

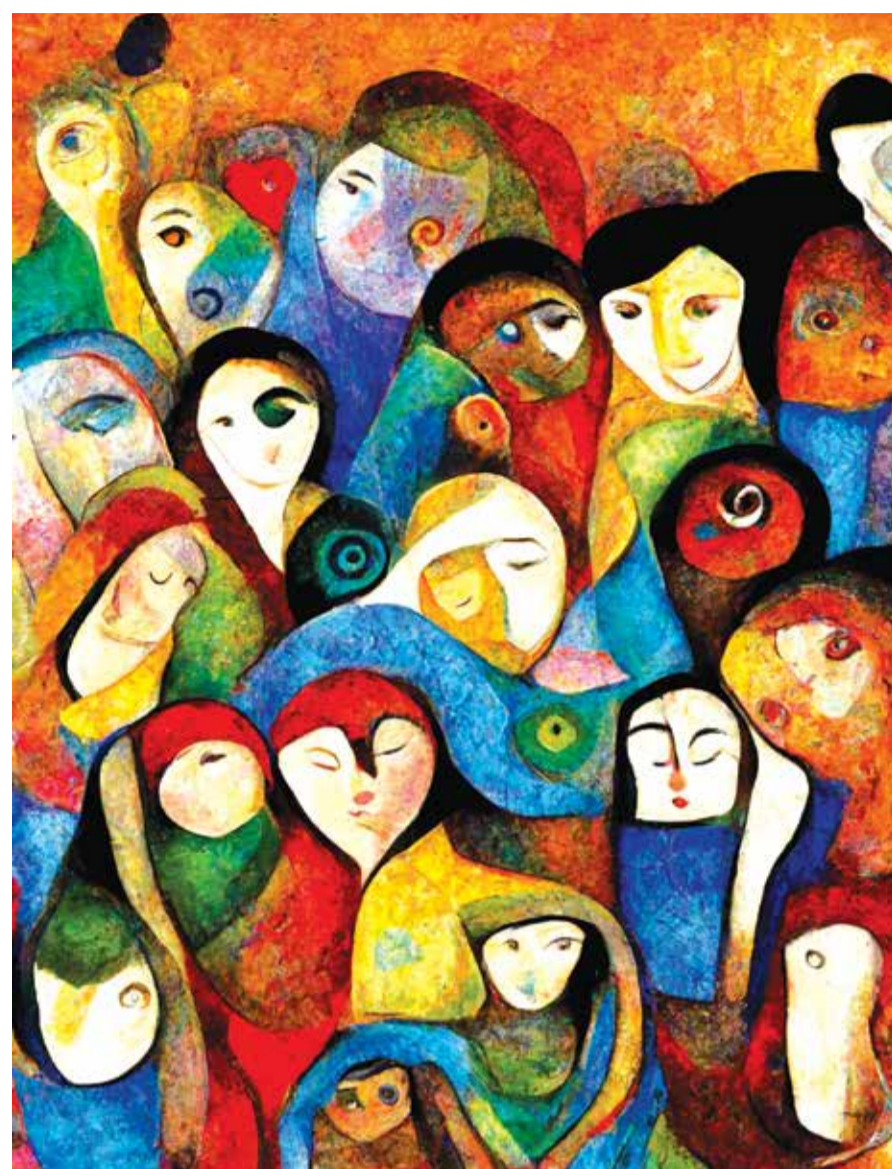


raises a number of interesting questions, questions about roles that people play, the ways in which they interact with each other, and what they enable what a team can do that no single individual alone can do. Just to give you one sense of that, if you think about all the evidence that I could ever possibly have in my mind, it's a tiny, tiny, tiny portion of the evidence that you need to confirm many of our most sophisticated scientific theories. So, how do we confirm our theories, given that I can't fit all the evidence that you need to confirm those theories in my mind? Well, what we do is we distribute the task to a team or sometimes even to an entire sub-discipline. So, one of the ways in which science is made more effective by groups is precisely that: It's the groups that actually possess the evidence that we need in order to both formulate and then test our various hypotheses. But the more important point is the point that has been made by many sociologists but also some philosophers of science as well. Here, I think of Helen Longino, and Miriam Solomon, two really wonderful philosophers of science who are still working. They've pointed out the fact that scientists criticize one another and have to subject their findings to scrutiny through peer review and public presentations. This is a way in which they subject their views to the criticism of their peers. And if anyone is going to be both motivated and knowledgeable about where those views go wrong, it's going to be competitor scientists who want to show that their own view is right. And it's in this clash of, if you like, presentations and criticism that science is kept as both honest, and I would argue, as reliable as it is in producing high-quality results.

