"Limits of Reason"

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The sermon is prefaced by the song Why Do Trees Look Like My Hands, by Rev. Lynn Harrison

Why do trees look like my hands? Why do waves move like my breath? What is going on here? What forces lead to the creation of trees, and what forces lead to the creation of hands? Are these 2 different stories, or are they 2 plotlines in the same story? Where do trees come from? Where do hands come from? Let's take a step back and look at the story of how we all got here. Let's start at the very beginning, the earliest known event, the big bang. Where the energy of the big bang came from, we don't know. What a mystery. A big bang, and then matter rushes apart, forming gigantic patterns, spreading, always spreading. And gravity acts, bringing these tendrils together to form galaxies and stars. Connecting, always connecting.

Planets form. In the primordial ocean, atoms bump into each other and form molecules. So much jostling, spreading and connecting. More complex molecules form, chains of amino acids, spreading and connecting. Single celled organisms are born. Jostling, reaching, connecting. Multicellular organisms, reaching, connecting. Photosynthesis, reaching for sunlight, each organism a tremendously complex network of life.

DNA is copied, proteins are made, signals are sent, all of this done mindlessly, for there are not yet any brains. Mindless organisms, reaching and connecting, reaching and connecting.

The first nervous systems evolve in jellyfish, to allow both movement and sensing the world. Neurons growing and connecting, growing and connecting. This proves handy: neural networks to make limbs move, to open the mouth, to bring in food, to sense predators. Systems grow by chance, and survive if they help the creature to survive. Concentrated neural networks - brains - develop. To look at a brain up close is to see an incredible network of neurons, interwoven and interspersed. Created through chance mutations and reinforcement of success.

Why do the neural networks in our brains look like trees, look like hands? Because they all evolved to reach and connect, reach and connect.

We don't think using logic gates and rational processes. We think using what evolution gave us.

A professor of both neurology and anthropology, Melvin Konner, wrote a book called The Tangled Wing: Biological Constraints on the Human Spirit. Konner says that humans think in ways that help us to survive. We use motivated reasoning, not pure reasoning. And yes, there is more to life than survival. We are motivated to be in close relationship with others. This also provides plenty of room for motivated reasoning. If our crops fail, should we blame ourselves, or nature, or should we blame the settlement one valley over? Let's blame the settlement one valley over, and let's make things right by taking their crops for ourselves. That's motivated reasoning, and it can help you to survive. You forgive your friend for something when you wouldn't forgive your enemy. That's motivated reasoning. Melvin

Konner says that this behaviour is wired in. Perhaps you've seen a little kid who can justify taking the last cookie, even though they've had their share. That's motivated reasoning.

Evolutionary psychologist William von Hippel wrote a book called The Social Leap. He argues that humans adapted to be social animals. We find value in a shared worldview, even if the worldview isn't true. Staying loyal to your political tribe can be more important than sussing out the truth. It's not just the other political tribe who does this! Your tribe does it to. We are wired to fit in. We are wired to believe what it is convenient to believe. We aren't wired to think rationally.

Here is a short list of some of our cognitive biases: Agent detection. Ambiguity effect. Anchoring. Anthropomorphism. Attentional bias. Attribute substitution. Automation bias. Availability heuristic. That's just the A's! For the full list, see the Wikipedia page List of Cognitive Biases. Humans have many cognitive biases. We have some because they help us to survive and bond with our neighbour. We have some because our brains are made by trial and error.

It can be so frustrating to see the mess people are making of their lives, or see the mess people are making of the world, due to low quality reasoning. I want to implore people, "Please do a better job of reasoning!!!" Do you ever feel that way, seeing how people respond to covid and such? Let's actually turn this into a litany. Each time I say something, you say "Please do a better job of reasoning!"

When a politician ignores the science...Please do a better job of reasoning.

When someone on the internet is wrong...Please do a better job of reasoning.

When global warming doesn't get addressed...Please do a better job of reasoning.

When someone chooses hate...Please do a better job of reasoning.

When someone is short-term thinking...Please do a better job of reasoning.

When a friend misinterprets your words...Please do a better job of reasoning.

Take a moment to insert your own thing here, what makes you want to say, Please do a better job of reasoning?... Okay, let's say it: Please do a better job of reasoning.

And one last one, aimed at yourself, because we're all wired irrationally...Please do a better job of reasoning.

I think, therefore I am probably making mistakes.

We try so hard to think better. Coming out of the dark ages, full of myth and provincialism, the enlightenment was a time of stepping back to try to see the bigger picture. It was a time of taking things apart to see what made them tick, to see how simple systems interacted so that we could then understand more complex systems. The scientific outlook gave us great gains, such as abundant food, an understanding of hygiene, and now mRNA vaccines. Thanks to science, we get to see a photo of earth from outer space.

