperation. And when we get to the pandemic, what that's going to bring in is the need to cooperate at a very large scale – worldwide cooperation – which is the most difficult sort. The simplest forms of

cooperation would take place between, say, two individuals. Well, and even that has problems. So to scale it up to any larger level, such as a national level, it's already huge. A worldwide level? Oh my heavens! And so, so the pandemic is the perfect storm, for cooperation not taking place. That's the great challenge is how do we cooperate at large scales? And that's, that's true for all the global problems. The pandemic is just the latest in a long parade of contexts requiring global cooperation. There's the economic context. There's the climate context. Now we have a disease context, because it's a globalized world.

**Richard Sergay:** So how do we cooperate in a globalized world, in a pandemic? What does that look like? What does it mean?

**David Sloan Wilson:** I think we need to begin by getting crystal clear on how our cooperation can evolve from a Darwinian process at any scale. And let me bring in Elinor Ostrom here. She's a very important person to be discussing in this conversation. She was a political scientist, and she won the Nobel Prize in 2009. At the time she was unknown among economists, and she remains unknown, despite the fame of winning the Nobel Prize. She remains unknown by most people. And so what she did to receive the Nobel Prize: she studied the famous tragedy of the commons. And most people have heard of the tragedy of the commons. That's what happens when people are drawing upon a common pool resource and there's the temptation to take more than your share, and that results in the overexploitation of the resource. And so cooperation in this context is to show restraint, not to overexploit the resource, that's what cooperation is, and the conventional wisdom was, was that the tragedy of the commons will always occur, unless you privatize the resource, and then everyone manages their little piece, or you impose top-down regulation.

And what Eleanor showed was that actually by studying groups that attempt to manage their common pool resources, is that actually some of them were able to do so, not all, but some. And she derived what she called core design principles for managing these common pool resources. This was the blueprint, the ingredients of groups, being able to manage their own affairs, groups being able to cooperate. So here are the special conditions that groups need. And I worked with Elinor for three years to generalize those core design principles. So in a sense I can right here and now I can provide you with the ingredients for cooperation to work. Would you like me to tell you?

**Richard Sergay:** Yes, I'd like to know.

**David Sloan Wilson:** Okay, so the groups that worked in the first place had a strong sense of identity and purpose. They knew that they were a group, what the group was supposed to do, that it was important, who was a member, in the case of a common pool resource, the boundary of the resource, and so on and so forth. So a strong sense of identity and purpose.

Number two: proportional costs and benefits, not sustainable for some members to get all the benefits and others to pay the costs. The groups that worked, what members got from the group was proportional to what they gave to their group.

Number three: fair and inclusive decision making. Not sustainable for some members of the group to call all the shots and for others not to have any part in the decision making process. In the first place, that's a recipe for unfairness, in the second place it doesn't make use of the wisdom of every group member.

Number four: monitoring agreed-upon behaviors. Not sustainable if you can't tell if people are, are behaving as, as they agree upon, then of course, all bets are off.

Number five: graduated sanctions, but it need not start out mean or harsh. A friendly reminder is usually enough to keep people in solid citizen mode, yet it must be possible to escalate. And while we're at it, let's reward good behavior at the same time that we punish bad behavior.

Number six: fashion fair conflict resolution. Conflicts will occur, they must be resolved quickly in a manner that's regarded as fair by all the parties. In a dispute, most people think they have a point of view.

Number seven: authority to self-govern. Members must have elbow room in order to manage their going affairs. If they're being bossed around from without, then all bets are off.

Number eight: polycentric governance ... with other groups, which reflect the same core design principles. So what this show is is that the core

design on principles are scale independent. They're needed to govern relations among groups, in addition to relations within groups.

Now, if you think of these core design principles and imagine a group that strongly implements them, and then imagine a member of that group trying to misbehave, then it will not be easy. This group is well protected against cheating. If you imagine a group that does not implement these core design principles, then that's easy pickings for a member of the group that seeks to exploit the group for their own gain.

And so there you have it. These are the ingredients that can cause cooperation to prosper. You've created the social environment, and this happens actually all the time, our very existence as a species can be understood as these ingredients, basically. We're the only primate species compared to our closest primate relatives. If you look at chimp communities, they don't have those core design principles. If you look at small scale human societies, they do. They do. And so basically it was social control, the capacity for originally smaller groups in order to hold each other in check, which caused our species to become so cooperative, first at a small scale and then at increasingly larger scales through human history through the last 10,000 years.