of the battle, suppressed one theory and kept it from being published, reviewed, and noticed despite the fact that the suppressed theory was a very good one. If I remember correctly, it had something to do with the quantum calculation that is now widely popular. That decision kept humanity back for 50 years until somebody else came and discovered it. So, there is a dirty side to your argument as well. Your account is too clean. You're absolutely right. So, I appreciate you pointing out that there's a grubbiness and dirtiness to this as well. There are all sorts of issues that arise which are on the dirtier side. So, I certainly don't want to deny that. My thought would be that in the long run, the kind of institutions and practices that constitute what you and I call "science" will eventually work themselves out so that you'll actually have better research and better-supported results. But there's no doubt that at any point in time, you have lots of forces that are trying to suppress and make sure that somebody's reputation is damaged because they don't like that research project. That is absolutely part of this as well. I would argue that the response to this is more social dimensions rather than less. But I think you're right. It's going to be an inevitable part of social dimensions that it has the smudgy fingerprint of humanity all over it, as one of my cousins used to say.

That's a very good line. In the introduction to your book, you highlighted the importance of the epistemology of the category of a socio-epistemic practice. Can you elaborate on that? Sure. Let's just describe a social practice before we get into socio-epistemic. I can help myself to the notion of a practice that has standards by which you assess or evaluate the products of that practice. Think about, for example, if you are in the business of producing a product. There's a process that you go through to produce that product. You can then evaluate how good the products are that you're producing. Practice is just when you have a collection of individuals that get together to do this for some end. If the practice is aiming at producing knowledge or if any part of the practice is aiming at producing, disseminating, or even preserving knowledge, then I'm going to call it a socio-epistemic practice in the sense that it's a social practice, whose aim is at least in part to disseminate, produce, evaluate, or store knowledge. That's what a socio-epistemic practice would be.

What could be a good candidate for a non-socio-epistemic practice? My partner and I live just north of the city of Chicago, and every week we go to a different restaurant in the city of Chicago. It's just the two of us, but imagine that we actually had a group of friends and we do it every single weekend, that would be an example of social practice. But the aim of that practice is actually to have us go to a different restaurant every weekend. It's certainly not to produce knowledge.



midjourney.com

Okay. But somebody might argue that if we take a broader definition of epistemology, or epistemic in this case, we can even call that practice of going to a different restaurant every week a socio-epistemic practice because then you will produce some knowledge about the quality of the restaurant and then even disseminate that. Excellent. Beautiful. What you pointed out very nicely is that I should be a little bit more careful in how I'm characterizing socio-epistemic practice. Think of these things as having the aim or the function of producing knowledge. That is to say, you can think of an aim or a function in one of two ways. A way that I like to think

of a function is that a practice has a function when that's the reason why the practice persists. So, think about why this practice of going out with friends every weekend persists. Is it so that we can talk to each other about the quality of the restaurants? I would argue that the reason for the practice, the thing that explains why it persists, is to enable us to enjoy ourselves every weekend. As a byproduct of that, we can actually talk about which restaurants are better, but certainly, that's not the point of the practice. That's not the function of the practice and not why the practice persists.

So, is it a matter of intention on the part of those who practice that practice?

It could be. It could be a matter of design though it doesn't have to be necessarily a matter of design. Think about the kinds of things that start off as the ways that we have of behaving, and then other people join us and behave in the same kinds of ways. Then, this evolves into a system where we end up having expectations about how each of us behaves, and that whole process begins to evolve.

That's a way in which a social practice can come into being even though it was never designed by a designer. So, I think some social practices are designed but others evolve to meet the needs that we find ourselves having in very natural ways.

TO BE CONTINUED

Please, by all means, go into the depths of the matter, because it helps us get a better understanding of how science works. It's not a new point to make. This is a very old point. In fact, sociologists of science have made the point for a long time that science is becoming increasingly a team sport. That is to say, major discoveries are not made by individuals. It may

have been possible to make major discoveries as individuals maybe 300 or 400 years ago. But these days, major discoveries are certainly not made by single individuals, certainly not in the experimental side of science; I leave off the theoretical for a moment. Immediately, you have a question: How does a team function when it's trying to produce knowledge? And that actually



midjourney.com



midjourney.com