

4.1 What Does It Mean to Know?

Knowledge and the Standard of Proof

So in one sense, we're asking a really simple question here. What does it actually mean to know something so that you can act on it? A fancy way to say that in my business is to use the word "epistemology," which is probably too complicated for what it sounds like. But it's really just in a very practical sense a kind of theory of knowledge or a notion of, what does it mean to have knowledge, and how broadly can one apply it? A kind of nature and scope of knowledge philosophy-- but actually, for our purposes and what we want to do here, we can really be very simple about this. It's really how we as a community of actors, or maybe as a company or maybe a group of people in a room, how we are going to decide amongst ourselves and agree with each other that something is true. Now, for philosophers, this is a really complicated subject. Epistemology is a philosophy that people have been struggling with for thousands of years. For us, it's really a practical art. It includes some elements of the scientific method that we've talked about, but it can't really adhere to it slavishly. Look, here's a really concrete example. As a college teacher, I really would like to find a way to know if I'm helping my students learn what they need to know 20 or 30 years later. In other words, are they becoming better citizens? Are they better workers? Are they happier? Are they more satisfied in their lives because of something I taught them? And if I knew that, that would be great. But even if I could collect the data for a scientific assessment of that, that data is not going to be available for 15, 20, maybe 30 years, and by that time, it's too late for me to go back and change how I taught them 30 years earlier. That's just not useful for my purposes. We actually need to be practical about what we can and what we need to know. So the real question is what epistemology should demand of us as decision-makers, and that depends a great deal on actually what we want to do with the knowledge that we claim we're going to have. There can be very different standards of truth depending on what kind of decision you want to make. One standard of truth might make a lot of sense if you're, say, working for Tesla and you're trying to decide, what do you think the most popular paint color is going to be for the car next year? And we're going to have to plan our build runs in the factory. That's a piece of data, a piece of knowledge. And we could argue about whether we've got it right, but the cost of not getting it right are things we might be able to manage. It's probably a different standard of truth if, say, you're sitting in the White House in the United States and you're trying to decide, is this rebel group in a country in the middle of a civil war taking money or not from a terrorist organization? That might be a different standard of truth. And in fact, it might even change over time. And if you're sitting in a hospital and you're thinking about, again, an experimental medical treatment, you might want another standard of truth to apply to, say, stage three clinical trials for an anti-cancer drug or an anti-dementia treatment. You wouldn't want to have to apply the same standard of truth to all of those three cases, because the stakes are really different. By the way, when we dig into this--

and actually, it's intuition. We'll see it this week. We'll see it some other times as well. I think you'll come to recognize, as I have over time, that actually, the most important arguments in the real world are actually not over whether something is said is true. That's not what people really argue about, although they do. What really matters in most decision-making situations happens prior to that discussion. It's actually the argument over what standard of proof ought to be applied. And I found, sometimes to my benefit and sometimes to my detriment, if you can win that argument before you actually argue about the truth, if you can win the argument about what the standard of proof is, then you're much more likely to win the argument about what's true and what we ought to do about it. And so I think being practical about that means getting really self-conscious about the phases of those discussions and the decisions that need to get made along the way. And if we think of ourselves as data science advisors, then helping the people around us to do that in a way that makes what we have to bring to the table-- the data-- most effective and most beneficial inside the organization.