**Richard Sergay:**

David, circle back to the pandemic for me. We saw in the first couple of months here in the United States, a pretty successful national lockdown, told by the government that for your own safety and those around you, you need to stay home. As this has unfolded and society begins to open up...I'm seeing a frame of that cooperation. We spoke to your colleague in New Zealand who said that they have had a very successful transition through the pandemic, whereas the United States, as we know, the latest numbers are that we are the highest of those among the world who are infected. So if you want to speak cross-culturally, that would be great.

**David Sloan Wilson:**

One of the things that makes cooperation work is to have in the first place norms of good behavior, we have to know what are we supposed to do? And those norms are enforced. Turns out that cultures vary quite widely in their norms and how strongly they're enforced. And that's a continuum from what's called a tight culture: strong norms, strongly enforced; and a loose culture, which provides a lot more elbow room for individuals do what they want. And there's actually advantages to both forms. Tightness is called for under some circumstances, looseness for

others. And so if you think about how various nations have responded to the pandemic, perhaps unsurprisingly, it's the tight ones that have responded most effectively because they're capable of saying: this is what we should do, and everyone does it. In Singapore or Korea, or even New Zealand, that takes place much more than in Brazil or Italy and the good old United States.

Even within the United States, if you look at the 50 states, there's cultural variation along the same axis. And so it's for that reason that you have some states doing much better than other states. It's vastly complicated in the United States by the fact that thanks to the Trump administration, the norm can often be a norm of not closing the economy. When your leader is saying, forget about the pandemic, open up the economy, then that becomes the norm – even in a tight culture, that becomes the norm. So you've got some Southern states which are tight as far as norm enforcement is concerned, but they pick that norm. That even happened in Scandinavia when Sweden chose to do one path and the other Nordic countries chose another path. And they all followed that path very conscientiously, because they're all quite tight and well-running, uh, nations, but, uh, Sweden chose the wrong norm. And so its, uh, infection rate went way up.

**Richard Sergay:**

One of the thoughts I have is that democracy is messy. And we are reflecting that in terms of our either cooperation or lack of cooperation. I mean, to be quite practical here, masks are a good example of that. Those on the right are generally disdaining the use of masks, and those toward the liberal and left are wearing masks, generally. How do you explain that culturally or that version of cooperation, knowing that the bottom line is that this is a virus? This will affect all of us. The science shows that. So is there, does that mean that there is no common good anymore?

**David Sloan Wilson:**

It means that it's awfully hard to agree upon the common good. And when we get, again, various forms of science denial. You say the science says that, well, who cares if the science says that when you have people that are discounting the authority of science. And so when we say it's politicized, that means that you have some that are more or less announcing their identity by not wearing masks. And frankly, if the death rate goes up, well, that's going to happen. And that's just the way it's

going to end up. It's a terribly dysfunctional situation. Hard to really know what to do about it.

**Richard Sergay:** So you're inferring a generalized lack of trust, which then translates into a lack of cooperation. Is that what I'm hearing?

**David Sloan Wilson:** Totally. I mean, cooperation requires trust. And once you lose trust, then it becomes extremely difficult to cooperate, or even to see yourself as part of the same group. And we're seeing that. So once again, the nations that are, that are capable of acting in a unitary fashion, coordinating everyone's activity and getting them to do something, which is hopefully a good thing to do is the nations that have a high degree of trust. And the reason they have a high degree of trust is that they've earned that trust, by delivering benefits to their citizens. Members of those nations don't mind paying high taxes because they got something back for them. So, uh, that means that, that the erosion of trust, especially in America, is going to take a long time to rebuild that.

**Richard Sergay:** And, and David it's revealing if we're going to stay domestically for the moment, all of America's fault lines, too correct?

**David Sloan Wilson:** Exactly. I think that around the world, the pandemic has revealed the fault lines that existed previously. I mean, it's like you had some kind of a ceramic vase that had cracks in it. And then the pandemic came, and by that shock just caused the vase to fragment on the basis of existing cracks. I mean, look at the inequality. And therefore we have people living under conditions, which are just really gonna make the disease spread. What do we do about those conditions? We have the frontline workers, the people that we really need now, and we were paying them a pittance before. And now they're doing things which are life-saving for us. What was that about? Climate change is behind so much of this. We don't recognize it because of the indirect effects. It's not the direct effects of climate change. It's the indirect effects. And another point to make, which I think is important is that okay, every culture is mismatched to the current situation, and there's no culture anywhere that is pre-adapted to solve these problems. And so on the one hand, we need to act of solidarity and so on and so forth, but on the other hand, we need to experiment. And that means we need to vary what we do, and compare, find best practices and then amplify those best practices. To have an evolvable culture requires a kind of flexibility that is in some sense loose. You need a very special combination of tightness and

looseness. You need to be loose enough to try different things, and you need to be tight enough once we decide what the best thing is, to implement it.