But we took reason too far. The modern era was unreasonable in its use of reason. To take one example, designers of cities said let's take out everything that's complex. Create a grid of streets, rectangular buildings, make everything large because large is more efficient. We created cities that were easy to

understand but that made no sense. Jane Jacobs came along and said, we need cities that don't make sense, we need cities that develop organically, the way that trees and hands and brains develop.

Reasoning better means opening up to the complexities of the world. Seeing things as they are. Not seeing things the way you want them to be, not seeing things the way your tribe says they are.

bell hooks said that "The heart of justice is truth telling, seeing ourselves and the world the way it is rather than the way we want it to be. More than ever before we, as a society, need to renew a commitment to truth telling."

Truth telling is one of our commitments, but we have other commitments. We don't specialize in reasoning better. But there is a group that does. The group formed around a website called Less Wrong. They say, we can't know if we are right, but we can try to be less wrong. Their goal is to do a better job of reasoning, to overcome their cognitive biases, so that they can see the world as it is, not as they want it to be. The Less Wrong community spawned a broader informal network of people that is sometimes called the rationalist community.

Julia Galef started the Center for Applied Rationality, to help people to think better. She has a background in statistics, which is a sound background for disciplined reasoning, but beware, it is possible to lie with statistics, even to yourself. Before starting the Center for Applied Rationality, Galef was a member of the New York City Skeptics. Perhaps there are skeptics here today. Galef wrote a book this year called the Scout Mindset: Why Some People See Things Clearly and Others Don't. She argues that some people have a scout mindset, trying to get an accurate lay of the land, while other people have a soldier mindset, motivated to see, not what is true, but what will help them win. Scouts aspire to accurate reasoning; soldiers are content with motivated reasoning.

Galef started the Center for Applied Rationality with the hope that she could help people to become scouts, that she could help people to overcome their biases, so that they could see and think more clearly. The good news is that studying reasoning can help you to better see your cognitive biases. The bad news is that, when it comes to reducing your cognitive biases, Galef did not see the results she was hoping for. It turns out that improving your reasoning skills can make you better at justifying your beliefs, not better at overcoming cognitive bias.

Even professional scientists don't always know what they don't know. The physicist Richard Feynman would play a practical joke by convincing his colleagues of one thing, and then convincing them of the opposite. Sneaky, and humbling.

We value reason. We affirm reason. We promote reason. And, we aren't necessarily good at reasoning. So what are we to do?

One thing that we do is create groups that can think better than individuals can think. The scientific approach has people looking at the same problem from different angles, checking each other's work, going beyond the limits of one mind. And consider us: Perhaps our intelligence as a congregation is greater than the sum of our individual intelligences. You can fool yourself some of the time, but it's hard to fool a community of truth-seekers. Have a number of people in your life to run things by. Some who think similarly to you, to help you to get into the nuances, and some who think differently from you, to help you to see your blind spots. Reason is bigger than us.

Another way to deal with being bad at reasoning is to use shortcuts. Instead of fully reasoning out whether a dog is safe, given it's breed and temperament, you can simply check if its tail is wagging. Instead of reasoning your way through the nutritional value of everything you eat, just check if you're eating a variety of healthy foods. These shortcuts don't provide proof, but they help us to avoid situations that are too complex for our reasoning ability.

Unfortunately, one way that some people avoid bad reasoning is to just do things the way they have always been done. The reasoning here is that if you do things differently, you'll probably do things worse. There is something called the rationalist to traditionalist pipeline. It happens when a rationalist says, wow, I'm bad at reasoning, and I can't get better at it. Rationalists who lose faith in their ability to reason, and dial back their use of reason a little bit, call themselves post rationalist, or postrat. Rationalist who dial back their use of reason a lot, who mostly do things the old way, now call themselves traditionalist, or trad.

I agree that we can depend too exclusively on reason, and yes, sometimes it's better to just follow the tradition of having birthday cake on your birthday without thinking it through. But I say don't respond to the limits of reason by abandoning reason. Rather, buttress it with other ways of knowing. We are bigger than reason. One way of knowing is relationship. I can't reason my way into knowing what is in your heart. I need to be in relationship with you. I can't reason my way into understanding First Nations needs. I need to be in relationship with First Nations. This is why so many congregations have indigenous awareness groups. We understand that relationship is an important piece of the puzzle.

Another way to complement your reason is to love. Wake up with the decision that, today, you are going to love the world. We are wired to be biased towards those we love, so love everybody. Love all beings. You might be biased in your reasoning, but at least you can tilt the bias towards helping all. Especially love those who need it the most.

The poet Elizabeth Tarbox says that "Love is so elusive and so precious and doesn't follow any rules." Reasoning can make us overvalue the explicit, the legible, the understood. Love can move you through the world the way trees, hands and neurons move, reaching and connecting.

We understand that there are limits to reason, but do not give up on reason. Broaden yourself to include reason, relationship, love and more. It is the reasonable thing to do.