Serving Science,
Technology, and
Society Worldwide
Since 1817

Science, Technology, and the Law

A Science in Society

Policy Report

August 1998

A Dissenting View From the Bench

ALEX KOZINSKI
United States Circuit Judge, Ninth Circuit

The question of how to better link science and the legal process is one of the most cutting-edge issues in the legal system. It requires scholarly attention outside of the context of litigation if systems are to be crafted which adapt to an ever more deeply scientific world. I do not believe that the Supreme Court's decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.* greatly helps that process.

Designating a Scientific Expert

In the Federal Rules of Evidence, the designation of someone as a qualified expert triggers an evidence "problem." There is no expert evidence problem until an "expert" is designated. But the question

The more cases Dr. Smith has testified in as an expert, the more likely that a court will deem Dr. Smith to be an expert. He is expert now by virtue of the fact that he was an expert before.

of an individual's worthiness to be considered an "expert" in legal terms is not a simple matter. Nor is it simply a matter of the legal process.

Suppose for a moment that a case is before the court. An individual provides a résumé and list of publications and is questioned in court about his expertise. The individual, let us call him Dr. Smith, has a good many credentials. He graduated from a prestigious medical school and then became a specialist. He is a Diplomate of this, a member of the Board of that, and practices in several hospitals. Dr. Smith's bona fides are long and impressive. The Court says, "Well, he must be an expert." The fact that perhaps every one of Dr. Smith's experiments failed or was disproved does not diminish his status as an expert.

But, in addition to the credentials, Dr. Smith has been designated an expert in some prior case. The more cases Dr. Smith has testified in as an expert, the more likely that a court will deem Dr. Smith to be an expert. The fact that the jury may not have found Dr. Smith credible in his last 20 cases does not keep him from being an expert. He is an expert now by virtue of the fact that he was an expert before.

The problem lies not simply with the legal process, but with the process by which science itself confers status, a process that is outside of the reach of the law. Science seldom rescinds degrees or awards or memberships. A scientist may engage in academic or research endeavor for a period of time and then decide that there is a better living to be made testifying in court. Over time, distance from the scientific enterprise will erode a scientist's true expertise.

But science as a profession has no certification process or competency testing. Once a scientist, always a scientist. Hence, once an expert, always an expert.

What To Do With Galileo?

So, Dr. Smith is an expert. He enters the courtroom and says, "I am an expert in physics and I tell you that if you drop a book from the table, it will float." The court is faced with a scientist who has expert credentials in the relevant field and who provides information indicating that, under certain circumstances, objects, when dropped from a table, will float. Is he crazy? Or is he so insightful that he knows something that, over time, others will come to accept as true? Could it be that Dr. Smith is another Galileo?

The more narrowly a rule of evidence is drawn, the more likely you are to exclude the prophets, the people who, as with Galileo, are ahead of their times.

The example is obviously over-drawn. We know a great deal about gravity. But there are many things that humanity does not know or understand very well. The example points to the next issue the legal establishment must face after an expert is designated: what happens when science is not sure? This almost philosophical question is at the heart of debate about scientific evidence. The more narrowly a rule of evidence is drawn, the more likely you are to exclude the prophets, the people who, as Galileo, are ahead of their times. Moreover, the more you exclude the Galileos, the more likely it is that the people who are designated and testify as experts will not be ahead of their times. They will have very limited vision and, sadly, will often be mistaken. And because there is generally a very narrow band of time between an event and its presentation in

court, there may be no way to identify the mistake and discern the underlying scientific truth.

Who Will Carry the Burden of Uncertainty?

When truth is not known, who must carry the burden of uncertainty? Prior to *Daubert*, the answer was clear. Until there was consensus in the scientific community, the burden of error fell on the moving party, that is the party who brought the lawsuit. Even if Dr. Smith was another Galileo, and even if he had grasped an essential truth, he could not have testified unless there was scientific consensus that books float. When that consensus emerges, he is, of course, no longer a Galileo. Prior to *Daubert*, this general approach governed not only tort cases, but also criminal cases in which the government offered scientific evidence. Evidence from lie detector tests, for example, was often ruled inadmissible because scientific consensus on its accuracy was not clear.

Under *Daubert*, the fact that a finding or a technology is not generally accepted by the scientific community is no longer a reason to exclude it.

Under *Daubert*, the parties bear the burden of uncertainty equally. But what a burden they bear. The courts now have a four-part test for expertise and evidence. The fact that a finding or a technology is not generally accepted by the scientific community is no longer a reason to exclude it. I find that troublesome. How will the courts sort through the variety and uncertainty in science?

Can *Daubert* Be Changed?

The Supreme Court decision in *Daubert* was based on Federal Rule of Evidence 702, which is not enshrined in the U.S.

Constitution or a statute. It reads: "If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise." It can be changed via one of two methods.

First, like statutes, the Rules of Evidence can be amended by the Congress. This happens periodically, but not frequently

The second, more ordinary way to amend the Rules of Evidence is through an advisory committee to the Judicial Conference of the United States. This committee, chaired by a judge and with members from the legal profession, considers requests for amendments to the Rules. Through a series of committees and hearings, suggestions for changes to the Rules are considered by the full Judicial Conference, the Supreme Court, and finally Congress. This is the normal amendment procedure. This is also the best method for managing change. It allows fundamental questions to be asked and addressed. Rules are not reinterpreted and amended in pieces. We can raise the difficult question of what, in whole, a rational rule regarding expert evidence would contain, and craft a rule that will satisfy both the legal process and the philosophical problems that scientific advance introduces into that process.

In fact, the Rules are in the process of being revised, with a particular focus on making them more intelligible and straightforward. Some changes may also be substantive. That process may affect Rule 702 regarding expert testimony. If it does, the *Daubert* rule will have had its day in court. ■