**Richard Sergay:** Is there a good example, in your mind, of a culture that reflects this?

**David Sloan Wilson:** The existing variation – my colleague, Michelle Gelfand, and her colleagues have an article on this. What they show us statistically is that the cultures that are best responding to the pandemic have two qualities. On the one hand they're tight, so they can form norms and people follow those norms. And on the other hand, number two, they have effective governments, which rules out autocracies, by the way. Authoritarian governments aren't responding to this very well. They're tight in their own way, but they're not tight in the way that they, that they need to be. So effective governance and tight cultures that are capable of forming norms and getting everyone to fall in steps. I mean, if you take, for example, wearing masks, if that's what the decision is made, we should be wearing a mask, and then you put someone on the streets that's not wearing a mask, just see the reaction they get from the people that are around them. And so that kind of informal policing is a culture basically, to be able to do something in a coordinated fashion. To cooperate at that scale requires those mechanisms. People are watching what you're doing, and if you're out of step, then there's a little correction. You got a sideways glance. So those are the core design principles that are in action.

**Richard Sergay:** Go back to something you said that intrigued me about inherent inequality, injustice, you referenced the global economy. Those inequities impact cooperation, in what way?

**David Sloan Wilson:** So if we take the world, with its current inequities, and then you exposed it to the shock of the pandemic, then what you find is those inequities, among other things are causing the disease to spread fast in ways that are very difficult for us to control. I mean, if people are in crowded circumstances, if they're working under work conditions that are just unsanitary, I mean, nobody has any life savings, they're living from paycheck to paycheck, they're work here for low wages...all of these are basically becoming pathological with respect to being able to respond to the pandemic. In a country, where there was, for example, a universal, basic income, you wouldn't be having these problems. It could all be, people could be staying at home. They wouldn't be turned out of their

apartment. So these are the senses in which the existing inequities are creating problems with respect to the pandemic.

**Richard Sergay:** How would you message cooperation to be more effective? So that all sides of cultural divides adhere to a lesson and a message of health and wellness that keeps the population safe. If you were that czar of messaging, what would you do?

**David Sloan Wilson:** Well, one point is to be holistic and systemic. It's that if we are going to solve this one problem, let's solve all problems at the same at the same time. Let's think about what it means for there to be a good society and a society that's good in all respects, not just try to solve this as a single, isolated problem. So that's point one. Point two is, which I think is so fundamental and it follows from evolutionary theory, identifies the small group as a fundamental unit of human social interaction. For the last 70 years, we've been living in the age of individualism, which treats the individual as the stand-alone person, the cost/benefit reasoner of economics, and then proceeds to large-scale society. And so the small group is like a dangerous species and modern life. And sociologists such as Robert Putnam in his classic book, *Bowling Alone*, put his finger on this, on this problem: the simple act of forming people into small, functionally oriented groups, in other words, small groups with a purpose, and endowing them with those core design principles, can do wonders in two ways.

In the first place you provided the optimal social environment for the individual, there'll be huge physical and mental health benefits just from doing that. And in the second place, those groups will be capable of efficacious action at a larger scale, more than any individual. And so to provide a cellular structure to large-scale societies by putting individuals into small groups is the most important thing you can do. And it's beyond the imagination of individualistic worldview, certainly the orthodox economic worldview. So there's one insight that follows from evolutionary theory right then and there: create cells, whenever you can. And then the purpose of those cells can be multiple. But they'd have to do of course with do they make our lives better in all respects. And then how do we work at a larger scale? How do those cells interact with each other in order to build up governance at a larger scale. This is what Elinor Ostrom called polycentric governance. And that can be generalized from an evolutionary perspective. So there actually is quite a specific blueprint

for what to do that begins with the creation of small, purposeful, functionally-oriented groups.

**Richard Sergay:** Do you come out of that theory, being optimistic that that is a possibility for a country that, like the United States, has 330 million people in it to build small structures that then become responsible in grand scale? Is that doable?

**David Sloan Wilson:** It is possible to be authentically optimistic. And I think that part of an evolutionary worldview is there when you look at the broad spans of history, you know, twenty, fifty thousand years, what you find is that back at the beginning, there were no societies larger than a few thousand individuals. Now we have societies of hundreds of millions and even billions of individuals, which cooperate at a scale that would have been totally beyond the imagination of anyone even a few hundred years ago, not to speak of if you, a thousand years ago. And so if you take that time span, what you find is we're actually only a step away from global cooperation when you, when you go back that far by way of a comparison.

So really it's an orientation, a conceptual orientation, which places the global good as the most important, and then orients everything lower than that, such as national interest, as subservient to global interest. And that's not even new. I mean, that happens all the time. An enlightened leader, and the enlightened leaders of the past and some in the present, the way they think about their nation being first, is by being a solid citizen of the world and deserving another reputation among other nations. It's standard at a smaller scale: how do you succeed in a smaller group? By cultivating a good reputation. And then status is given to you. It's no different at the larger scale. The global village that phrase is, is very apt. I mean, the world is a global village of nearly about 200 nations. If they could act as individuals, and we enforce each other for their cooperative behavior, then we'd be done. And so it's not hard to understand, but it does require the right theoretical worldview.

**Richard Sergay:** Well, on that possible, hopeful note, we'll call it a day there, and thank you very much for your thoughts. And we'll come back to you as this pandemic continues on and see where we're at in a number of months from now.

**Tavia Gilbert:**

As Richard said, listeners, we're ending on a hopeful note. We're so glad you joined us for this inaugural season of Stories of Impact, and for the five conversations Richard has brought you with cutting edge scientists whose work has turned, in this most unusual season, to looking at the societal response to the Covid-19 pandemic. If you've tuned in for the entire series, you know that in addition to today's conversation with David Sloan Wilson on the Core Principles of Cooperation, we've spoken with Barbara Fredrickson about the Power of Positivity, Erez Yoeli about Encouraging Altruism, Athena Aktipis on Cooperation Amidst Catastrophe, and Joseph Bulbulia on Spirituality, Belonging, & the Pandemic Response. I've found all of these conversations hopeful, encouraging, and positive during a most difficult time, and hope you have too. If you've missed any of them, go back and catch up. These conversations will bring you an uplifting perspective as you and your families continue to navigate the complexities of the pandemic.

We'll be taking a season break for a couple of weeks, but stay tuned for our return in mid-August, when we'll be back with the first episodes of our second season, which explores the Diverse Intelligences Initiative from Templeton World Charity Foundation. The DI Initiative is a multi-year, global effort to understand a world alive with brilliance in many forms, with a mission to promote open-minded, forward-looking inquiry into animal, human, and machine intelligences. Our DI season kicks off with a conversation with Pranab Das, professor of Physics at Elon University and the Principal Advisor to TWCF's Diverse Intelligences Initiative. He's a researcher with a long history in study regarding science and spirituality. A conversation with Pranab kicks off what promises to be a fascinating series of episodes about intelligences as diverse as the Honeybee Brain, the relationship between Artificial Intelligence and the Future of Human Morality, and Humpback Whale Songs & the Search for Alien Intelligence.

**Fred Sharpe:**

I think it was the song of the humpback whale that made us realize that there are other worldly beings right here in our oceans. Now is there life out there in the universe, statistically speaking it seems, yes, there most likely is, and I think through these collaborative ventures, between people in the animal sciences and SETI I think will get closer to this wonderful and perplexing question.

**Tavia Gilbert:**

That was Fred Sharpe, a research biologist specializing in humpback whalesong. We'll be back in the first episode of our second season with Richard's full conversation with Fred Sharpe and other researchers, studying the songs and sounds of humpback whales, and how those vocalizations inform our search for life in the universe.

If you've enjoyed these Stories of Impact, please consider taking a moment to subscribe to the podcast, and rate and review us on Apple Podcasts. Your recommendation to other listeners helps us grow our audience and sustain this project.

This has been the Stories of Impact podcast, with Richard Sergay and Tavia Gilbert. This episode produced by Tavia Gilbert and Talkbox. Assistant producer Katie Flood. Music by Aleksander Filipiak. Mix and master by Kayla Elrod. Executive producer Michele Cobb.

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